

Introduction to Intellectual Property Law

Course Materials Handout

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Wheaton v. Peters,
33 U.S. (8 Pet.) 591 (1834) (excerpt).

The case as stated in the opinion of the court was as follows:

“The complainants in their bill state, that Henry Wheaton is the author of twelve books or volumes, of the reports of cases argued and adjudged in the supreme court of the United States, and commonly known as *Wheaton’s Reports*; which contain a connected and complete series of the decisions of said court, from the year 1816 until the year 1827. That before the first volume was published, the said Wheaton sold and transferred his copyright in the said volume to Matthew Carey of Philadelphia; who, before the publication, deposited a printed copy of the title page of the volume in the clerk’s office of the district court of the eastern district of Pennsylvania, where he resided. That the same was recorded by the said clerk according to law, and that a copy of the said record was caused by said Carey to be inserted at full length in the page immediately following the title of said book. And the complainants further state, that they have been informed and believe, that all things which are necessary and requisite to be done in and by the provisions of the acts of congress of the United States, passed the 31st day of May 1790 and the 29th day of April 1802, for the purpose of securing to authors and proprietors the copyrights of books, and for other purposes, in order to entitle the said Carey to the benefit of the said acts; have been done.”

* * * * *

“The complainants charge, that the defendants have lately published and sold, or caused to be sold, a volume called *Condensed Reports of Cases in the Supreme Court of the United States*, containing the whole series of the decisions of the court from its organization to the commencement of Peters’s Reports at January term 1827. That this volume contains, without any material abbreviation or alteration, all the reports of cases in the said first volume of Wheaton’s Reports, and that the publication and sale thereof is a direct violation of the complainants’ rights, and an injunction, &c. is prayed.”

* * * * *

Mr. Justice M’LEAN delivered the opinion of the Court.

* * * * *

The complainants assert their right on two grounds.

First, under the common law.

Secondly, under the acts of congress.

And they insist, in the first place, that an author was entitled, at common law, to a perpetual property in the copy of his works, and in the profits of their publication; and to recover damages for its injury, by an action on the case, and to the protection of a court of equity.

* * * * *

Perhaps no topic in England has excited more discussion, among literary and talented men, than that of the literary property of authors. . . .

* * * * *

This question was brought before the house of lords, in the case of *Donaldson v. Beckett and others*, reported in 4 Burr. 2408.

. . . The eleven judges gave their opinions on the following points. 1st. Whether at common law an author of any book or literary composition, had the sole right of first printing, and publishing the same for sale; and might bring an action against any person who printed, published and sold the same, without his consent. On this question there were eight judges in the affirmative, and three in the negative.

2d. If the author had such right originally, did the law take it away, upon his printing and publishing such book or literary composition; and might any person, afterward, reprint and sell, for his own benefit, such book or literary composition, against the will of the author. This question was answered in the affirmative, by four judges, and in the negative by seven.

3d. If such action would have lain, at common law, is it taken away by the statute of 8 Anne; and is an author, by the said statute, precluded from every remedy, except on the foundation of the said statute, and on the terms of the conditions prescribed thereby. Six of the judges, to five, decided that the remedy must be under the statute.

4th. Whether the author of any literary composition, and his assigns, had the sole right of

printing and publishing the same in perpetuity, by the common law. Which question was decided in favour of the author, by seven judges to four.

5th. Whether this right is any way impeached, restrained or taken away, by the statute 8 Anne? Six, to five judges, decided that the right is taken away by the statute. And the lord chancellor, seconding Lord Camden's motion to reverse, the decree was reversed.

It would appear from the points decided, that a majority of the judges were in favour of the common law right of authors, but that the same had been taken away by the statute.

* * * * *

From the above authorities, and others which might be referred to if time permitted, the law appears to be well settled in England, that, since the statute of 8 Anne, the literary property of an author in his works can only be asserted under the statute. . . .

That an author, at common law, has a property in his manuscript, and may obtain redress against any one who deprives him of it, or by improperly obtaining a copy endeavours to realise a profit by its publication, cannot be doubted; but this is a very different right from that which asserts a perpetual and exclusive property in the future publication of the work, after the author shall have published it to the world.

The argument that a literary man is as much entitled to the product of his labour as any other member of society, cannot be controverted. And the answer is, that he realises this product by the transfer of his manuscripts, or in the sale of his works, when first published.

A book is valuable on account of the matter it contains, the ideas it communicates, the instruction or entertainment it affords. Does the author hold a perpetual property in these? Is there an implied contract by every purchaser of his book, that he may realise whatever instruction or entertainment which the reading of it shall give, but shall not write out or print its contents.

In what respect does the right of an author differ from that of an individual who has invented a most useful and valuable machine? In the production of this, his mind has been as intensely engaged, as long; and, perhaps, as usefully to the public, as any distinguished author in the composition of his book.

The result of their labours may be equally

beneficial to society, and in their respective spheres they may be alike distinguished for mental vigour. Does the common law give a perpetual right to the author, and withhold it from the inventor? And yet it has never been pretended that the latter could hold, by the common law, any property in his invention, after he shall have sold it publicly.

* * * * *

That every man is entitled to the fruits of his own labour must be admitted; but he can enjoy them only, except by statutory provision, under the rules of property, which regulate society, and which define the rights of things in general.

But, if the common law right of authors were shown to exist in England, does the same right exist, and to the same extent, in this country.

It is clear, there can be no common law of the United States. The federal government is composed of . . . sovereign and independent states; each of which may have its local usages, customs and common law. There is no principle which pervades the union and has the authority of law, that is not embodied in the constitution or laws of the union. The common law could be made a part of our federal system, only by legislative adoption.

* * * * *

In the eighth section of the first article of the constitution of the United States it is declared, that congress shall have power "to promote the progress of science and useful arts, by securing for limited times, to authors and inventors, the exclusive right to their respective writings and discoveries." And in pursuance of the power thus delegated, congress passed the act of the 30th of May 1790.

This is entitled "an act for the encouragement of learning, by securing the copies of maps, charts and books, to the authors and proprietors of such copies, during the times therein mentioned."

In the first section of this act, it is provided, "that from and after its passage, the author and authors of any map, chart, book or books, already printed within these United States, being a citizen, &c. who hath or have not transferred to any other person the copyright of such map, chart, book or books, &c. shall have the sole right and liberty of printing, reprinting, publishing and vending such map, book or books, for fourteen

years.”

In behalf of the common law right, an argument has been drawn from the word *secure*, which is used in relation to this right, both in the constitution and in the acts of congress. This word, when used as a verb active, signifies to protect, insure, save, ascertain, &c.

The counsel for the complainants insist that the term, as used, clearly indicates an intention, not to originate a right, but to protect one already in existence.

* * * * *

That congress, in passing the act of 1790, did not legislate in reference to existing rights, appears clear, from the provision that the author, &c. “shall have the sole right and liberty of printing,” &c. Now if this exclusive right existed at common law, and congress were about to adopt legislative provisions for its protection, would they have used this language? Could they have deemed it necessary to vest a right already vested. Such a presumption is refuted by the words above quoted, and their force is not less-

ened by any other part of the act.

Congress, then, by this act, instead of sanctioning an existing right, as contended for, created it. This seems to be the clear import of the law, connected with the circumstances under which it was enacted.

From these considerations it would seem, that if the right of the complainants can be sustained, it must be sustained under the acts of congress. Such was, probably, the opinion of the counsel who framed the bill, as the right is asserted under the statutes, and no particular reference is made to it as existing at common law. The claim, then, of the complainants, must be examined in reference to the statutes under which it is asserted.

* * * * *

It may be proper to remark that the court are unanimously of opinion, that no reporter has or can have any copyright in the written opinions delivered by this court; and that the judges thereof cannot confer on any reporter any such right.

**Mazer v. Stein,
347 U.S. 201 (1954) (excerpt).**

Opinion of MR. JUSTICE DOUGLAS, in which MR. JUSTICE BLACK concurs.

An important constitutional question underlies this case—a question which was stirred on oral argument but not treated in the briefs. It is whether these statuettes of dancing figures may be copyrighted. Congress has provided that “works of art,” “models or designs for works of art,” and “reproductions of a work of art” may be copyrighted; and the Court holds that these statuettes are included in the words “works of art.” But may statuettes be granted the monopoly of the copyright?

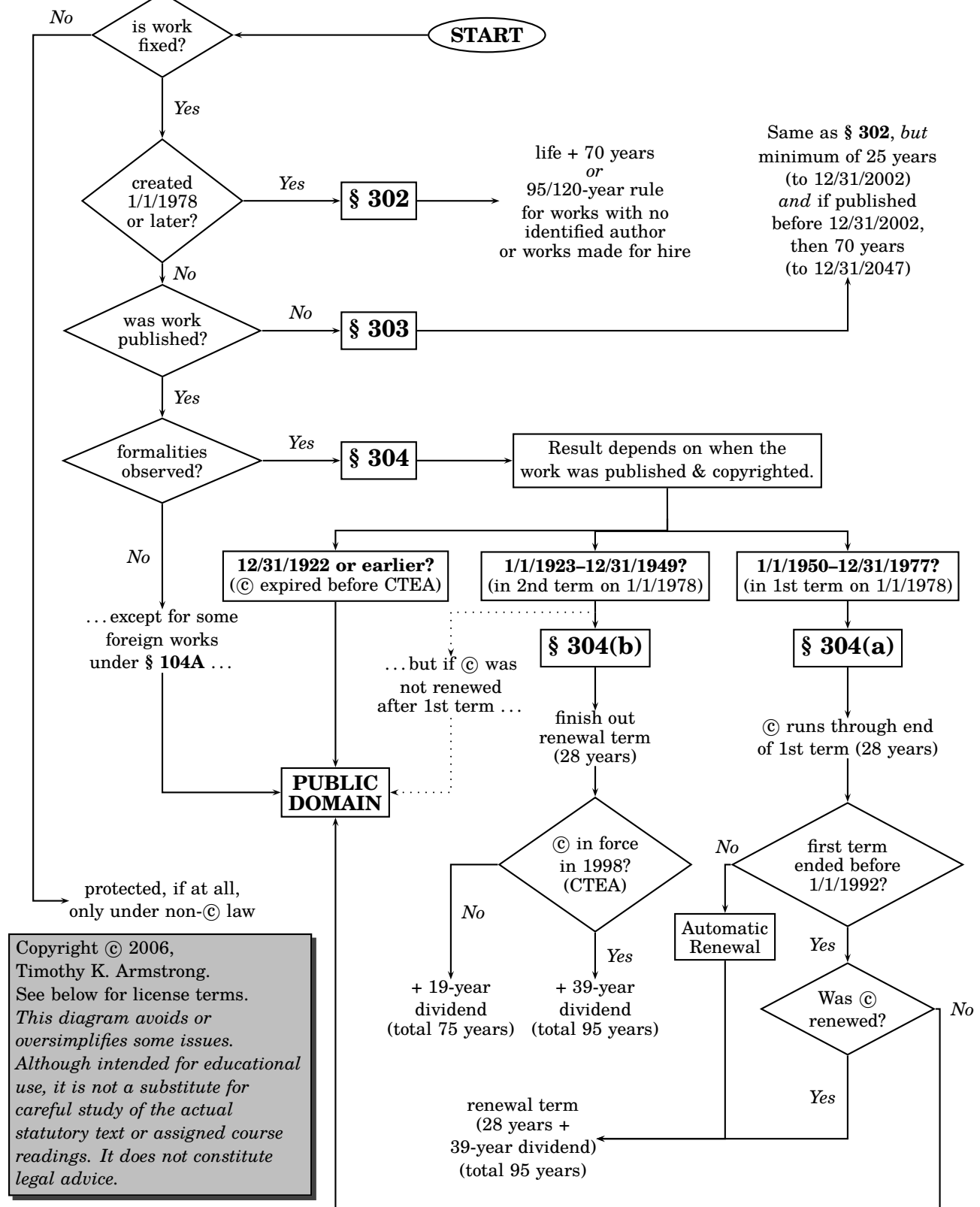
Article I, § 8 of the Constitution grants Congress the power “To promote the Progress of Science and useful Arts, by securing for limited Times to Authors ... the exclusive Right to their respective Writings ...” The power is thus circumscribed: it allows a monopoly to be

granted only to “authors” for their “writings.” Is a sculptor an “author” and is his statue a “writing” within the meaning of the Constitution? We have never decided the question.

* * * * *

The interests involved in the category of “works of art,” as used in the copyright law, are considerable. The Copyright Office has supplied us with a long list of such articles which have been copyrighted—statuettes, book ends, clocks, lamps, door knockers, candlesticks, inkstands, chandeliers, piggy banks, sundials, salt and pepper shakers, fish bowls, casseroles, and ash trays. Perhaps these are all “writings” in the constitutional sense. But to me, at least, they are not obviously so. It is time that we came to the problem full face. I would accordingly put the case down for reargument.

COPYRIGHT DURATION AND RENEWAL GUIDE



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DISCUSSION QUESTIONS ON EXPIRATION AND RENEWAL OF COPYRIGHT

Consider the following sequence of events.

- 1897** Author John Luther Long pens the novel *Madame Butterfly* and copyrights it.
- 1900** Playwright David Belasco turns the novel into a theatrical play, but does not copyright it.
- 1904** Composer Giacomo Puccini turns the play into an opera and copyrights it.
- 1917** Belasco copyrights the play.
- 1925** The copyright in the novel is renewed.
- 1932** The copyright in the opera is renewed.
- 1945** The copyright in the play is not renewed, and the play falls into the public domain.

With the foregoing sequence of events in mind, please consider the following questions.

1. In 1946, filmmaker Carmine Gallone wants to make a movie of the play.
 - Does Gallone need permission from the copyright holder of the novel?
 - Does Gallone need permission from the copyright holder of the play?
 - Does Gallone need permission from the copyright holder of the opera?
2. Are your answers different if Gallone wants to make his movie in 1954 instead of 1946?
3. In 1946, can the following parties do any of the following without obtaining permission from anybody else?
 - Can the holder of the copyright in the opera stage a performance of the play?
 - Can the holder of the copyright in the book produce a movie based on the opera?
 - Can the holder of the copyright in the opera produce a movie based on the book?
 - Can the holder of the copyright in the book produce a movie based on the book?
 - Can the holder of the copyright in the opera produce a movie based on the opera?

**Bright Tunes Music Corp. v. Harrisongs Music, Ltd.,
420 F. Supp. 177 (S.D.N.Y. 1976) (excerpt).**

OWEN, District Judge.

This is an action in which it is claimed that a successful song, *My Sweet Lord*, listing George Harrison as the composer, is plagiarized from an earlier successful song, *He's So Fine*, composed by Ronald Mack, recorded by a singing group called the "Chiffons," the copyright of which is owned by plaintiff, Bright Tunes Music Corp.

He's So Fine, recorded in 1962, is a catchy tune consisting essentially of four repetitions of a very short basic musical phrase, "sol-mi-re," (hereinafter motif A),¹ altered as necessary to fit the words, followed by four repetitions of another short basic musical phrase, "sol-la-do-la-do," (hereinafter motif B).² While neither motif is novel, the four repetitions of A, followed by four repetitions of B, is a highly unique pattern.³ In addition, in the second use of the motif B series, there is a grace note inserted making the phrase go "sol-la-do-la-re-do."⁴

My Sweet Lord, recorded first in 1970, also uses the same motif A (modified to suit the words) four times, followed by motif B, repeated three times, not four. In place of *He's So Fine's* fourth repetition of motif B, *My Sweet Lord* has a transitional passage of musical attractiveness of the same approximate length, with the identical grace note in the identical second repetition. The harmonies of both songs are identical.⁶

George Harrison, a former member of The Beatles, was aware of *He's So Fine*. In the United States, it was No. 1 on the billboard charts for five weeks; in England, Harrison's home country, it was No. 12 on the charts on June 1, 1963,

a date upon which one of the Beatle songs was, in fact, in first position. For seven weeks in 1963, *He's So Fine* was one of the top hits in England.

According to Harrison, the circumstances of the composition of *My Sweet Lord* were as follows. Harrison and his group, which include an American black gospel singer named Billy Preston, were in Copenhagen, Denmark, on a singing engagement. There was a press conference involving the group going on backstage. Harrison slipped away from the press conference and went to a room upstairs and began "vamping" some guitar chords, fitting on to the chords he was playing the words, "Hallelujah" and "Hare Krishna" in various ways.⁸ During the course of this vamping, he was alternating between what musicians call a Minor II chord and a Major V chord.

At some point, germinating started and he went down to meet with others of the group, asking them to listen, which they did, and everyone began to join in, taking first "Hallelujah" and then "Hare Krishna" and putting them into four part harmony. Harrison obviously started using the "Hallelujah," etc., as repeated sounds, and from there developed the lyrics, to wit, "My Sweet Lord," "Dear, Dear Lord," etc. In any event, from this very free-flowing exchange of ideas, with Harrison playing his two chords and everybody singing "Hallelujah" and "Hare Krishna," there began to emerge the *My Sweet Lord* text idea, which Harrison sought to develop a little bit further during the following week as he was playing it on his guitar. Thus developed motif A and its



³All the experts agreed on this.

⁶Expert witnesses for the defendants asserted crucial differences in the two songs. These claimed differences essentially stem, however, from the fact that different words and number of syllables were involved. This necessitated modest alterations in the repetitions or the places of beginning of a phrase, which, however, has nothing to do whatsoever with the essential musical kernel that is involved.

⁸These words ended up being a "responsive" interjection between the eventually copyrighted words of *My Sweet Lord*. In *He's So Fine* the Chiffons used the sound "dulang" in the same places to fill in and give rhythmic impetus to what would otherwise be somewhat dead spots in the music.

words interspersed with “Hallelujah” and “Hare Krishna.”

Approximately one week after the idea first began to germinate, the entire group flew back to London because they had earlier booked time to go to a recording studio with Billy Preston to make an album. In the studio, Preston was the principal musician. Harrison did not play in the session. He had given Preston his basic motif A with the idea that it be turned into a song, and was back and forth from the studio to the engineer’s recording booth, supervising the recording “takes.” Under circumstances that Harrison was utterly unable to recall, while everybody was working toward a finished song, in the recording studio, somehow or other the essential three notes of motif A reached polished form.

* * * * *

Similarly, it appears that motif B emerged in some fashion at the recording session as did motif A. This is also true of the unique grace note in the second repetition of motif B.

* * * * *

The Billy Preston recording, listing George Harrison as the composer, was thereafter issued by Apple Records. The music was then reduced to paper by someone who prepared a “lead sheet” containing the melody, the words and the harmony for the United States copyright application.

...

Seeking the wellsprings of musical composition why a composer chooses the succession of notes and the harmonies he does whether it be George Harrison or Richard Wagner is a fascinating inquiry. It is apparent from the extensive colloquy between the Court and Harrison covering forty pages in the transcript that neither Harrison nor Preston were conscious of the fact that they were

utilizing the He’s So Fine theme. However, they in fact were, for it is perfectly obvious to the listener that in musical terms, the two songs are virtually identical except for one phrase. There is motif A used four times, followed by motif B, four times in one case, and three times in the other, with the same grace note in the second repetition of motif B.

What happened? I conclude that the composer, in seeking musical materials to clothe his thoughts, was working with various possibilities. As he tried this possibility and that, there came to the surface of his mind a particular combination that pleased him as being one he felt would be appealing to a prospective listener; in other words, that this combination of sounds would work. Why? Because his subconscious knew it already had worked in a song his conscious mind did not remember. Having arrived at this pleasing combination of sounds, the recording was made, the lead sheet prepared for copyright and the song became an enormous success. Did Harrison deliberately use the music of He’s So Fine? I do not believe he did so deliberately. Nevertheless, it is clear that My Sweet Lord is the very same song as He’s So Fine with different words,¹³ and Harrison had access to He’s So Fine. This is, under the law, infringement of copyright, and is no less so even though subconsciously accomplished. ...

Given the foregoing, I find for the plaintiff on the issue of plagiarism, and set the action down for trial on November 8, 1976 on the issue of damages and other relief as to which the plaintiff may be entitled. The foregoing constitutes the Court’s findings of fact and conclusions of law.

So Ordered.

**Perfect 10, Inc. v. Amazon.com, Inc.,
487 F.3d 701 (9th Cir. 2007) (excerpt).**

IKUTA, Circuit Judge.

In this appeal, we consider a copyright owner’s efforts to stop an Internet search engine from facilitating access to infringing images. Perfect 10, Inc. sued Google Inc., for infringing Perfect 10’s copyrighted photographs of nude models, among

other claims. Perfect 10 brought a similar action against Amazon.com and its subsidiary A9.com (collectively, “Amazon.com”). The district court preliminarily enjoined Google from creating and publicly displaying thumbnail versions of Perfect 10’s images, *Perfect 10 v. Google, Inc.*, 416 F.

¹³Harrison himself acknowledged on the stand that the two songs were substantially similar. This same conclusion was obviously reached by a recording group called the “Belmonts” who recorded My Sweet Lord at a later time. With “tongue in cheek” they used the words from both He’s So Fine and My Sweet Lord interchangeably at certain points.

Supp. 2d 828 (C.D. Cal. 2006), but did not enjoin Google from linking to third-party websites that display infringing full-size versions of Perfect 10's images. Nor did the district court preliminarily enjoin Amazon.com from giving users access to information provided by Google. * * * We affirm in part, reverse in part, and remand.

I. Background

Google's computers, along with millions of others, are connected to networks known collectively as the "Internet." . . . Computer owners can provide information stored on their computers to other users connected to the Internet through a medium called a webpage. A webpage consists of text interspersed with instructions written in Hypertext Markup Language ("HTML") that is stored in a computer. No images are stored on a webpage; rather, the HTML instructions on the webpage provide an address for where the images are stored, whether in the webpage publisher's computer or some other computer. In general, webpages are publicly available and can be accessed by computers connected to the Internet through the use of a web browser.

Google operates a search engine, a software program that automatically accesses thousands of websites (collections of webpages) and indexes them within a database stored on Google's computers. When a Google user accesses the Google website and types in a search query, Google's software searches its database for websites responsive to that search query. Google then sends relevant information from its index of websites to the user's computer. Google's search engines can provide results in the form of text, images, or videos.

The Google search engine that provides responses in the form of images is called "Google Image Search." In response to a search query, Google Image Search identifies text in its database responsive to the query and then communicates to users the images associated with the relevant text. Google's software cannot recognize and index the images themselves. Google Image Search provides search results as a web-

page of small images called "thumbnails," which are stored in Google's servers. The thumbnail images are reduced, lower-resolution versions of full-sized images stored on third-party computers.

When a user clicks on a thumbnail image, the user's browser program interprets HTML instructions on Google's webpage. These HTML instructions direct the user's browser to cause a rectangular area (a "window") to appear on the user's computer screen. The window has two separate areas of information. The browser fills the top section of the screen with information from the Google webpage, including the thumbnail image and text. The HTML instructions also give the user's browser the address of the website publisher's computer that stores the full-size version of the thumbnail.² By following the HTML instructions to access the third-party webpage, the user's browser connects to the website publisher's computer, downloads the full-size image, and makes the image appear at the bottom of the window on the user's screen. Google does not store the images that fill this lower part of the window and does not communicate the images to the user; Google simply provides HTML instructions directing a user's browser to access a third-party website. However, the top part of the window (containing the information from the Google webpage) appears to frame and comment on the bottom part of the window. Thus, the user's window appears to be filled with a single integrated presentation of the full-size image, but it is actually an image from a third-party website framed by information from Google's website. The process by which the webpage directs a user's browser to incorporate content from different computers into a single window is referred to as "in-line linking." *Kelly v. Arriba Soft Corp.*, 336 F.3d 811, 816 (9th Cir. 2003). The term "framing" refers to the process by which information from one computer appears to frame and annotate the in-line linked content from another computer.

Google also stores webpage content in its

²The website publisher may not actually store the photographic images used on its webpages in its own computer, but may provide HTML instructions directing the user's browser to some further computer that stores the image. Because this distinction does not affect our analysis, for convenience, we will assume that the website publisher stores all images used on its webpages in the website publisher's own computer.

³Generally, a "cache" is "a computer memory with very short access time used for storage of frequently or recently used instructions or data." *United States v. Ziegler*, 474 F.3d 1184, 1186 n.3 (9th Cir. 2007) (quoting *MERRIAM-WEBSTER'S COLLEGIATE DICTIONARY* 171 (11th ed. 2003)). There are two types of caches at issue in this case. A user's personal computer has an internal

cache.³ For each cached webpage, Google's cache contains the text of the webpage as it appeared at the time Google indexed the page, but does not store images from the webpage. *Id.* at 833. Google may provide a link to a cached webpage in response to a user's search query. However, Google's cache version of the webpage is not automatically updated when the webpage is revised by its owner. So if the webpage owner updates its webpage to remove the HTML instructions for finding an infringing image, a browser communicating directly with the webpage would not be able to access that image. However, Google's cache copy of the webpage would still have the old HTML instructions for the infringing image. Unless the owner of the computer changed the HTML address of the infringing image, or otherwise rendered the image unavailable, a browser accessing Google's cache copy of the website could still access the image where it is stored on the website publisher's computer. In other words, Google's cache copy could provide a user's browser with valid directions to an infringing image even though the updated webpage no longer includes that infringing image.

In addition to its search engine operations, Google generates revenue through a business program called "AdSense." Under this program, the owner of a website can register with Google to become an AdSense "partner." The website owner then places HTML instructions on its webpages that signal Google's server to place advertising on the webpages that is relevant to the webpages' content. Google's computer program selects the advertising automatically by means of an algorithm. AdSense participants agree to share the revenues that flow from such advertising with Google.

Google also generated revenues through an agreement with Amazon.com that allowed Amazon.com to in-line link to Google's search results. . . .

Perfect 10 markets and sells copyrighted images of nude models. Among other enterprises, it operates a subscription website on the Internet. Subscribers pay a monthly fee to view Perfect 10 images in a "members' area" of the site. Subscribers must use a password to log

into the members' area. Google does not include these password-protected images from the members' area in Google's index or database. Perfect 10 has also licensed Fonestarz Media Limited to sell and distribute Perfect 10's reduced-size copyrighted images for download and use on cell phones.

Some website publishers republish Perfect 10's images on the Internet without authorization. Once this occurs, Google's search engine may automatically index the webpages containing these images and provide thumbnail versions of images in response to user inquiries. When a user clicks on the thumbnail image returned by Google's search engine, the user's browser accesses the third-party webpage and in-line links to the full-sized infringing image stored on the website publisher's computer. This image appears, in its original context, on the lower portion of the window on the user's computer screen framed by information from Google's webpage.

* * * * *

III. Direct Infringement

* * * * *

A. Display Right

In considering whether Perfect 10 made a prima facie case of violation of its display right, the district court reasoned that a computer owner that stores an image as electronic information and serves that electronic information directly to the user ("i.e., physically sending ones and zeroes over the [I]nternet to the user's browser") is displaying the electronic information in violation of a copyright holder's exclusive display right. Conversely, the owner of a computer that does not store and serve the electronic information to a user is not displaying that information, even if such owner in-line links to or frames the electronic information. The district court referred to this test as the "server test."

Applying the server test, the district court concluded that Perfect 10 was likely to succeed in its claim that Google's thumbnails constituted direct infringement but was unlikely to succeed in its claim that Google's in-line linking to full-size

cache that saves copies of webpages and images that the user has recently viewed so that the user can more rapidly revisit these webpages and images. Google's computers also have a cache which serves a variety of purposes. Among other things, Google's cache saves copies of a large number of webpages so that Google's search engine can efficiently organize and index these webpages.

infringing images constituted a direct infringement. As explained below, because this analysis comports with the language of the Copyright Act, we agree with the district court's resolution of both these issues.

We have not previously addressed the question when a computer displays a copyrighted work for purposes of section 106(5). . . .

... A photographic image is a work that is "fixed" in a tangible medium of expression," for purposes of the Copyright Act, when embodied (i.e., stored) in a computer's server (or hard disk, or other storage device). The image stored in the computer is the "copy" of the work for purposes of copyright law. See *MAI Sys. Corp. v. Peak Computer, Inc.*, 991 F.2d 511, 517–18 (9th Cir. 1993) (a computer makes a "copy" of a software program when it transfers the program from a third party's computer (or other storage device) into its own memory, because the copy of the program recorded in the computer is "fixed" in a manner that is "sufficiently permanent or stable to permit it to be perceived, reproduced, or otherwise communicated for a period of more than transitory duration" (quoting 17 U.S.C. § 101)). The computer owner shows a copy "by means of a . . . device or process" when the owner uses the computer to fill the computer screen with the photographic image stored on that computer, or by communicating the stored image electronically to another person's computer. 17 U.S.C. § 101. In sum, based on the plain language of the statute, a person displays a photographic image by using a computer to fill a computer screen with a copy of the photographic image fixed in the computer's memory. There is no dispute that Google's computers store thumbnail versions of Perfect 10's copyrighted images and communicate copies of those thumbnails to Google's users. Therefore, Perfect 10 has made a prima facie case that Google's communication of its stored thumbnail images directly infringes Perfect 10's display right.

Google does not, however, display a copy of full-size infringing photographic images for purposes of the Copyright Act when Google frames in-line linked images that appear on a user's computer screen. Because Google's computers do not store the photographic images, Google does not have a copy of the images for purposes of the Copyright Act. In other words, Google does not have any

"material objects . . . in which a work is fixed . . . and from which the work can be perceived, reproduced, or otherwise communicated" and thus cannot communicate a copy. 17 U.S.C. § 101.

Instead of communicating a copy of the image, Google provides HTML instructions that direct a user's browser to a website publisher's computer that stores the full-size photographic image. Providing these HTML instructions is not equivalent to showing a copy. First, the HTML instructions are lines of text, not a photographic image. Second, HTML instructions do not themselves cause infringing images to appear on the user's computer screen. The HTML merely gives the address of the image to the user's browser. The browser then interacts with the computer that stores the infringing image. It is this interaction that causes an infringing image to appear on the user's computer screen. Google may facilitate the user's access to infringing images. However, such assistance raises only contributory liability issues, see *Metro-Goldwyn-Mayer Studios, Inc. v. Grokster, Ltd.*, 545 U.S. 913, 929–30 (2005), *Napster*, 239 F.3d at 1019, and does not constitute direct infringement of the copyright owner's display rights.

Perfect 10 argues that Google displays a copy of the full-size images by framing the full-size images, which gives the impression that Google is showing the image within a single Google webpage. While in-line linking and framing may cause some computer users to believe they are viewing a single Google webpage, the Copyright Act, unlike the Trademark Act, does not protect a copyright holder against acts that cause consumer confusion. Cf. 15 U.S.C. § 1114(1) (providing that a person who uses a trademark in a manner likely to cause confusion shall be liable in a civil action to the trademark registrant).

Nor does our ruling that a computer owner does not display a copy of an image when it communicates only the HTML address of the copy erroneously collapse the display right in section 106(5) into the reproduction right set forth in section 106(1). . . .

Because Google's cache merely stores the text of webpages, our analysis of whether Google's search engine program potentially infringes Perfect 10's display and distribution rights is equally applicable to Google's cache. Perfect 10 is not likely to succeed in showing that a cached web-

page that in-line links to full-size infringing images violates such rights. For purposes of this analysis, it is irrelevant whether cache copies direct a user's browser to third-party images that are no longer available on the third party's website, because it is the website publisher's computer, rather than Google's computer, that stores and displays the infringing image.

B. Distribution Right

The district court also concluded that Perfect 10 would not likely prevail on its claim that Google directly infringed Perfect 10's right to distribute its full-size images. The district court reasoned that distribution requires an "actual dissemination" of a copy. Because Google did not communicate the full-size images to the user's computer, Google did not distribute these images.

Again, the district court's conclusion on this point is consistent with the language of the Copyright Act. ...

* * * * *

... Google does not own a collection of Perfect 10's full-size images and does not communicate these images to the computers of people using Google's search engine. Though Google indexes these images, it does not have a collection of stored full-size images it makes available to the public. Google therefore cannot be deemed to distribute copies of these images

C. Fair Use Defense

Although Perfect 10 has succeeded in showing it would prevail in its prima facie case that Google's thumbnail images infringe Perfect 10's display rights, Perfect 10 must still show a likelihood that it will prevail against Google's affirmative defense. Google contends that its use of thumbnails is a fair use of the images and therefore does not constitute an infringement of Perfect 10's copyright.

* * * * *

In applying the fair use analysis in this case, we are guided by *Kelly v. Arriba Soft Corp.*, which considered substantially the same use of copyrighted photographic images as is at issue here. See 336 F.3d 811. In *Kelly*, a photographer brought a direct infringement claim against Arriba, the operator of an Internet search engine. The search engine provided thumbnail versions of the photographer's images in response to search queries. We held that Arriba's use of

thumbnail images was a fair use primarily based on the transformative nature of a search engine and its benefit to the public. We also concluded that Arriba's use of the thumbnail images did not harm the photographer's market for his image.

In this case, the district court determined that Google's use of thumbnails was not a fair use and distinguished *Kelly*. We consider these distinctions in the context of the four-factor fair use analysis ...

Purpose and character of the use. The first factor, 17 U.S.C. § 107(1), requires a court to consider "the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes." The central purpose of this inquiry is to determine whether and to what extent the new work is "transformative." *Campbell*, 510 U.S. at 579. A work is "transformative" when the new work does not "merely supersede the objects of the original creation" but rather "adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message." Conversely, if the new work "supersede[s] the use of the original," the use is likely not a fair use.

* * * * *

Google's use of thumbnails is highly transformative. In *Kelly*, we concluded that Arriba's use of thumbnails was transformative because "Arriba's use of the images serve[d] a different function than Kelly's use—improving access to information on the [I]nternet versus artistic expression." Although an image may have been created originally to serve an entertainment, aesthetic, or informative function, a search engine transforms the image into a pointer directing a user to a source of information. Just as a "parody has an obvious claim to transformative value" because "it can provide social benefit, by shedding light on an earlier work, and, in the process, creating a new one," *Campbell*, 510 U.S. at 579, a search engine provides social benefit by incorporating an original work into a new work, namely, an electronic reference tool. Indeed, a search engine may be more transformative than a parody because a search engine provides an entirely new use for the original work, while a parody typically has the same entertainment purpose as the original work. ...

The fact that Google incorporates the entire

Perfect 10 image into the search engine results does not diminish the transformative nature of Google's use. As the district court correctly noted, we determined in *Kelly* that even making an exact copy of a work may be transformative so long as the copy serves a different function than the original work . . .

The district court nevertheless determined that Google's use of thumbnail images was less transformative than Arriba's use of thumbnails in *Kelly* because Google's use of thumbnails superseded Perfect 10's right to sell its reduced-size images for use on cell phones. The district court stated that "mobile users can download and save the thumbnails displayed by Google Image Search onto their phones," and concluded "to the extent that users may choose to download free images to their phone rather than purchase [Perfect 10's] reduced-size images, Google's use supersedes [Perfect 10's]."

Additionally, the district court determined that the commercial nature of Google's use weighed against its transformative nature. Although *Kelly* held that the commercial use of the photographer's images by Arriba's search engine was less exploitative than typical commercial use, and thus weighed only slightly against a finding of fair use, the district court here distinguished *Kelly* on the ground that some website owners in the AdSense program had infringing Perfect 10 images on their websites. The district court held that because Google's thumbnails "lead users to sites that directly benefit Google's bottom line," the AdSense program increased the commercial nature of Google's use of Perfect 10's images.

... Although the district court acknowledged the "truism that search engines such as Google Image Search provide great value to the public," the district court did not expressly consider whether this value outweighed the significance of Google's superseding use or the commercial nature of Google's use. The Supreme Court, however, has directed us to be mindful of the extent to which a use promotes the purposes of copyright and serves the interests of the public. . . .

We note that the superseding use in this case is not significant at present: the district court did not find that any down loads for mobile phone use had taken place. Moreover, while Google's use of thumbnails to direct users to AdSense partners containing infringing content adds a commercial

dimension that did not exist in *Kelly*, the district court did not determine that this commercial element was significant. The district court stated that Google's AdSense programs as a whole contributed "\$630 million, or 46% of total revenues" to Google's bottom line, but noted that this figure did not "break down the much smaller amount attributable to websites that contain infringing content."

We conclude that the significantly transformative nature of Google's search engine, particularly in light of its public benefit, outweighs Google's superseding and commercial uses of the thumbnails in this case. . . .

Accordingly, we disagree with the district court's conclusion that because Google's use of the thumbnails could supersede Perfect 10's cell phone download use and because the use was more commercial than Arriba's, this fair use factor weighed "slightly" in favor of Perfect 10. Instead, we conclude that the transformative nature of Google's use is more significant than any incidental superseding use or the minor commercial aspects of Google's search engine and website. Therefore, the district court erred in determining this factor weighed in favor of Perfect 10.

The nature of the copyrighted work. With respect to the second factor, "the nature of the copyrighted work," 17 U.S.C. § 107(2), our decision in *Kelly* is directly on point. There we held that the photographer's images were "creative in nature" and thus "closer to the core of intended copyright protection than are more fact-based works." However, because the photos appeared on the Internet before Arriba used thumbnail versions in its search engine results, this factor weighed only slightly in favor of the photographer.

* * * * *

The amount and substantiality of the portion used. ... In *Kelly*, we held Arriba's use of the entire photographic image was reasonable in light of the purpose of a search engine. Specifically, we noted, "[i]t was necessary for Arriba to copy the entire image to allow users to recognize the image and decide whether to pursue more information about the image or the originating [website]. If Arriba only copied part of the image, it would be more difficult to identify it, thereby reducing the usefulness of the visual search engine." Accordingly, we concluded that this factor did not weigh in favor of either party. Because

the same analysis applies to Google's use of Perfect 10's image, the district court did not err in finding that this factor favored neither party.

Effect of use on the market. The fourth factor is "the effect of the use upon the potential market for or value of the copyrighted work." 17 U.S.C. § 107(4). In *Kelly*, we concluded that Arriba's use of the thumbnail images did not harm the market for the photographer's full-size images. We reasoned that because thumbnails were not a substitute for the full-sized images, they did not harm the photographer's ability to sell or license his full-sized images. The district court here followed Kelly's reasoning, holding that Google's use of thumbnails did not hurt Perfect 10's market for full-size images.

* * * * *

Perfect 10 also has a market for reduced-size images, an issue not considered in *Kelly*. The district court held that "Google's use of thumbnails likely does harm the potential market for the downloading of [Perfect 10's] reduced-size images onto cell phones." The district court reasoned that persons who can obtain Perfect 10 images

free of charge from Google are less likely to pay for a download, and the availability of Google's thumbnail images would harm Perfect 10's market for cell phone downloads. As we discussed above, the district court did not make a finding that Google users have downloaded thumbnail images for cell phone use. This potential harm to Perfect 10's market remains hypothetical. We conclude that this factor favors neither party.

Having undertaken a case-specific analysis of all four factors, we now weigh these factors together In this case, Google has put Perfect 10's thumbnail images (along with millions of other thumbnail images) to a use fundamentally different than the use intended by Perfect 10. In doing so, Google has provided a significant benefit to the public. Weighing this significant transformative use against the unproven use of Google's thumbnails for cell phone downloads, and considering the other fair use factors, all in light of the purpose of copyright, we conclude that Google's use of Perfect 10's thumbnails is a fair use. ...

* * * * *

William W. Fisher, III, *Promises to Keep: Technology, Law, and the Future of Entertainment* 116–19 (2004) (excerpt).

The second chance to fashion an alternative ending to the story came during the Napster litigation. The courts, had they wished, easily could have ruled in favor of Napster on one critical issue, thus allowing the system to survive. With respect to most of the issues in the case, the media companies had solid arguments, and the courts were right to rule in their favor. For example, the media companies (and the Justice Department, which filed a "friend of the court" brief) persuasively argued that the conduct of Napster's subscribers could not plausibly be shoehorned into the safe harbor created by section 1008 of the Audio Home Recording Act for the "noncommercial use" of a "digital audio recording device." Similarly, the media companies were probably correct that Napster could not fairly avail itself of the qualified immunity created by the DMCA for Internet service providers.

But there was one crucial issue for which Napster had the better argument. Remember that, in the *Sony* case, the United States Supreme Court

had ruled that the distributor of technology that is often used for infringing purposes is nevertheless not liable for contributory copyright infringement if the technology is "capable of substantial noninfringing uses." In that case, the Court concluded that the use of a VCR to "time-shift" a copyrighted program, although presumptively a violation of the copyright owner's exclusive right to reproduce the program, nevertheless qualified as a fair use and was therefore lawful. Because time-shifting was a common use of VCRs, the machines themselves plainly were capable of at least one substantial noninfringing use—and thus Sony escaped liability.

Napster argued, plausibly, that it should prevail for very similar reasons. Specifically, Napster argued that at least three uses of its system were noninfringing: "sampling, where users make temporary copies of a work before purchasing; space-shifting, where users access a sound recording through the Napster system that they already own in audio CD format; and permissive

distribution of recordings by both new and established artists.” Each of these activities, Napster claimed, either was authorized by the relevant copyright owners or, like time-shifting, constituted a fair use and was therefore lawful. Thus even if most of Napster’s subscribers were engaged in illegal behavior, the fact that a significant subset were engaged in lawful conduct should have excused Napster from liability for contributory or vicarious infringement.⁷⁴

The grounds on which the courts rejected this contention were shaky at best. Their weakness is most evident with respect to “sampling,” so we will concentrate on that activity. Napster argued, accurately, that some of its subscribers used its system only to determine what CDs to buy. In other words, they would download songs from albums they were considering purchasing and then listen to them through the speakers on their computers. If they liked particular songs, they would buy the corresponding CDs. If they didn’t, they wouldn’t. In either event, they would delete the MP3 files after listening to them once or twice. (Why wouldn’t they simply keep the songs they downloaded and avoid the cost and inconvenience of buying CDs? Some did not want to deprive the recording artists and composers of the revenue they would have reaped from CD sales. Others had poor-quality sound systems on their computers and lacked the skill or equipment to convert downloaded MP3 files to CDs that they could play in their home stereos. Still others valued the slightly better sound that could be obtained through uncompressed files.) If time-shifting movies constitutes a fair use, then surely “sampling” in this sense constitutes a fair use. Both activities involve temporarily making full-length copies of highly creative materials—circumstances that would ordinarily suggest they could not qualify as “fair.” However, both activities are “noncommercial” at least in the sense that (unlike, for instance, the behavior of MP3.com) they are not associated with profit making. And neither undermines the nor-

mal markets for the copyrighted works in question. (Indeed, sampling MP3 recordings, unlike time-shifting movies, *enhances* the normal market for sound recordings by stimulating CD sales.) Thus, if time-shifting movies is legitimate, then sampling songs ought to be also.

How did the courts—and, specifically, the Court of Appeals for the Ninth Circuit in its decisive ruling in the case—avoid this conclusion? First, the appellate court rejected the characterization of sampling as “noncommercial” in nature, reasoning that, if they were unable to sample sounds through Napster, its users would visit ad-supported Websites where (free) authorized “promotional downloads” (either excerpts of songs or full-length versions which self-destructed after a brief period) were available, and record companies are paid fees by those Websites. In other words, the court claimed, the samplers’ behavior is “commercial” because, if they were prevented from engaging in it, the copyright owners could make more money. But this is surely not the definition of “commercial” that underlay the Supreme Court’s ruling in the *Sony* case. On this definition, time-shifting would be “commercial” because, if forbidden to engage in it, VCR owners would pay for access to films and TV shows broadcast at times they were not home. Nor does the Court of Appeals’ definition make much sense. Viewed through this lens, virtually every unauthorized use of a copyrighted work would be “commercial” in character.

Next, the Court of Appeals upheld a factual finding by the trial court that “the more music that sampling users download, the less likely they are to eventually purchase the recordings.” This ruling either misunderstands the nature of sampling (by assuming that samplers keep the recordings they download) or presupposes, implausibly, that samplers buy less music because they conclude they don’t like any of the songs they temporarily download.

Finally, the Court of Appeals ruled that, even if the activity of sampling increased CD sales, it

⁷⁴ ... This argument would, of course, lose much of its force if Napster were capable of determining which of its subscribers were engaged in lawful activities and which were not—and then using that information either to cancel the subscription of the latter or to block their behavior. But with respect to sampling, at least, such differentiation is impossible. As the Court of Appeals emphasized in a separate section of its opinion, Napster probably was capable of distinguishing recordings whose copyright owners did not object to Internet distribution from recordings whose copyright owners did so object—and of taking steps to block exchanges of the latter. But Napster could not know (and had no way of learning) what a given user did with the files he or she downloaded—and thus could not determine whether he or she was engaged in unlawful “librarying” or lawful sampling.

still deprived the record companies of a “potential market”—namely their right to charge money for licenses to engage in sampling. Remember that Justice Blackmun made a precisely analogous argument in his dissenting opinion in the *Sony* case. The majority of the Supreme Court rejected the argument, implicitly adopting a narrower conception of what counts as a “potential market” when assessing alleged injuries claimed by copyright owners. To be sure, as noted in the previous chapter, both the Supreme Court and the lower federal courts have since vacillated on this topic, and thus the Ninth Circuit’s analysis is not wholly unprecedented. But it is inconsistent with the approach taken by the majority of the Supreme Court in *Sony*, the case whose facts most closely resemble those of *Napster*.

(Judge Posner, in the *Aimster* case, had an easier time dealing with this issue, because he could

stress *Aimster*’s failure to offer any evidence that any of its subscribers were engaged in benign activities. But even Posner, in order to rule for the entertainment companies, had to contort the *Sony* decision a bit. The Supreme Court, you will recall, had indicated that a company could escape liability for contributory infringement if it showed that its technology was “capable of substantial noninfringing uses.” For Posner, merely being “capable” of legal uses was not enough. The company would have to “demonstrate that its service *has* substantial noninfringing uses.”)

The bottom line: the courts had to strain to find against *Napster* on this score. On balance, *Napster* had the better argument. To rule in favor of the record companies, the courts were obliged to misconstrue the Supreme Court’s judgment in *Sony* and reconfigure the fair-use doctrine. . . .

BMG Music v. Gonzalez,
430 F.3d 888 (7th Cir. 2005), cert. denied, 547 U.S. 1130 (2006) (excerpt).

EASTERBROOK, Circuit Judge.

Last June the Supreme Court held in *MGM Studios, Inc. v. Grokster, Ltd.*, 125 S. Ct. 2764 (2005), that a distributed file-sharing system is engaged in contributory copyright infringement when its principal object is the dissemination of copyrighted material. The foundation of this holding is a belief that people who post or download music files are primary infringers. *In re Aimster Copyright Litigation*, 334 F.3d 643, 645 (7th Cir. 2003), which anticipated *Grokster*, made the same assumption. In this appeal Cecilia Gonzalez, who downloaded copyrighted music through the KaZaA file-sharing network, denies the premise of *Grokster* and *Aimster*. She contends that her activities were fair use rather than infringement. The district court disagreed and granted summary judgment for the copyright proprietors (to which we refer collectively as BMG Music). 2005 U.S. Dist. LEXIS 910 (N.D. Ill. Jan. 7, 2005). The court enjoined Gonzalez from further infringement and awarded \$22,500 in damages under 17 U.S.C. § 504(c).

A “fair use” of copyrighted material is not infringement. Gonzalez insists that she was engaged in fair use under the terms of 17 U.S.C. § 107—or at least that a material dispute entitles

her to a trial. It is undisputed, however, that she downloaded more than 1,370 copyrighted songs during a few weeks and kept them on her computer until she was caught. Her position is that she was just sampling music to determine what she liked enough to buy at retail. Because this suit was resolved on summary judgment, we must assume that Gonzalez is telling the truth when she says that she owned compact discs containing some of the songs before she downloaded them and that she purchased others later. She concedes, however, that she has never owned legitimate copies of 30 songs that she downloaded. (How many of the remainder she owned is disputed.)

Instead of erasing songs that she decided not to buy, she retained them. It is these 30 songs about which there is no dispute concerning ownership that formed the basis for the damages award. This is not a form of time-shifting, along the lines of *Sony Corp. of America v. Universal Studios, Inc.*, 464 U.S. 417 (1984) (*Betamax*). A copy downloaded, played, and retained on one’s hard drive for future use is a direct substitute for a purchased copy—and without the benefit of the license fee paid to the broadcaster. The premise of *Betamax* is that the broadcast was licensed for

one transmission and thus one viewing. *Betamax* held that shifting the time of this single viewing is fair use. The files that Gonzalez obtained, by contrast, were posted in violation of copyright law; there was no license covering a single transmission or hearing—and, to repeat, Gonzalez kept the copies. Time-shifting by an authorized recipient this is not. See William M. Landes & Richard A. Posner, *The Economic Structure of Intellectual Property Law* 117–22 (2003).

Section 107 provides that when considering a defense of fair use the court must take into account “(1) the purpose and character of the use, including whether such use is of a commercial nature or is for nonprofit educational purposes; (2) the nature of the copyrighted work; (3) the amount and substantiality of the portion used in relation to the copyrighted work as a whole; and (4) the effect of the use upon the potential market for or value of the copyrighted work.” Gonzalez was not engaged in a nonprofit use; she downloaded (and kept) whole copyrighted songs (for which, as with poetry, copying of more than a couplet or two is deemed excessive); and she did this despite the fact that these works often are sold per song as well as per album. This leads her to concentrate on the fourth consideration: “the effect of the use upon the potential market for or value of the copyrighted work.”

As she tells the tale, downloading on a try-before-you-buy basis is good advertising for copyright proprietors, expanding the value of their inventory. The Supreme Court thought otherwise in *Grokster*, with considerable empirical support. As file sharing has increased over the last four years, the sales of recorded music have dropped by approximately 30%. Perhaps other economic factors contributed, but the events likely are related. Music downloaded for free from the Internet is a close substitute for purchased music; many people are bound to keep the downloaded files without buying originals. That is exactly what Gonzalez did for at least 30 songs. It is no surprise, therefore, that the only appellate decision on point has held that downloading copyrighted songs cannot be defended as fair use, whether or not the recipient plans to buy the songs she likes well enough to spring for. See *A&M Records, Inc. v. Napster, Inc.*, 239 F.3d 1004, 1014–19 (9th Cir. 2001). See also *UMG Recordings, Inc. v. MP3.com, Inc.*, 92 F. Supp. 2d

349 (S.D.N.Y. 2000) (holding that downloads are not fair use even if the downloader *already* owns one purchased copy).

Although BMG Music sought damages for only the 30 songs that Gonzalez concedes she has never purchased, all 1,000+ of her downloads violated the statute. All created copies of an entire work. All undermined the means by which authors seek to profit. Gonzalez proceeds as if the authors’ only interest were in selling compact discs containing collections of works. Not so; there is also a market in ways to introduce potential consumers to music.

Think of radio. Authors and publishers collect royalties on the broadcast of recorded music, even though these broadcasts may boost sales. See *Broadcast Music, Inc. v. Columbia Broadcasting System, Inc.*, 441 U.S. 1 (1979) (discussing the licenses available from performing rights societies for radio and television broadcasts). Downloads from peer-to-peer networks such as KaZaA compete with licensed broadcasts and hence undermine the income available to authors. This is true even if a particular person never buys recorded media. Cf. *United States v. Slater*, 348 F.3d 666 (7th Cir. 2003). Many radio stations stream their content over the Internet, paying a fee for the right to do so. Gonzalez could have listened to this streaming music to sample songs for purchase; had she done so, the authors would have received royalties from the broadcasters (and reduced the risk that files saved to disk would diminish the urge to pay for the music in the end).

Licensed Internet sellers, such as the iTunes Music Store, offer samples—but again they pay authors a fee for the right to do so, and the teasers are just a portion of the original. Other intermediaries (not only Yahoo! Music Unlimited and Real Rhapsody but also the revived Napster, with a new business model) offer licensed access to large collections of music; customers may rent the whole library by the month or year, sample them all, and purchase any songs they want to keep. New technologies, such as SNOCAP, enable authorized trials over peer-to-peer systems. See Saul Hansell, *Putting the Napster Genie Back in the Bottle*, New York Times (Nov. 20, 2005); see also <http://www.snocap.com>.

Authorized previews share the feature of evanescence: if a listener decides not to buy (or

stops paying the rental fee), no copy remains behind. With all of these means available to consumers who want to choose where to spend their money, downloading full copies of copyrighted material without compensation to authors cannot be deemed “fair use.” Copyright law lets authors make their own decisions about how best to promote their works; copiers such as Gonzalez cannot ask courts (and juries) to second-guess the market and call wholesale copying “fair use” if they think that authors err in understanding

their own economic interests or that Congress erred in granting authors the rights in the copyright statute. Nor can she defend by observing that other persons were greater offenders; Gonzalez’s theme that she obtained “only 30” (or “only 1,300”) copyrighted songs is no more relevant than a thief’s contention that he shoplifted “only 30” compact discs, planning to listen to them at home and pay later for any he liked.

* * * * *

Affirmed.

**Lexmark International, Inc. v. Static Control Components, Inc.,
387 F.3d 522 (6th Cir. 2004) (excerpt).**

SUTTON, Circuit Judge.

This copyright dispute involves two computer programs, two federal statutes and three theories of liability. The first computer program, known as the “Toner Loading Program,” calculates toner level in printers manufactured by Lexmark International. The second computer program, known as the “Printer Engine Program,” controls various printer functions on Lexmark printers.

The first statute, the general copyright statute, 17 U.S.C. § 101 *et seq.*, has been with us in one form or another since 1790 and grants copyright protection to “original works of authorship fixed in any tangible medium of expression,” *id.* § 102(a), but does not “extend to any idea, procedure, process, system, method of operation, concept, principle, or discovery,” *id.* § 102(b). The second federal statute, the Digital Millennium Copyright Act (DMCA), 17 U.S.C. § 1201 *et seq.*, was enacted in 1998 and proscribes the sale of products that may be used to “circumvent a technological measure that effectively controls access to a work” protected by the copyright statute.

These statutes became relevant to these computer programs when Lexmark began selling discount toner cartridges for its printers that only Lexmark could re-fill and that contained a microchip designed to prevent Lexmark printers from functioning with toner cartridges that Lexmark had not re-filled. In an effort to support the market for competing toner cartridges, Static Control Components (SCC) mimicked Lexmark’s computer chip and sold it to companies interested in selling remanufactured toner cartridges.

Lexmark brought this action to enjoin the sale

of SCC’s computer chips and raised three theories of liability in doing so. Lexmark claimed that SCC’s chip copied the Toner Loading Program in violation of the federal copyright statute. It claimed that SCC’s chip violated the DMCA by circumventing a technological measure designed to control access to the Toner Loading Program. And it claimed that SCC’s chip violated the DMCA by circumventing a technological measure designed to control access to the Printer Engine Program.

After an evidentiary hearing, the district court decided that Lexmark had shown a likelihood of success on each claim and entered a preliminary injunction against SCC. As we view Lexmark’s prospects for success on each of these claims differently, we vacate the preliminary injunction and remand the case for further proceedings.

I.

A.

The Parties. Headquartered in Lexington, Kentucky, Lexmark is a leading manufacturer of laser and inkjet printers and has sold printers and toner cartridges for its printers since 1991. Lexmark is a publicly traded corporation and reported \$4.8 billion in revenue for 2003.

Static Control Components is a privately held company headquartered in Sanford, North Carolina. Started in 1987, it currently employs approximately 1,000 workers and makes a wide range of technology products, including microchips that it sells to third-party companies for use in remanufactured toner cartridges.

The Two Computer Programs. The first program at issue is Lexmark’s “Toner Loading

Program,” which measures the amount of toner remaining in the cartridge based on the amount of torque (rotational force) sensed on the toner cartridge wheel. The Toner Loading Program relies upon eight program commands—“add,” “sub” (an abbreviation for subtract), “mul” (multiply), “pct” (take a percent), “jump,” “if,” “load,” and “exit”—to execute one of several mathematical equations that convert the torque reading into an approximation of toner level. The exact code of the Toner Loading Program varies slightly for each printer model, and this case involves two versions of the program—one for Lexmark’s T520 and T522 printer models and another for Lexmark’s T620 and T622 printer models. The Toner Loading Program for the T520/522 printers comprises 33 program instructions and occupies 37 bytes of memory, while the Toner Loading Program for the T620/622 printers comprises 45 program commands and uses 55 bytes of memory. To illustrate the modest size of this computer program, the phrase “Lexmark International, Inc. vs. Static Control Components, Inc.” in ASCII format would occupy more memory than either version of the Toner Loading Program. The Toner Loading Program is located on a microchip contained in Lexmark’s toner cartridges.

The second program is Lexmark’s “Printer Engine Program.” The Printer Engine Program occupies far more memory than the Toner Loading Program and translates into over 20 printed pages of program commands. The program controls a variety of functions on each printer—e.g., paper feed and movement, and printer motor control. Unlike the Toner Loading Program, the Printer Engine Program is located within Lexmark’s printers.

Lexmark obtained Certificates of Registration from the Copyright Office for both programs. Neither program is encrypted and each can be read (and copied) directly from its respective memory chip.

Lexmark’s Prebate and Non-Prebate Cartridges. Lexmark markets two types of toner cartridges for its laser printers: “Prebate” and “Non-Prebate.” Prebate cartridges are sold to business consumers at an up-front discount. In exchange, consumers agree to use the cartridge just once, then return the empty unit to Lexmark; a “shrink-wrap” agreement on the top of each cartridge box spells out these restrictions and con-

firms that using the cartridge constitutes acceptance of these terms. Non-Prebate cartridges are sold without any discount, are not subject to any restrictive agreements and may be re-filled with toner and reused by the consumer or a third-party remanufacturer.

To ensure that consumers adhere to the Prebate agreement, Lexmark uses an “authentication sequence” that performs a “secret handshake” between each Lexmark printer and a microchip on each Lexmark toner cartridge. Both the printer and the chip employ a publicly available encryption algorithm known as “Secure Hash Algorithm-1” or “SHA-1,” which calculates a “Message Authentication Code” based on data in the microchip’s memory. If the code calculated by the microchip matches the code calculated by the printer, the printer functions normally. If the two values do not match, the printer returns an error message and will not operate, blocking consumers from using toner cartridges that Lexmark has not authorized.

SCC’s Competing Microchip. SCC sells its own microchip—the “SMARTEK” chip—that permits consumers to satisfy Lexmark’s authentication sequence each time it would otherwise be performed, i.e., when the printer is turned on or the printer door is opened and shut. SCC’s advertising boasts that its chip breaks Lexmark’s “secret code” (the authentication sequence), which “even on the fastest computer available today . . . would take **Years** to run through all of the possible 8-byte combinations to break.” SCC sells these chips to third-party cartridge remanufacturers, permitting them to replace Lexmark’s chip with the SMARTEK chip on refurbished Prebate cartridges. These recycled cartridges are in turn sold to consumers as a low-cost alternative to new Lexmark toner cartridges.

Each of SCC’s SMARTEK chips also contains a copy of Lexmark’s Toner Loading Program, which SCC claims is necessary to make its product compatible with Lexmark’s printers. The SMARTEK chips thus contain an identical copy of the Toner Loading Program that is appropriate for each Lexmark printer, and SCC acknowledges that it “slavishly copied” the Toner Loading Program “in the exact format and order” found on Lexmark’s cartridge chip. A side-by-side comparison of the two data sequences reveals no differences between them.

The parties agree that Lexmark's printers perform a second calculation independent of the authentication sequence. After the authentication sequence concludes, the Printer Engine Program downloads a copy of the Toner Loading Program from the toner cartridge chip onto the printer in order to measure toner levels. Before the printer runs the Toner Loading Program, it performs a "checksum operation," a "commonly used technique" to ensure the "integrity" of the data downloaded from the toner cartridge microchip. Under this operation, the printer compares the result of a calculation performed on the data bytes of the transferred copy of the Toner Loading Program with the "checksum value" located elsewhere on the toner cartridge microchip. If the two values do not match, the printer assumes that the data was corrupted in the program download, displays an error message and ceases functioning. If the two values do match, the printer continues to operate.

The Lawsuit. On December 30, 2002, Lexmark filed a complaint in the United States District Court for the Eastern District of Kentucky seeking to enjoin SCC (on a preliminary and permanent basis) from distributing the SMARTEK chips. The complaint contained three theories of liability. First, Lexmark alleged that SCC violated the copyright statute, 17 U.S.C. § 106, by reproducing the Toner Loading Program on its SMARTEK chip. Second, it alleged that SCC violated the DMCA by selling a product that circumvents access controls on the Toner Loading Program. Third, it alleged that SCC violated the DMCA by selling a product that circumvents access controls on the Printer Engine Program.

B.

The district court initially concluded that Lexmark had established a likelihood of success on its copyright infringement claim for SCC's copying of its Toner Loading Program.

* * * * *

The district court next determined that Lexmark had established a likelihood of success on its two DMCA claims, one relating to the Toner Loading Program, the other relating to the Printer Engine Program. Observing that the anti-trafficking provision of the DMCA, 17 U.S.C. § 1201(a)(2), "prohibits any product or device that circumvents a technological measure that prevents unauthorized access to a copy-

righted work," the district court concluded that Lexmark had established a likelihood of success that SCC's SMARTEK chip did this very thing. In the district court's view, Lexmark's authentication sequence (not the checksum calculation) constitutes a "technological measure" that "effectively controls access" to two copyrighted works—the Toner Loading Program and the Printer Engine Program. The authentication sequence, it determined, "controls access" because it "controls the consumer's ability to make use of these programs." Because SCC designed the SMARTEK chip to circumvent Lexmark's authentication sequence, because circumvention was the sole commercial purpose of the SMARTEK chip and because SCC markets these chips as performing that function, the court reasoned that SCC likely had violated the DMCA's prohibitions on marketing circumvention devices. See 17 U.S.C. 1201(a)(2).

Finally, the district court determined that the DMCA's "reverse engineering" exception to liability did not apply.

* * * * *

Because Lexmark had established a likelihood of success on the merits, the district court presumed irreparable harm, *id.* at 48–49, and concluded that the public interest would favor an injunction against SCC, *id.* at 50–51. After weighing other potential hardships, the district court concluded that the preliminary injunction should issue.

II.

* * * * *

III.

With respect to Lexmark's copyright infringement claim, Judge Sutton determined (1) that the copyright doctrines of merger and scènes-à-faire applied and suggested that, because the expressive aspects of Lexmark's Toner Loading Program were inseparable from its functional aspects, the program was ineligible for copyright protection; (2) that the preliminary injunction record was insufficient to support the district court's conclusion that the Toner Loading Program was sufficiently original, as a matter of law, to warrant copyright protection; and (3) that the fact that Lexmark employed the Toner Loading Program as a functional "lock-out code," rather than for its

expressive qualities, also raised doubts as to the program's copyrightability.

Because the record cast doubt upon the eligibility of the Toner Loading Program for copyright protection, Judge Sutton did not find it necessary to determine whether SCC had a valid defense under the fair use exception. He did suggest, however, that SCC might have a stronger fair use defense than the district court recognized. As to the first fair use factor, Judge Sutton noted that SCC had not "copied the Toner Loading Program for its commercial value as a copyrighted work," but rather simply for its functional properties. As to the fourth fair use factor, Judge Sutton found no evidence that a market existed for the Toner Loading Program as a copyrighted work, and that effects on a different market—to wit, the market for Lexmark's toner cartridges—were irrelevant to the fair use issue.

* * * * *

IV.

A.

Enacted in 1998, the DMCA has three liability provisions. The statute first prohibits the circumvention of "a technological measure that effectively controls access to a work protected [by copyright]." 17 U.S.C. § 1201(a)(1). The statute then prohibits selling devices that circumvent access-control measures:

No person shall manufacture, import, offer to the public, provide, or otherwise traffic in any technology, product, service, device, component, or part thereof, that—

(A) is primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access to a [copyrighted work];

(B) has only limited commercially significant purpose or use other than to circumvent a technological measure that effectively controls access to a [copyrighted work]; or

(C) is marketed by that person or another acting in concert with that person with that person's knowledge for use in circumventing a technological

measure that effectively controls access to a [copyrighted work].

Id. § 1201(a)(2). The statute finally bans devices that circumvent "technological measures" protecting "a right" of the copyright owner. *Id.* § 1201(b). The last provision prohibits devices aimed at circumventing technological measures that allow some forms of "access" but restrict other uses of the copyrighted work, *see Universal City Studios, Inc. v. Corley*, 273 F.3d 429, 441 (2d Cir. 2001); *United States v. Elcom Ltd.*, 203 F. Supp. 2d 1111, 1120 (N.D. Cal. 2002), such as streaming media, which permits users to view or watch a copyrighted work but prevents them from downloading a permanent copy of the work, *see RealNetworks, Inc. v. Streambox, Inc.*, No. 2:99CV02070, 2000 WL 127311, at *1–2 (W.D. Wash. Jan. 18, 2000).

* * * * *

In filing its complaint and in its motion for a preliminary injunction, Lexmark invoked the second liability provision—the ban on distributing devices that circumvent access-control measures placed on copyrighted works. *See id.* § 1201(a)(2). According to Lexmark, SCC's SMARTEK chip is a "device" marketed and sold by SCC that "circumvents" Lexmark's "technological measure" (the SHA-1 authentication sequence, not the checksum operation), which "effectively controls access" to its copyrighted works (the Toner Loading Program and Printer Engine Program). Lexmark claims that the SMARTEK chip meets all three tests for liability under § 1201(a)(2): (1) the chip "is primarily designed or produced for the purpose of circumventing" Lexmark's authentication sequence, 17 U.S.C. § 1201(a)(2)(A); (2) the chip "has only limited commercially significant purpose or use other than to circumvent" the authentication sequence, *id.* § 1201(a)(2)(B); and (3) SCC "market[s]" the chip "for use in circumventing" the authentication sequence, *id.* § 1201(a)(2)(C). The district court agreed and concluded that Lexmark had shown a likelihood of success under all three provisions.

B.

We initially consider Lexmark's DMCA claim concerning the Printer Engine Program, which (the parties agree) is protected by the general copyright statute. In deciding that Lexmark's au-

thentication sequence “effectively controls access to a work protected under [the copyright provisions],” the district court relied on a definition in the DMCA saying that a measure “effectively controls access to a work” if, “in the ordinary course of operation,” it “requires the application of information, or a process or treatment, with the authority of the copyright owner, to gain access to the work.” 17 U.S.C. § 1201(a)(3). Because Congress did not explain what it means to “gain access to the work,” the district court relied on the “ordinary, customary meaning” of “access”: “the ability to enter, to obtain, or to make use of,” D. Ct. Op. at 41 (quoting *Merriam-Webster’s Collegiate Dictionary* 6 (10th ed. 1999)). Based on this definition, the court concluded that “Lexmark’s authentication sequence effectively ‘controls access’ to the Printer Engine Program because it controls the consumer’s ability to *make use of* these programs.” D. Ct. Op. at 41 (emphasis added).

We disagree. It is not Lexmark’s authentication sequence that “controls access” to the Printer Engine Program. See 17 U.S.C. § 1201(a)(2). It is the purchase of a Lexmark printer that allows “access” to the program. Anyone who buys a Lexmark printer may read the literal code of the Printer Engine Program directly from the printer memory, with or without the benefit of the authentication sequence, and the data from the program may be translated into readable source code after which copies may be freely distributed. No security device, in other words, protects access to the Printer Engine Program Code and no security device accordingly must be circumvented to obtain access to that program code.

The authentication sequence, it is true, may well block one form of “access”—the “ability to . . . make use of” the Printer Engine Program by preventing the printer from functioning. But it does not block another relevant form of “access”—the “ability to [] obtain” a copy of the work or to “make use of” the literal elements of the program (its code). Because the statute refers to “control[ling] access to a work protected under this title,” it does not naturally apply when the “work protected under this title” is otherwise accessible. Just as one would not say that a lock on the back door of a house “controls access” to a house whose front door does not contain a lock and just as one would not say that a lock on any

door of a house “controls access” to the house after its purchaser receives the key to the lock, it does not make sense to say that this provision of the DMCA applies to otherwise-readily-accessible copyrighted works. Add to this the fact that the DMCA not only requires the technological measure to “control[] access” but also requires the measure to control that access “effectively,” 17 U.S.C. § 1201(a)(2), and it seems clear that this provision does not naturally extend to a technological measure that restricts one form of access but leaves another route wide open. See also *id.* § 1201(a)(3) (technological measure must “require[] the application of information, or a process or a treatment . . . to gain access to the work”) (emphasis added). See *The Chamberlain Group, Inc. v. Skylink Techs., Inc.*, 381 F.3d 1178, 1183 (Fed. Cir. 2004) (“Chamberlain’s proposed construction of the DMCA ignores the significant differences between defendants whose accused products enable copying and those, like Skylink, whose accused products enable only legitimate uses of copyrighted software.”).

Nor are we aware of any cases that have applied this provision of the DMCA to a situation where the access-control measure left the literal code or text of the computer program or data freely readable. And several cases apply the provision in what seems to us its most natural sense. See, e.g., *321 Studios v. Metro Goldwyn Mayer Studios, Inc.*, 307 F. Supp. 2d 1085, 1095 (N.D. Cal. 2004) (deciding that the “CSS” encryption program, which prevents viewing of DVD movies and copying of the data encoded on the DVD, effectively controls access to copyrighted DVD movies); *Universal City Studios, Inc. v. Reimerdes*, 111 F. Supp. 2d 294, 318 (S.D.N.Y. 2000), *aff’d sub nom.*, *Corley*, 273 F.3d 429; *Sony Computer Entm’t Am. Inc. v. Gamemasters*, 87 F. Supp. 2d 976, 987 (N.D. Cal. 1999) (deciding that technological measure on PlayStation game console, which prevented unauthorized games from being played, effectively controlled access to copyrighted CD-ROM video games, which the facts of the case do not describe as either encrypted or unencrypted); see also *RealNetworks*, 2000 WL 127311, at *3 (noting that the technological measure at issue was a “successful means of protecting against unauthorized duplication and distribution” of copyrighted digital works); *Pearl Investments, LLC v. Standard I/O, Inc.*,

257 F. Supp. 2d 326, 349–50 (D. Me. 2003) (determining that plaintiff’s “encrypted, password-protected virtual private network,” which blocked access to data including plaintiff’s copyrighted computer software, was a technological measure that effectively controlled access to that work).

Lexmark defends the district court’s contrary ruling on several grounds.

* * * * *

Second, Lexmark counters that several cases have embraced a “to make use of” definition of “access” in applying the DMCA. While Lexmark is partially correct, these cases (and others as well) ultimately illustrate the liability line that the statute draws and in the end explain why access to the Printer Engine Program is not covered.

In the essential setting where the DMCA applies, the copyright protection operates on two planes: in the literal code governing the work and in the visual or audio manifestation generated by the code’s execution. For example, the encoded data on CDs translates into music and on DVDs into motion pictures, while the program commands in software for video games or computers translate into some other visual and audio manifestation. In the cases upon which Lexmark relies, restricting “use” of the work means restricting consumers from making use of the copyrightable expression in the work. *See* 321 *Studios*, 307 F. Supp. 2d at 1095 (movies contained on DVDs protected by an encryption algorithm cannot be watched without a player that contains an access key); *Reimerdes*, 111 F. Supp. 2d at 303 (same); *Gamemasters*, 87 F. Supp. 2d at 981 (Sony’s game console prevented operation of unauthorized video games). As shown above, the DMCA applies in these settings when the product manufacturer prevents all access to the copyrightable material and the alleged infringer responds by marketing a device that circumvents the technological measure designed to guard access to the copyrightable material.

The copyrightable expression in the Printer Engine Program, by contrast, operates on only one plane: in the literal elements of the program, its source and object code. Unlike the code underlying video games or DVDs, “using” or executing the Printer Engine Program does not in turn create any protected expression. Instead, the program’s output is purely functional: the Printer

Engine Program “controls a number of operations” in the Lexmark printer such as “paper feed[,] paper movement[,] [and] motor control.” And unlike the code underlying video games or DVDs, no encryption or other technological measure prevents access to the Printer Engine Program. Presumably, it is precisely because the Printer Engine Program is not a conduit to protectable expression that explains why Lexmark (or any other printer company) would not block access to the computer software that makes the printer work. Because Lexmark’s authentication sequence does not restrict access to this literal code, the DMCA does not apply.

Lexmark next argues that access-control measures may “effectively control access” to a copyrighted work within the meaning of the DMCA even though the measure may be evaded by an “enterprising end-user.” Doubtless, Lexmark is correct that a precondition for DMCA liability is not the creation of an impervious shield to the copyrighted work. *See RealNetworks*, 2000 WL 127311, at *9; *Reimerdes*, 111 F. Supp. 2d at 317–18 (rejecting argument that an encryption measure does not “effectively control access” because it is only a “weak cipher”); *see also* 17 U.S.C. § 1201(a)(3). Otherwise, the DMCA would apply only when it is not needed.

But our reasoning does not turn on the *degree* to which a measure controls access to a work. It turns on the textual requirement that the challenged circumvention device must indeed circumvent *something*, which did not happen with the Printer Engine Program. Because Lexmark has not directed any of its security efforts, through its authentication sequence or otherwise, to ensuring that its copyrighted work (the Printer Engine Program) cannot be read and copied, it cannot lay claim to having put in place a “technological measure that effectively controls access to a work protected under [the copyright statute].” 17 U.S.C. § 1201(a)(2)(B).

Nor can Lexmark tenably claim that this reading of the statute fails to respect Congress’s purpose in enacting it. Congress enacted the DMCA to implement the Copyright Treaty of the World Intellectual Property Organization, and in doing so expressed concerns about the threat of “massive piracy” of digital works due to “the ease with which [they] can be copied and distributed worldwide virtually instantaneously.” S. Rep. No.

105-190, at 8 (1998). As Congress saw it, “copyrighted works will most likely be encrypted and made available to consumers once payment is made for access to a copy of the work. [People] will try to profit from the works of others by decoding the encrypted codes protecting copyrighted works, or engaging in the business of providing devices or services to enable others to do so.” H.R. Rep. No. 105-551, pt. 1, at 10. Backing with legal sanctions “the efforts of copyright owners to protect their works from piracy behind digital walls such as encryption codes or password protections,” *Corley*, 273 F.3d at 435, Congress noted, would encourage copyright owners to make digital works more readily available, see S. Rep. No. 105-190, at 8. See also Nimmer § 12A.02[B][1].

Nowhere in its deliberations over the DMCA did Congress express an interest in creating liability for the circumvention of technological measures designed to prevent consumers from using consumer goods while leaving the copyrightable content of a work unprotected. In fact, Congress added the interoperability provision in part to ensure that the DMCA would not diminish the benefit to consumers of interoperable devices “in the consumer electronics environment.” 144 Cong. Rec. E2136 (daily ed. Oct. 13, 1998) (remarks of Rep. Bliley). See generally Anti-Circumvention Rulemaking Hearing, at 44–56, at <http://www.copyright.gov/1201/2003/hearings/transcript-may9.pdf> (testimony of Professor Jane Ginsburg) (Section 1201(a) does not “cover[] the circumvention of a technological measure that controls access to a work not protected under [the Copyright] title. And if we’re talking about ball point pen cartridges, printer cartridges, garage doors and so forth, we’re talking about works not protected under this title.”).

C.

In view of our conclusion regarding the Printer Engine Program, we can dispose quickly of Lexmark’s DMCA claim regarding the Toner Loading Program. The SCC chip does not provide “access” to the Toner Loading Program but replaces the program. And to the extent a copy of the Toner Loading Program appears on the Printer Engine Program, Lexmark fails to overcome the same problem that undermines its DMCA claim with respect to the Printer Engine Program: Namely, it is not the SCC chip that permits access to the

Printer Engine Program but the consumer’s purchase of the printer. One other point deserves mention. All three liability provisions of this section of the DMCA require the claimant to show that the “technological measure” at issue “controls access to a work protected under this title,” see 17 U.S.C. § 1201(a)(2)(A)–(C), which is to say a work protected under the general copyright statute, *id.* § 102(a). To the extent the Toner Loading Program is not a “work protected under [the copyright statute],” which the district court will consider on remand, the DMCA necessarily would not protect it.

* * * * *

V.

Because Lexmark failed to establish a likelihood of success on any of its claims, whether under the general copyright statute or under the DMCA, we vacate the district court’s preliminary injunction and remand the case for further proceedings consistent with this opinion.

MERRITT, Circuit Judge, concurring.

I agree with the Court’s opinion as far as it goes; but, on the record now before us, I would go further in limiting the scope of the remand. As the Court explains, the Toner Loading Program is not copyrightable because of the merger and *scènes à faire* doctrines, and even if it were copyrightable SCC’s use of the program in this case appears to fall under the fair use exception. Its purpose, though commercial in nature, was only to sell cartridges that could be used by Lexmark printers rather than to profit by infringing any Lexmark copyright. The fact that the Toner Loading Program is not copyrightable defeats both Lexmark’s direct claim to copyright infringement and its DMCA claim based on the Toner Loading Program (because the DMCA only prevents the circumvention of measures that protect copyright-protected works). And I agree that Lexmark’s DMCA claim based on the clearly copyright-protected Printer Engine Program fails because the authentication sequence does not, and is not intended to, “effectively control[] access” to the Printer Engine Program.

I write separately to emphasize that our holding should not be limited to the narrow facts surrounding either the Toner Loading Program or the Printer Engine Program. We should make clear that in the future companies like Lexmark

cannot use the DMCA in conjunction with copyright law to create monopolies of manufactured goods for themselves just by tweaking the facts of this case: by, for example, creating a Toner Loading Program that is more complex and “creative” than the one here, or by cutting off other access to the Printer Engine Program. The crucial point is that the DMCA forbids anyone from trafficking in any technology that “is primarily designed or produced for the purpose of circumventing a technological measure that effectively controls access to a [protected] work.” 17 U.S.C. § 1201(2)(A) (emphasis added). The key question is the “purpose” of the circumvention technology. The microchip in SCC’s toner cartridges is intended not to reap any benefit from the Toner Loading Program—SCC’s microchip is not designed to measure toner levels—but only for the purpose of making SCC’s competing toner cartridges work with printers manufactured by Lexmark.

By contrast, Lexmark would have us read this statute in such a way that any time a manufacturer intentionally circumvents any technological measure and accesses a protected work it necessarily violates the statute regardless of its “purpose.” Such a reading would ignore the precise language—“for the purpose of”—as well as the main point of the DMCA—to prohibit the pirating of copyright-protected works such as movies, music, and computer programs. If we were to adopt Lexmark’s reading of the statute, manufacturers could potentially create monopolies for replacement parts simply by using similar, but more creative, lock-out codes. Automobile manufacturers, for example, could control the entire market of replacement parts for their vehicles by including lock-out chips. Congress did not intend to allow the DMCA to be used offensively in this manner, but rather only sought to reach those who circumvented protective measures “for the purpose” of pirating works protected by the copyright statute. Unless a plaintiff can show that a defendant circumvented protective measures for such a purpose, its claim should not be allowed to go forward. If Lexmark wishes to utilize DMCA protections for (allegedly) copyrightable works, it should not use such works to prevent competing cartridges from working with its printer.

Reading the DMCA in *pari materia* with the rest of the copyright code supports this interpretation. The DMCA should be used as part of the

copyright code as it applies to computer software codes and other digital media. To this extent, the specific “purpose” language of the DMCA modifies the more abstract language of the previous copyright law. As the Court explains, the fair use exception in copyright law explicitly looks to the purpose of the one making the copy in determining whether or not such copying violates the statute, and the DMCA itself contains a reverse engineering exception that also demonstrates Congress’s aim merely to prevent piracy. I agree with the Court that both exceptions apply to SCC’s actions in this case. But we should be wary of shifting the burden to a rival manufacturer to demonstrate that its conduct falls under such an exception in cases where there is no indication that it has any intention of pirating a protected work. *See, e.g.,* Lawrence Lessig, *Free Culture* 187 (2004) (noting the danger that “in America fair use simply means the right to hire a lawyer to defend your right to create”). A monopolist could enforce its will against a smaller rival simply because the potential cost of extended litigation and discovery where the burden of proof shifts to the defendant is itself a deterrent to innovation and competition. Misreading the statute to shift the burden in this way could allow powerful manufacturers in practice to create monopolies where they are not in principle supported by law. Instead, a better reading of the statute is that it requires plaintiffs as part of their burden of pleading and persuasion to show a purpose to pirate on the part of defendants. Only then need the defendants invoke the statutory exceptions, such as the reverse engineering exception. In this case, even if the Toner Loading Program were protected by copyright, and even if the access to the Printer Engine Program were “effectively” controlled, there has been no showing that SCC circumvented the authentication sequence for the purpose of accessing these programs. Indeed, the proof so far shows that SCC had no interest in those programs other than ensuring that their own cartridges would work with Lexmark’s printers.

Finally, this reading of the DMCA is also supported by the provision in the Constitution that grants Congress the power to regulate copyright. Article I, section 8, of the Constitution gives Congress the power to regulate copyright in order to “promote the Progress of Science and use-

ful Arts.” U.S. Const. art. I, § 8, cl. 8. Congress gives authors and programmers exclusive rights to their expressive works (for a limited time) so that they will have an incentive to create works that promote progress. Lexmark’s reading of the extent of these rights, however, would clearly stifle rather than promote progress. It would allow authors exclusive control over not only their own expression, but also over whatever functional use they can make of that expression in manufactured goods. Giving authors monopolies over manufactured goods as well as over their creative expressions will clearly not “promote the Progress of Science and the useful Arts,” but rather would stifle progress by stamping out competition from manufacturers who may be able to design better or less expensive replacement parts like toner cartridges.

For these additional reasons, I concur in the Court’s opinion reversing the judgment of the district court. On remand the first question should be whether Lexmark can show the requisite “primary purpose” to pirate a copyrighted work rather than to ensure that their own cartridges work with Lexmark’s printer. If not, its case against SCC should be dismissed.

FEIKENS, District Judge, Concurring in part and Dissenting in part.

I begin this opinion by noting that my colleagues and I agree on a number of points regarding this case. We agree that this opinion does not foreclose any outcome on the case in chief; instead, its decisions are limited to the grant of the preliminary injunction below. We also agree that Plaintiff Lexmark failed to demonstrate a likelihood of success on the merits of success on the third count, which deals with the Printer Engine Program (PEP) (although I write to explain my own reasoning as to why that is, I also agree with the reasoning of my colleagues). We agree that the Digital Millennium Copyright Act (DMCA) was not intended by Congress to be used to create a monopoly in the secondary markets for parts or components of products that consumers have already purchased. Finally, we agree on the outcome of the second count, although we come to that conclusion for different reasons.

For the reasons explained below, however, I dissent as to the majority’s decision on the first count, regarding the copyrightability and infringement of the Toner Loading Program (TLP).

I. Count One

Judge Feikens dissented from the panel majority’s conclusion that Lexmark’s Toner Loading Program was not copyrightable. Judge Feikens concluded, instead, that (1) the fact that Lexmark could have written the TLP in any of several different ways showed that the particular method Lexmark chose had a sufficient expressive character to justify copyright protection; (2) that the evidence was conflicting on the question whether SCC could have reverse-engineered Lexmark’s chip without copying the TLP; (3) that the doctrine of merger was properly addressed solely to the question whether SCC had infringed Lexmark’s copyright, not to the question whether Lexmark’s TLP was copyrightable in the first instance; (4) that the scènes-à-faire doctrine should be limited in the context of computer programming and should provide only a defense to a claim for infringement rather than for the issue of copyrightability vel non; and (5) that adverse effects on the market for Lexmark’s toner cartridges were sufficient to undercut SCC’s fair use defense.

* * * * *

II. Count Two

As discussed under Count I, the DMCA only offers its additional protections to those works that are already protected by Title 17 of the U.S. Code or those works in which the copyright owner has a protected right under Title 17. 17 U.S.C. § 1201(a)(2)(A); 17 U.S.C. § 1201(b)(A). Because I believe that this record does not allow the elimination of copyrightability on the grounds of originality, merger, or scènes à faire, I believe some analysis of the DMCA claim regarding the TLP is necessary. However, I note that the DMCA explicitly leaves the defenses to copyright infringement, including the fair use doctrine, unaltered. 17 U.S.C. § 1201(c). Therefore, if the district court on remand were to find that the merger, scènes à faire, or fair use doctrine supplied an adequate defense to infringement, given the copying that went on in this case, I do not believe Plaintiff could meet its burden to show likelihood of success under 17 U.S.C. § 1201(b), because there would be no “right of a copyright owner” to prevent the TLP’s use in this fashion.

I believe Plaintiff also failed to meet its burden under both 1201(a) and 1201(b), however, because it failed to present evidence that the chip

was primarily designed or produced for the purpose of accessing the TLP.

Interestingly, unlike traditional copyright law, there is an element of scienter present in the DMCA: in order to be a violation of the Act, any technology that is marketed must have been “primarily designed or produced for the purpose of circumventing” a technological measure or other protection of a work (or a portion of the work) protected under Title 17. 17 U.S.C. § 1201(a)(2)(A); 17 U.S.C. § 1201(b)(A). Here, I think the evidence before the trial court was overwhelming on the point that while Defendant “primarily designed” the chip to circumvent any protections of the Printer Engine Program, the chip was not “primarily designed or produced for the purpose of” circumventing protections for the TLP. Therefore, even if the checksum sequence can be categorized as a lock-out code that must be circumvented in order for the TLP on the chip to be used, or the primary authentication sequence is seen as a protection for both the TLP and the Printer Engine Program, because the chip was primarily designed to allow access to the Printer Engine Program and not the TLP, I believe Plaintiff has not demonstrated a likelihood of success on this count.

However, I emphasize the narrow bounds of my position. The record before the trial court at the preliminary injunction stage points overwhelmingly to the conclusion that Defendant did not realize the TLP was on the chip. If evidence showed Defendant knew or should have known that there was a program on the chip, and that it was practical for the Defendant to manufacture a chip that did not access (and therefore use) the TLP, in my mind, that would be a different case. Under that scenario, the defendant would know of the protection, be able to achieve the purpose of operating the printer without circumventing that protection, and yet still choose to circumvent those protections. On such a record, I think a court would have to carefully weigh whether such a situation means that Defendant’s product was “produced for the purpose of circumventing” protections of the TLP.

My reasoning on this count is based on my belief that consumers did not have an implied license to use the copyrightable TLP beyond the first re-fill of the Prebate cartridge. With the assumption that the shrinkwrap agreement was

valid and enforceable (I believe Lexmark can demonstrate a likelihood of success on that question), I would conclude consumers’ implied license to use the copyrighted TLP did not extend beyond the first re-fill of the Prebate cartridge. The TLP at issue is not present in the printer at purchase. Instead, the consumer gains access to using it by purchasing the Prebate toner cartridge (which stores the programs in its microchip). The Prebate toner cartridge is only sold under a special shrinkwrap agreement that requires that the cartridge be returned to Lexmark when it is empty and may not be re-filled by others for reuse. Since the consumer is only authorized to use the Prebate cartridge until the toner runs out, it follows that the license also blocks the consumer from using the TLP after that time.

The TLP was part of the cartridge, and therefore, when the consumer was able to use the TLP after the cartridge had been emptied of toner and re-filled by Defendant (in violation of the shrinkwrap agreement), in my mind, he or she gained unauthorized access to the TLP. However, the record currently supports the finding that Defendant did not have the requisite knowledge of the TLP to form an intent to primarily design or produce a chip for the purpose of gaining access to it. Therefore, I concur on the outcome of the second count, although my reasoning would be different from that of my colleagues.

III. Count Three

In contrast to the TLP, I believe the consumer has a right to use the Printer Engine Program for the life of the printer. Because the consumer has this right, there is no right of the copyright owner to prevent the consumer from using the Printer Engine Program, and therefore, Defendants cannot be found to be in violation of the DMCA. Though the words are never used, I think the concept of this license is present in my colleagues opinion. I agree with their reasoning regarding this count, and write on this issue only because I believe it sheds additional light on my reasoning regarding Count Two.

All the Lexmark printers at issue here come with the Printer Engine Program installed. In fact, it would be impossible for the printer to work at all without such a program, just as it would be impossible for the printer to work without an engine. Therefore, when the consumer buys the printer, the consumer must be buying

the right to use not just the physical printer components, but also the Printer Engine Program that allows those physical components to produce printed pages. By buying a Lexmark printer, the consumer acquires an implied license to use the Printer Engine Program for the life of that printer.

The DMCA defines “circumventing a technological measure” to mean avoid, bypass, etc., “a technological measure, without the authority of the copyright owner.” 17 U.S.C. § 1201(a)(3)(A) (emphasis mine). Therefore, under the plain meaning of the law, circumventing a technological measure it is only a violation of § 1201(a) if the device allows consumers access to a work that they are not otherwise permitted to have. Therefore, even if Defendant has circumvented the authentication sequence to gain access to the Printer Engine Program, or designed a chip with that as its main purpose, it has not violated the statute, because it has not given anyone access to the program who did not already have authority from Lexmark to use it. In fact, it would be impossible to use the toner cartridge’s chip to gain illegal access to the Lexmark Printer Engine Program, because only consumers with Lexmark printers would use the toner cartridge, and they already own the right to use the Printer Engine Program.

If this language of the statute were not enough, it is clear from the legislative history that Congress did not intend this provision to apply to devices that merely facilitated legitimate access. In the House of Representative’s Commerce Committee’s report on the DMCA, it stated explicitly

that the aim of § 1201(b) was to restrict devices used primarily for piracy, and not those that facilitate legal use of products. In discussion of § 1201(b), the Committee stated, “This provision is not aimed at products that are capable of commercially significant non-infringing uses, such as consumer electronics, telecommunications, or computer products [...] used by businesses and consumers for perfectly legitimate purposes.” HR Rep. 105-796 (October 8, 1998). The Committee also stated that § 1201(b)(1) seeks to prohibit “making or selling the technological means to overcome these protections and thereby facilitate copyright infringement” [emphasis mine]. *Id.* In its January 1999 report discussing § 1201(b), the Commerce Committee again clarified that the measure was intended to outlaw trade in “devices with no substantial non-infringing uses that are expressly intended to facilitate circumvention of technological measures for purposes of gaining access to or making a copy of a work” [emphasis mine]. HR Rep. 105-846 (Jan. 2, 1999). This understanding of § 1201(b) was also clear in the Senate discussions of the DMCA. It stated that the prohibitions in § 1201(a) were made “meaningful” through the provisions of § 1201(b), which were intended to enforce “the longstanding prohibitions on infringements.” S. Rep. 105-190 (May 11, 1998). It reiterated that § 1201(b) is intended to attack those devices that “facilitate copyright infringement.” *Id.* Because Defendant’s chip can only make non-infringing uses of the Lexmark Printer Engine Program, it is clear Congress did not intend the DMCA to apply in this situation.

* * * * *

**Application of Bergy,
596 F.2d 952 (C.C.P.A. 1979) (excerpt).**

RICH, Judge:

* * * * *

The Constitution

The grant of power to Congress to establish a patent system is in these familiar words of Article I, section 8, clauses 8 and 18:

[The Congress shall have Power] * * *

(8) To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries; * * *

(18) To make all Laws which shall be necessary and proper for carrying into Execution the foregoing Powers * * *.

Scholars who have studied this provision, its origins, and its subsequent history, have, from time to time, pointed out that it is really two grants of power rolled into one; first, to establish a copyright system and, second, to establish a patent system. See R. DeWolf, *An Outline of Copyright Law* 15 (1925); K. Lutz, *Patents and Science: A Clarification of the Patent Clause of the Constitution*, 18 Geo. Wash. L. Rev. 50 (1949); P. Federico, *Commentary on the New Patent Act*, 35 U.S.C.A. § 1 to § 110, 1, 3 (1954); G. Rich, *Principles of Patentability*, 28 Geo. Wash. L. Rev. 393 (1960). Their conclusions have been that the constitutionally-stated purpose of granting patent rights to inventors for their discoveries is the promotion of progress in the “useful Arts,” rather than in science. In enacting the 1952

Patent Act, both houses of Congress adopted in their reports this construction of the Constitution in identical words, as follows:

The background, the balanced construction, and the usage current then and later, indicate that the constitutional provision is really two provisions merged into one. The purpose of the first provision is to promote the progress of Science by securing for limited times To authors the exclusive right to their Writings, the word “science” in this connection having the meaning of knowledge in general, which is one of its meanings today. The other provision is that Congress has the power to promote the Progress of useful arts by securing for limited times to inventors the exclusive right to their Discoveries. The first patent law and all patent laws up to a much later period were entitled “Acts to promote the progress of useful arts.” (H.R.Rep.No.1923, 82d Cong., 2d Sess. 4 (1952); S.Rep.No.1979, 82d Cong., 2d Sess. 3 (1952), U.S.Code Cong. & Admin.News 1952, pp. 2394, 2396. Emphasis ours.)

It is to be observed that the Constitutional clause under consideration neither gave to nor preserved in inventors (or authors) any rights and set no standards for the patentability² of individual inventions; it merely empowered

²We use the term “patentability” although the Constitution does not mention patents because history shows that the authors of the Constitution had patents in mind as the means for securing exclusive rights to inventors. They had been in use in the American colonies and the practice had been imported from England. See B. Bugbee, *The Genesis of American Patent and Copyright Law*, Chap. VI (1967). The only restraints placed on Congress pertained to the means by which it could promote useful arts, namely, through the device of securing “exclusive rights” which were required to be limited in time, a device known to governments for centuries. The conditions to be imposed on the granting of such rights, which have varied through the years, were left to Congress to devise. *Graham v. John Deere Co.*, 383 U.S. 1, 6 (1966).

³The term “exclusive right” is one which caused much confusion in thinking throughout much of the early history of patent law, at least until 1852 when the Supreme Court decided *Bloomer v. McQuewan*, 14 How. 539, 55 U.S. 539, wherein it pointed out (14 How. p. 548, 55 U.S. p. 548) that

The franchise which the patent grants, consists altogether in the right to exclude everyone from making, using, or vending the thing patented, without the permission of the patentee. *This is all that he obtains by the patent.* (Emphasis ours.)

Confusion persisted, however, principally for the reason that until 1952 the patent statute phrased the patent grant, Revised Statutes § 4884, as “the exclusive right to make, use, and vend the invention * * *.” (Emphasis ours.) The patent grant never has had anything to do with the patentee’s right to make, use, or vend, and the 1952 Act clarified the right to conform to *Bloomer v. McQuewan*. 35 U.S.C. § 154.

Congress, if it elected to do so, to secure to inventors an “exclusive right”³ for an unstated “limited” time for the stated purpose of promoting useful arts. We have previously pointed out that the present day equivalent of the term “useful arts” employed by the Founding Fathers is “technological arts.” *In re Musgrave*, 431 F.2d 882, 893 (C.C.P.A. 1970). See also *In re Waldbaum*, 457 F.2d 997 (C.C.P.A. 1972) (Rich, J., *concurring*).

We turn now to a consideration of how Congress has implemented the power delegated to it.

Anatomy of the Patent Statute

The reason for our consideration of the statutory scheme in relation to its Constitutional purpose is that we have been directed to review our prior decisions in the light of *Flook* and we find in *Flook* an unfortunate and apparently unconscious, though clear, commingling of distinct statutory provisions which are conceptually unrelated, namely, those pertaining to the *categories* of inventions in § 101 which *may* be patentable and to the *conditions* for patentability demanded by the statute for inventions within the statutory categories, particularly the nonobviousness condition of § 103. The confusion creeps in through such phrases as “eligible for patent protection,” “patentable process,” “new and useful,” “inventive application,” “inventive concept,” and “patentable invention.” The last-mentioned term is perhaps one of the most difficult to deal with unless it is used *exclusively* with reference to an invention which complies with *every* condition of the patent statutes so that a valid patent may be issued on it.

The problem of accurate, unambiguous expression is exacerbated by the fact that prior to the Patent Act of 1952 the words “invention,” “inventive,” and “invent” had distinct legal implications related to the concept of patentability which they have not had for the past quarter century. Prior to 1952, and for sometime thereafter, they were used by courts as imputing *patentability*. Statements in the older cases must be handled with care lest the terms used in their reasoning clash with the reformed terminology of the present statute; lack of meticulous care may lead to distorted legal conclusions.

The transition made in 1952 was with respect to the old term “invention,” imputing *patentability*, which term was replaced by a new statu-

tory provision, § 103, requiring *nonobviousness*, as is well explained and approved in *Graham v. John Deere Co.*, *supra* n.2. Part IV of that opinion, entitled “The 1952 Act,” quotes the key sections of the statute upon which patentability depends. *Graham* states that there are three explicit conditions, novelty, utility, and nonobviousness, which is true, but there is a fourth requirement, which alone, is involved here. This was also the sole requirement involved in *Flook*.

The Revised Statutes of 1874, which contained the primary patent statutes revised and codified in 1952, lumped most of the conditions for patentability in a single section, § 4886, as did all of the prior statutes back to the first one of 1790. The 1952 Act divided that statute up into its logical components and *added* the nonobviousness requirement, which until then had been imposed only by court decisions. This attempt at a clearcut statement to replace what had been a hodgepodge of separate enactments resulted in a new and official Title 35 in the United States Code with three main divisions. Part I pertains to the establishment and organization of the PTO. Part II, here involved, covers patentability of inventions and the grant of patents. Part III relates to issued patents and the protection of the rights conferred by them.

All of the statutory law relevant to the present cases is found in four of the five sections in Chapter 10, the first chapter of Part II:

Sec. 100 Definitions

Sec. 101 Inventions patentable (if they qualify)

Sec. 102 Conditions for patentability; novelty and loss of right to patent

Sec. 103 Conditions for patentability; non-obvious subject matter

More strictly speaking, these cases involve only § 101, as did *Flook*. Achieving the ultimate goal of a patent under those statutory provisions involves, to use an analogy, having the separate keys to open in succession the three doors of sections 101, 102, and 103, the last two guarding the public interest by assuring that patents are not granted which would take from the public that which it already enjoys (matters already within its knowledge whether in actual use or not) or *potentially* enjoys by reason of obviousness from knowledge which it already has.

Inventors of patentable inventions, as a class, are those who bridge the chasm between the known and the obvious on the one side and that which promotes progress in useful arts or technology on the other.

The first door which must be opened on the difficult path to patentability is § 101 (augmented by the § 100 definitions), quoted *supra*.⁴ The person approaching that door is *an inventor*, whether his invention is patentable or not. There is always an inventor; being an inventor might be regarded as a preliminary legal requirement, for if he has not invented something, if he comes with something he knows was invented by someone else, he has no right even to approach the door. Thus, section 101 begins with the words “Whoever invents or discovers,” and since 1790 the patent statutes have always said substantially that. Being an inventor or having an invention, however, is no guarantee of opening even the first door. What *kind* of an invention or discovery is it? In dealing with the question of kind, as distinguished from the qualitative conditions which make the invention patentable, § 101 is broad and general; its language is: “any * * * process, machine, manufacture, or composition of matter, or any * * * improvement thereof.” Section 100(b) further expands “process” to include “art or method, and * * * a new use of a known process, machine, manufacture, composition of matter, or material.” If the invention, as the inventor defines it in his claims (pursuant to § 112, second paragraph), falls into any one of the named categories, he is allowed to pass through to the second door, which is § 102; “novelty and loss of right to patent” is the sign on it. Notwithstanding the words “new and useful” in § 101, the invention is not examined under that statute for novelty because that is not the statutory scheme of things or the long-established administrative practice.

Section 101 *states* three requirements: novelty, utility, and statutory subject matter. The understanding that these three requirements are *separate and distinct* is long-standing and has been universally accepted. The text writers are all in accord and treat these requirements under separate chapters and headings. See, e.g., *Curtis’s Law of Patents*, Chapters I and II (1873); 1

Robinson on Patents §§ 69–70 at 105–109 (1890); 1 *Rogers on Patents* (1914); Revise & Caesar, *Patentability and Validity*, Chapters II, III, IV (1936); *Deller’s Walker on Patents*, Chapters II, IV, V (1964). Thus, the questions of whether a particular invention is *novel* or *useful* are questions wholly apart from whether the invention falls into a category of *statutory subject matter*. Of the three requirements *stated* in § 101, only two, utility and statutory subject matter, are *applied* under § 101. As we shall show, in 1952 Congress voiced its intent to consider the novelty of an invention under § 102 where it is first made clear what the statute means by “new”, notwithstanding the fact that this requirement is first *named* in § 101.

The PTO, in administering the patent laws, has, for the most part, consistently applied § 102 in making rejections for lack of novelty. To provide the option of making such a rejection under either § 101 or § 102 is confusing and therefore bad law. Our research has disclosed only two instances in which rejections for lack of novelty were made by the PTO under § 101, *In re Bergstrom*, 427 F.2d 1394 (C.C.P.A. 1970); *In re Seaborg*, 328 F.2d 996 (C.C.P.A. 1964). In *In re Bergstrom* we in effect treated the rejection as if it had been made under § 102, observing in the process that “The word ‘new’ in § 101 is defined and is to be construed in accordance with the provisions of § 102.” 427 F.2d at 1401.

When § 101 was enacted, the accompanying Reviser’s Note stated (inserts and emphasis ours):

The corresponding section of the existing statute (R.S. § 4886) is split into two sections, section 101 relating to the *subject matter* for which patents *may* be obtained [“subject to the conditions and requirements of this title”], and section 102 defining statutory novelty and stating other conditions for patentability.

H.R. Rep. No. 1923, *supra* at 6, U.S. Code Cong. & Admin. News 1952, p. 2409, another contemporaneous document, states (emphasis ours):

Part II relates to patentability of inventions and the grant of patents.

⁴The Supreme Court has directed that the determination that statutory subject matter under § 101 exists “must precede” the inquiries under §§ 102–103. *Parker v. Flook*, *supra*, 437 U.S. at 593.

Referring first to section 101, this section specifies *the type of material* which can be the subject matter of a patent.

* * *

Section 101 sets forth the *subject matter* that can be patented “subject to the conditions and requirements of this title.” *The conditions* under which a patent may be obtained *follow*, and section 102 covers the conditions relating to novelty.

A person may have “invented” a machine or a manufacture, which may include anything under the sun that is made by man, *but it is not necessarily patentable* under section 101 unless the conditions of the title are fulfilled.

Section 102 in paragraphs (a), (b), and (c) repeats the conditions in the existing law relating to novelty.

The Senate report, No. 1979, makes the identical statement.

The second door then, as we have already seen, is § 102 pursuant to which the inventor’s claims are examined for novelty, requiring, for the first time in the examination process, comparison with the prior art which, up to this point, has therefore been irrelevant.

Section 102 also contains other conditions under the heading “loss of right” which need not be considered here. An *invention* may be in a statutory category and not patentable for want of *novelty*, or it may be novel and still not be patentable because it must meet yet another condition existing in the law since 1850 when *Hotchkiss v. Greenwood*, 11 How. 248, 13 L.Ed. 683, was decided. This condition developed in the ensuing century into the “*requirement for invention*.” See *Graham v. John Deere Co.*, *supra*.

The third door, under the 1952 Act, is § 103 which was enacted *to take the place of the requirement for “invention.”* We need not examine this requirement in detail for it is not involved in the present appeals, and was not involved in *Flook*. It will suffice to quote what the House and Senate reports, cited *supra*—“signals” from Congress—say about the third requirement, from which it will be seen that, again, the claimed invention

for which a patent is sought must be compared with the prior art. We quote H.R.Rep. No. 1923, *supra* at 7 U.S. Code Cong. & Admin. News 1952, p. 2399:

Section 103, for the first time in our statute, provides a condition which exists in the law and has existed for more than 100 years, but only by reason of decisions of the courts. *An invention* which has been made, and which is new in the sense that the *same* thing has not been made [or known] before, may still not be patentable if the difference between the new thing and what was known before is not considered sufficiently great to warrant a patent. That has been expressed in a large variety of ways in decisions of the courts and in writings. Section 103 states this requirement in the title [“Conditions for patentability; non-obvious subject matter”]. It refers to the difference between the subject matter sought to be patented *and the prior art*, meaning what was known before as described in section 102. If this difference is such that *the subject matter as a whole* would have been obvious at the time [the invention was made] to a person [ordinarily] skilled in the art, then the subject matter cannot be patented. [Insertions and emphasis ours.]

If the inventor holds the three different keys to the three doors, his *invention* (here assumed to be “useful”) qualifies for a patent, otherwise not; but he, as *inventor*, must meet still other statutory requirements in the preparation and prosecution of his patent application. We need not here consider the latter because appellants have not been faulted by the PTO in their paperwork or behavior. The point not to be forgotten is that being an *inventor* and having made an *invention* is not changed by the fact that one or more or all of the conditions for *patentability* cannot be met. Year in and year out this court turns away the majority of the inventors who appeal here because their inventions do not qualify for patents. They remain inventions nevertheless. It is time to settle the point that the terms invent,

inventor, inventive, and the like are unrelated to deciding whether the statutory requirements for patentability under the 1952 Act have been met. There is always *an invention*; the issue[] is its patentability. Terms like “inventive application” and “inventive concept” no longer have any useful place in deciding questions under the 1952 Act, notwithstanding their universal use in cases from the last century and the first half of this one. As Mr. Justice Holmes said in *Towne v. Eisner*, 245 U.S. 418, 425 (1918), “A word * * * may vary greatly in color and content according to the circumstances and the time in which it is used.” And Mr. Justice Frankfurter said in *Shapiro v. United States*, 335 U.S. 1, 56 (1948), “It is the part of wisdom, particularly for judges, not to be victimized by words.”

We have observed with regret that the briefs filed by the Solicitor General for Acting Commissioner Parker in *Parker v. Flook*, a case which, as the Court noted, “turns entirely on the proper construction of § 101,” badly, and with a seeming sense of purpose, confuse the statutory-categories requirement of § 101 with a requirement for the existence of “invention.” This they do by basing argument on the opening words of § 101, “Whoever invents or discovers,” thereby importing into the discussion of compliance with § 101 a requirement for “invention” in a patentability sense. But there has not been a requirement for “invention” in the patentability sense in the laws since 1952—the requirement was replaced by the § 103 requirement for nonobviousness. *Graham v. John Deere Co.*, *supra*. Furthermore, when one has only compliance with § 101 to consider, the sole question, aside from utility, is whether the invention falls into a named category, not whether it is *patentable*. Falling into a category, does not involve considerations of novelty or nonobviousness and *only* those two considerations involve comparison with prior art or inquiry as to whether all or any part of the invention is or is not in, or assumed to be in, the prior art or the public domain. *Prior art is irrelevant to the determination of statutory subject matter under § 101*. An invention can be statutory subject matter and be 100% old, devoid of any utility, or entirely obvious. This is our understanding of the statute and the basis on which we proceed to the further consideration of these appeals.

The error of the line of argument pursued in the Solicitor General’s briefs in *Flook* Is sufficiently illustrated by quoting from the summation of that argument in the opening paragraphs of the Reply Brief for the Petitioner, pages 1 and 2 (footnotes omitted, all emphasis and bracketed material in original):

1. Respondent errs in asserting (Br. 7–13) that our argument confuses the standard of nonobviousness prescribed in 35 U.S.C. 103 and the requirement of statutory subject matter under 35 U.S.C. 101. As respondent recognizes, the patent examiner’s sole ground for rejection of the claims at issue was that they did not cover statutory subject matter under 35 U.S.C. 101. We do not contend that respondent’s particular algorithm for computing updated alarm-limits is not novel or is obvious within the meaning of 35 U.S.C. 102 or 103. We simply contend that the subject matter he seeks to patent is unpatentable under 35 U.S.C. 101, because it is not an “invent[ion] or discover[y]” within the meaning of that Section.

The plain language of Section 101 requires that the application of a mathematical algorithm involve invention or discovery for it to be patentable. It states that patents may issue only to one who “*invents or discovers any * * * process, machine, manufacture, or composition of matter*” (emphasis supplied). This language dates from the original Patent Act of 1790. In none of the subsequent amendments to the patent statute has Congress altered this basic requirement.

Yet respondent would have the courts ignore this explicit language and adopt a new rule that would allow patents to issue to anyone who “[*applies for a patent on*] any * * * process, machine, manufacture, or composition of matter, * * * subject to the conditions and requirements of this title”. Congress could have changed the language of Section 101 to broaden

the statutory standards of patentability, but it did not; indeed, respondent agrees (Br. 11) that in the 1952 Patent Act revision, Congress intended to codify the existing judicial precedents regarding the standard of patentability.

It is transparently clear that the above argument makes the opening words of § 101, “Whoever invents or discovers,” into a requirement for compliance with § 103, the 1952 replacement for the old requirement for “invention”; one must get through the third door in order to get past the first one! That is not the statutory scheme.⁵ The statement that respondent Flook was asking for a rule under which “anyone who [applies for a patent on] any * * *” of the § 101 named categories should have a patent “issue” to him is subversive nonsense. There is no *issuance* without examination for novelty and nonobviousness. The statement that “Congress could have changed the language of section 101 to broaden the statutory standards of patentability, but it did not” is wholly beside the point because § 101 was never intended to be a “standard of patentability”; the standards, or conditions as the statute calls them, are in § 102 and § 103. The naming of the categories of inventions that *may* be patented, in whatever statute appearing, has never supplied a standard. The question here, as it always has been, is: are the inventions claimed of a *kind* contemplated by Congress as possibly patentable *if* they turn out to be new, useful, and unobvious within the meaning of those terms as used in the statute.

For a better understanding of the issues presented by the present appeals, one further matter should be pointed out. An “invention” in the popular sense may have many aspects in the patent law sense and, technically speaking, may really be an aggregation of closely related inventions all pertaining to the same contribution the inventor is making to the technological arts. This will later be seen to be the case with the inventions of Bergy and Chakrabarty. When that is so, the applicant is in a position to define his inven-

tion(s) in claims (technical legal definitions of the spheres of *protection* sought, not *descriptions* of the invention) which may fall into different § 101 categories. For example, an inventor may have produced a new product which is made by a new process and put to a new use. The invention is capable, therefore, of being defined or *claimed* as a manufacture or composition of matter, as a process for making the product, and as a process utilizing the product in some way. The PTO has procedures under which it may or may not permit claims of differing types to be prosecuted in the same patent application. In each of the cases here on appeal, the application contains claims of different types to process and to product. In each application the process claims have been approved—stand “allowed”—only product claims being rejected and on appeal; but in each application all of the claims pertain to the *same invention*, considered broadly and in terms of the contribution of the inventor.

Before explaining the Bergy and Chakrabarty inventions, we shall state our understanding of the views expressed by the Supreme Court in the *Flook* opinion and the light shed thereby on the problems before us.

In Light of *Parker v. Flook*

* * * * *

As indicated earlier, we deem it our duty to seek whatever additional light there may be in the Court’s opinion on the meaning of § 101, without restricting ourselves to the holding. It is stated to be well established in patent law that the following are not within the statutory categories of subject matter enumerated in § 101 and its predecessor statutes as interpreted through the years: principles, laws of nature, mental processes, intellectual concepts, ideas, natural phenomena, mathematical formulae, methods of calculation, fundamental truths, original causes, motives, the Pythagorean theorem, and the computer-implementable method claims of Benson and Tabbot. The present appeals do not involve an attempt to patent any of these things and the Court’s review of this horn-

⁵In our view, the opening phrase of § 101, “Whoever invents or discovers,” merely embodies the constitutional limitation in Article I, section 8, clause 8, that only the Person who invents or discovers may be the beneficiary of the exercise of Congressional power and thus “obtain a patent * * * subject to the conditions and requirements of this title (Title 35 USC).” The plain meaning of the statute is that certain Persons May obtain patents for certain enumerated Classes of subject matter. Provisions are made elsewhere in Title 35 for applications by persons other than the true inventor, See §§ 111, 116–18. We find no support in the statute or its legislative history for any other interpretation.

book law is, therefore, inapplicable to the issue before us, which involves only the construction of the terms “manufacture, or composition of mat-

ter.”

* * * * *

Bilski v. Kappos,
561 U.S. —, 130 S. Ct. 3218 (2010) (excerpt).

JUSTICE KENNEDY delivered the opinion of the Court, except as to Parts II-B-2 and II-C-2.¹

The question in this case turns on whether a patent can be issued for a claimed invention designed for the business world. The patent application claims a procedure for instructing buyers and sellers how to protect against the risk of price fluctuations in a discrete section of the economy. Three arguments are advanced for the proposition that the claimed invention is outside the scope of patent law: (1) it is not tied to a machine and does not transform an article; (2) it involves a method of conducting business; and (3) it is merely an abstract idea. The Court of Appeals ruled that the first mentioned of these, the so-called machine-or-transformation test, was the sole test to be used for determining the patentability of a “process” under the Patent Act, 35 U.S.C. § 101.

I.

Petitioners’ application seeks patent protection for a claimed invention that explains how buyers and sellers of commodities in the energy market can protect, or hedge, against the risk of price changes. The key claims are claims 1 and 4. Claim 1 describes a series of steps instructing how to hedge risk. Claim 4 puts the concept articulated in claim 1 into a simple mathematical formula. Claim 1 consists of the following steps:

“(a) initiating a series of transactions between said commodity provider and consumers of said commodity wherein said consumers purchase said commodity at a fixed rate based upon historical averages, said fixed rate corresponding to a risk position of said consumers;

“(b) identifying market participants for said commodity having a counter-risk position to said consumers; and

“(c) initiating a series of transactions between said commodity provider and said market participants at a second fixed rate such that said series of market participant transactions balances the risk position of said series of consumer transactions.”

The remaining claims explain how claims 1 and 4 can be applied to allow energy suppliers and consumers to minimize the risks resulting from fluctuations in market demand for energy. For example, claim 2 claims “[t]he method of claim 1 wherein said commodity is energy and said market participants are transmission distributors.” Some of these claims also suggest familiar statistical approaches to determine the inputs to use in claim 4’s equation....

The patent examiner rejected petitioners’ application, explaining that it “‘is not implemented on a specific apparatus and merely manipulates [an] abstract idea and solves a purely mathematical problem without any limitation to a practical application, therefore, the invention is not directed to the technological arts.’” The Board of Patent Appeals and Interferences affirmed, concluding that the application involved only mental steps that do not transform physical matter and was directed to an abstract idea.

The United States Court of Appeals for the Federal Circuit heard the case en banc and affirmed [545 F.3d 943]....

The court rejected its prior test for determining whether a claimed invention was a patentable “process” under § 101—whether it produces a “‘useful, concrete, and tangible result’”—as articulated in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F. 3d 1368, 1373 (1998), and *AT&T Corp. v. Excel Communications, Inc.*, 172 F. 3d 1352, 1357 (1999). The court held that “[a] claimed process is surely patent eligible under § 101 if: (1) it is tied to a

¹JUSTICE SCALIA does not join Parts II-B-2 and II-C-2. [The Chief Justice and Justices Thomas and Alito joined Justice Kennedy’s opinion in its entirety.]

particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.” The court concluded this “machine-or-transformation test” is “the sole test governing § 101 analyses,” and thus the “test for determining patent eligibility of a process under § 101.” Applying the machine-or-transformation test, the court held that petitioners’ application was not patent eligible. . . .

* * * * *

II.

A.

Section 101 defines the subject matter that may be patented under the Patent Act:

“Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.”

Section 101 thus specifies four independent categories of inventions or discoveries that are eligible for protection: processes, machines, manufactures, and compositions of matter. “In choosing such expansive terms . . . modified by the comprehensive ‘any,’ Congress plainly contemplated that the patent laws would be given wide scope.” *Diamond v. Chakrabarty*, 447 U. S. 303, 308 (1980). . . .

The Court’s precedents provide three specific exceptions to § 101’s broad patent-eligibility principles: “laws of nature, physical phenomena, and abstract ideas.” While these exceptions are not required by the statutory text, they are consistent with the notion that a patentable process must be “new and useful.” And, in any case, these exceptions have defined the reach of the statute as a matter of statutory *stare decisis* going back 150 years. The concepts covered by these exceptions are “part of the storehouse of knowledge of all men . . . free to all men and reserved exclusively to none.”

The § 101 patent-eligibility inquiry is only a threshold test. Even if an invention qualifies as a process, machine, manufacture, or composition of matter, in order to receive the Patent Act’s protection the claimed invention must also satisfy

“the conditions and requirements of this title.” § 101. Those requirements include that the invention be novel, see § 102, nonobvious, see § 103, and fully and particularly described, see § 112.

The present case involves an invention that is claimed to be a “process” under § 101. Section 100(b) defines “process” as:

“process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.”

The Court first considers two proposed categorical limitations on “process” patents under § 101 that would, if adopted, bar petitioners’ application in the present case: the machine-or-transformation test and the categorical exclusion of business method patents.

B.

1.

Under the Court of Appeals’ formulation, an invention is a “process” only if: “(1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.” This Court has “more than once cautioned that courts ‘should not read into the patent laws limitations and conditions which the legislature has not expressed.’” In patent law, as in all statutory construction, “[u]nless otherwise defined, ‘words will be interpreted as taking their ordinary, contemporary, common meaning.’” . . .

Any suggestion in this Court’s case law that the Patent Act’s terms deviate from their ordinary meaning has only been an explanation for the exceptions for laws of nature, physical phenomena, and abstract ideas. *See Parker v. Flook*, 437 U.S. 584, 588–589 (1978). This Court has not indicated that the existence of these well-established exceptions gives the Judiciary *carte blanche* to impose other limitations that are inconsistent with the text and the statute’s purpose and design. Concerns about attempts to call any form of human activity a “process” can be met by making sure the claim meets the requirements of § 101.

Adopting the machine-or-transformation test as the sole test for what constitutes a “process” (as opposed to just an important and useful clue) violates these statutory interpretation principles. Section 100(b) provides that “[t]he term

‘process’ means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.” The Court is unaware of any “‘ordinary, contemporary, common meaning,’” of the definitional terms “process, art or method” that would require these terms to be tied to a machine or to transform an article....

The Court of Appeals incorrectly concluded that this Court has endorsed the machine-or-transformation test as the exclusive test. It is true that *Cochrane v. Deener*, 94 U.S. 780, 788 (1877), explained that a “process” is “an act, or a series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing.” More recent cases, however, have rejected the broad implications of this dictum; and, in all events, later authority shows that it was not intended to be an exhaustive or exclusive test....

This Court’s precedents establish that the machine-or transformation test is a useful and important clue, an investigative tool, for determining whether some claimed inventions are processes under § 101. The machine-or transformation test is not the sole test for deciding whether an invention is a patent-eligible “process.”

2.

[Here, Justice Kennedy, writing for himself and three others, reasoned that the Court of Appeals’ proposed “machine-or-transformation” test could slow technological advance, given the uncertainty about whether “Information Age” inventions would necessarily satisfy the test.]

C.

1.

Section 101 similarly precludes the broad contention that the term “process” categorically excludes business methods. The term “method,” which is within § 100(b)’s definition of “process,” at least as a textual matter and before consulting other limitations in the Patent Act and this Court’s precedents, may include at least some methods of doing business. The Court is unaware of any argument that the “‘ordinary, contemporary, common meaning,’” of “method” excludes business methods. Nor is it clear how far a prohibition on business method patents would reach, and whether it would exclude technologies for conducting a business more efficiently.

The argument that business methods are categorically outside of § 101’s scope is further undermined by the fact that federal law explicitly contemplates the existence of at least some business method patents. Under 35 U.S.C. § 273(b)(1), if a patent-holder claims infringement based on “a method in [a] patent,” the alleged infringer can assert a defense of prior use. For purposes of this defense alone, “method” is defined as “a method of doing or conducting business.” § 273(a)(3). In other words, by allowing this defense the statute itself acknowledges that there may be business method patents. Section 273’s definition of “method,” to be sure, cannot change the meaning of a prior-enacted statute. But what § 273 does is clarify the understanding that a business method is simply one kind of “method” that is, at least in some circumstances, eligible for patenting under § 101.

* * * * *

2.

[Justice Kennedy, for himself and three others, here argues that many of the concerns expressed in the arguments to the Court about the patentability of business methods are better understood in light of the other statutory requirements for patentability, rather than as issues of patentable subject matter under § 101.]

III.

Even though petitioners’ application is not categorically outside of § 101 under the two broad and atextual approaches the Court rejects today, that does not mean it is a “process” under § 101. Petitioners seek to patent both the concept of hedging risk and the application of that concept to energy markets. Rather than adopting categorical rules that might have wide-ranging and unforeseen impacts, the Court resolves this case narrowly on the basis of this Court’s decisions in *Benson*, *Flook*, and *Diehr*, which show that petitioners’ claims are not patentable processes because they are attempts to patent abstract ideas. Indeed, all members of the Court agree that the patent application at issue here falls out side of § 101 because it claims an abstract idea.

In [*Gottschalk v.*] *Benson*[, 409 U.S. 63 (1972)], the Court considered whether a patent application for an algorithm to convert binary-coded decimal numerals into pure binary code was a “process” under § 101. The Court first explained that

“[a] principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right.” The Court then held the application at issue was not a “process,” but an unpatentable abstract idea. “It is conceded that one may not patent an idea. But in practical effect that would be the result if the formula for converting . . . numerals to pure binary numerals were patented in this case.” A contrary holding “would wholly pre-empt the mathematical formula and in practical effect would be a patent on the algorithm itself.”

* * * * *

In light of these precedents, it is clear that petitioners’ application is not a patentable “process.” Claims 1 and 4 in petitioners’ application explain the basic concept of hedging, or protecting against risk: “Hedging is a fundamental economic practice long prevalent in our system of commerce and taught in any introductory finance class.” 545 F.3d, at 1013 (Rader, J., dissenting). . . . The concept of hedging, described in claim 1 and reduced to a mathematical formula in claim 4, is an unpatentable abstract idea, just like the algorithms at issue in *Benson* and *Flook*. Allowing petitioners to patent risk hedging would pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea.

* * * * *

Today, the Court once again declines to impose limitations on the Patent Act that are inconsistent with the Act’s text. The patent application here can be rejected under our precedents on the unpatentability of abstract ideas. The Court, therefore, need not define further what constitutes a patentable “process” . . .

And nothing in today’s opinion should be read as endorsing interpretations of § 101 that the Court of Appeals for the Federal Circuit has used in the past. It may be that the Court of Appeals thought it needed to make the machine-or-transformation test exclusive precisely because its case law had not adequately identified less extreme means of restricting business method patents, including (but not limited to) application of our opinions in *Benson*, *Flook*, and *Diehr*. In disapproving an exclusive machine-or-transformation test, we by no means foreclose the Federal Circuit’s development of other limiting

criteria that further the purposes of the Patent Act and are not inconsistent with its text.

The judgment of the Court of Appeals is affirmed.

JUSTICE STEVENS, with whom JUSTICE GINSBURG, JUSTICE BREYER, and JUSTICE SOTOMAYOR join, concurring in the judgment.

In the area of patents, it is especially important that the law remain stable and clear. The only question presented in this case is whether the so-called machine-or transformation test is the exclusive test for what constitutes a patentable “process” under 35 U. S. C. § 101. It would be possible to answer that question simply by holding, as the entire Court agrees, that although the machine-or-transformation test is reliable in most cases, it is not the *exclusive* test.

I agree with the Court that, in light of the uncertainty that currently pervades this field, it is prudent to provide further guidance. But I would take a different approach. Rather than making any broad statements about how to define the term “process” in § 101 or tinkering with the bounds of the category of unpatentable, abstract ideas, I would restore patent law to its historical and constitutional moorings.

For centuries, it was considered well established that a series of steps for conducting business was not, in itself, patentable. In the late 1990’s, the Federal Circuit and others called this proposition into question. Congress quickly responded to a Federal Circuit decision with a stop-gap measure designed to limit a potentially significant new problem for the business community. It passed the First Inventors Defense Act of 1999 . . . (codified at 35 U.S.C. § 273), which provides a limited defense to claims of patent infringement, for “method[s] of doing or conducting business.” Following several more years of confusion, the Federal Circuit changed course, overruling recent decisions and holding that a series of steps may constitute a patentable process only if it is tied to a machine or transforms an article into a different state or thing. This “machine-or-transformation test” excluded general methods of doing business as well as, potentially, a variety of other subjects that could be called processes.

The Court correctly holds that the machine-or transformation test is not the sole test for what constitutes a patentable process; rather, it

is a critical clue.¹ But the Court is quite wrong, in my view, to suggest that any series of steps that is not itself an abstract idea or law of nature may constitute a “process” within the meaning of § 101. The language in the Court’s opinion to this effect can only cause mischief. The wiser course would have been to hold that petitioners’ method is not a “process” because it describes only a general method of engaging in business transactions—and business methods are not patentable. More precisely, although a process is not patent-ineligible simply because it is useful for conducting business, a claim that merely describes a method of doing business does not qualify as a “process” under § 101.

* * * * *

III.

* * * * *

Section 101 undoubtedly defines in “expansive terms” the subject matter eligible for patent protection, as the statute was meant to ensure that “‘ingenuit[ies] receive a liberal encouragement.’” *Diamond v. Chakrabarty*, 447 U.S. 303, 308–309 (1980). . . . Nonetheless, not every new invention or discovery may be patented. Certain things are “free for all to use.” *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 151 (1989).

The text of the Patent Act does not on its face give much guidance about what constitutes a patentable process. The statute defines the term “process” as a “process, art or method [that] includes a new use of a known process, machine, manufacture, composition of matter, or material.” § 100(b). But, this definition is not especially helpful, given that it also uses the term “process” and is therefore somewhat circular.

As lay speakers use the word “process,” it constitutes any series of steps. But it has always been clear that, as used in § 101, the term does not refer to a “‘process’ in the ordinary sense of the word[.]” Rather, . . . the term “process” (along with the definitions given to that term) has long accumulated a distinctive meaning in patent law. When the term was used in the 1952 Patent Act, it was neither intended nor understood to encompass *any* series of steps or *any way* to do *any thing*.

¹Even if the machine-or-transformation test may not define the scope of a patentable process, it would be a grave mistake to assume that anything with a “‘useful, concrete and tangible result,’” *State Street Bank & Trust v. Signature Financial Group, Inc.*, 149 F.3d 1368, 1373 (CA Fed. 1998), may be patented.

* * * * *

IV.

* * * * *

Early American Patent Law At the Constitutional Convention, the Founders decided to give Congress a patent power so that it might “promote the Progress of . . . useful Arts.” There is little known history of that Clause. We do know that the Clause passed without objection or debate. This is striking because other proposed powers, such as a power to grant charters of incorporation, generated discussion about the fear that they might breed “monopolies.” Indeed, at the ratification conventions, some States recommended amendments that would have prohibited Congress from granting “exclusive advantages of commerce.” If the original understanding of the Patent Clause included the authority to patent methods of doing business, it might not have passed so quietly.

* * * * *

Thus, fields such as business and finance were not generally considered part of the “useful arts” in the founding Era. . . .

* * * * *

Development of American Patent Law . . .

* * * * *

Although courts occasionally struggled with defining what was a patentable “art” [before the 1952 Patent Act], they consistently rejected patents on methods of doing business. The rationales for those decisions sometimes varied. But there was an overarching theme, at least in dicta: Business methods are not patentable arts. *See, e.g., United States Credit Sys. Co. v. American Credit Indem. Co.*, 53 F. 818, 819 (CC NY 1893) (“method of insuring against loss by bad debts” could not be patented “as an art”); *Hotel Security Checking Co. v. Lorraine Co.*, 160 F. 467, 469 (CA2 1908) (“A system of transacting business disconnected from the means for carrying out the system is not, within the most liberal interpretation of the term, an art”); *Guthrie v. Curlett*, 10 F. 2d 725, 726 (CA2 1926) (method of abbreviating

rail tariff schedules, “if it be novel, is not the kind of art protected by the patent acts”); *In re Patton*, 127 F.2d 324, 327–328 (CCPA 1942) (holding that novel “‘interstate and national fire-fighting system’” was not patentable because, *inter alia*, “a system of transacting business, apart from the means for carrying out such system is not” an art within the meaning of the patent law, “nor is an abstract idea or theory, regardless of its importance or . . . ingenuity”); *Loew’s Drive-In Theatres, Inc. v. Park-In Theatres, Inc.*, 174 F.2d 547, 552 (CA1 1949) (“[A] system for the transaction of business, such, for example, as the cafeteria system for transacting the restaurant business . . . however novel, useful, or commercially successful is not patentable apart from the means for making the system practically useful, or carrying it out”); *Joseph E. Seagram & Sons, Inc. v. Marzall*, 180 F.2d 26, 28 (CA2 1950) (method of focus-group testing for beverages is not patentable subject matter); *see also In re Howard*, 394 F.2d 869, 872 (CCPA 1968) (Kirkpatrick, J., concurring) (explaining that a “method of doing business” cannot be patented). . . .

By the early 20th century, it was widely understood that a series of steps for conducting business could not be patented. . . . Indeed, “[u]ntil recently” it was still “considered well established that [business] methods were non-statutory.”

* * * * *

Since at least the days of Assyrian merchants, people have devised better and better ways to conduct business. Yet it appears that neither the Patent Clause, nor early patent law, nor the current § 101 contemplated or was publicly understood to mean that such innovations are patentable. Although it may be difficult to define with precision what is a patentable “process” under § 101, the historical clues converge on one conclusion: A business method is not a “process.” And to the extent that there is ambiguity, we should be mindful of our judicial role. “[W]e must proceed cautiously when we are asked to extend patent rights” into an area that the Patent Act likely was not “enacted to protect,” *Flook*, 437 U.S., at 596, 593, lest we create a legal regime that Congress never would have endorsed, and that can be repaired only by disturbing settled property rights.

V.

[Justice Stevens then considered the effect of 35 U.S.C. § 273, upon which the majority had relied as showing Congress’s recognition that at least some business methods were patentable. Justice Stevens noted that Congress was motivated to enact § 273 in 1999 by the Federal Circuit’s abrupt holding that business methods could be patented, and that the intent of the statute was not to endorse the Federal Circuit’s conclusion, but rather to protect businesses from the risk that they could incur liability for patent infringement simply by conducting business as they had always done. Because § 273 was aimed at limiting the adverse effects from the change in the law announced by the Federal Circuit in the late 1990s, Justice Stevens reasoned, it could not be taken to reflect Congress’s agreement with or endorsement of that change.]

VI.

The constitutionally mandated purpose and function of the patent laws bolster the conclusion that methods of doing business are not “processes” under § 101.

The Constitution allows Congress to issue patents “[t]o promote the Progress of . . . useful Arts.” This clause “is both a grant of power and a limitation.” It “reflects a balance between the need to encourage innovation and the avoidance of monopolies which stifle competition without any concomitant advance in the ‘Progress of Science and useful Arts.’”

* * * * *

Without any legislative guidance to the contrary, there is a real concern that patents on business methods would press on the limits of the “standard expressed in the Constitution,” more likely stifling progress than “promot[ing]” it. I recognize that not all methods of doing business are the same, and that therefore the constitutional “balance” may vary within this category. Nevertheless, I think that this balance generally supports the historic understanding of the term “process” as excluding business methods. . . .

On one side of the balance is whether a patent monopoly is necessary to “motivate the innovation,” *Pfaff v. Wells Electronics, Inc.*, 525 U.S. 55, 63 (1998). Although there is certainly disagreement about the need for patents, scholars

generally agree that when innovation is expensive, risky, and easily copied, inventors are less likely to undertake the guaranteed costs of innovation in order to obtain the mere possibility of an invention that others can copy.⁴⁵ Both common sense and recent economic scholarship suggest that these dynamics of cost, risk, and reward vary by the type of thing being patented. And the functional case that patents promote progress generally is stronger for subject matter that has “historically been eligible to receive the protection of our patent laws,” than for methods of doing business.

* * * * *

“[C]ompanies have ample incentives to develop business methods even without patent protection, because the competitive marketplace rewards companies that use more efficient business methods.” Burk & Lemley[, *Policy Levers in Patent Law*, 89 Va. L. Rev. 1575,] 1618 [(2003)].⁴⁹ Innovators often capture advantages from new business methods notwithstanding the risk of others copying their innovation. Some business methods occur in secret and therefore can be protected with trade secrecy. And for those methods that occur in public, firms that innovate often capture long-term benefits from doing so, thanks to various first mover advantages, including lock-ins, branding, and networking effects. Business innovation, more over, generally does not entail the same kinds of risk as does more traditional, technological innovation. It generally does not require the same “enormous costs in terms of time, research, and development,” and thus does not require the same kind of “compensation to [innovators] for their labor, toil, and expense[.]”

* * * * *

In any event, even if patents on business methods were useful for encouraging innovation and disclosure, it would still be questionable whether they would, on balance, facilitate or impede the progress of American business. . . . Patents “can discourage research by impeding the free exchange of information,” for example, by forcing people to “avoid the use of potentially patented ideas, by leading them to conduct costly and time-consuming searches of existing or pending

patents, by requiring complex licensing arrangements, and by raising the costs of using the patented” methods. . . .

The primary concern is that patents on business methods may prohibit a wide swath of legitimate competition and innovation. As one scholar explains, “it is useful to conceptualize knowledge as a pyramid: the big ideas are on top; specific applications are at the bottom.” Dreyfuss[, *Are Business Methods Patents Bad for Business?*, 16 Santa Clara Computer & High Tech. L.J. 263,] 275 [(2000)]. The higher up a patent is on the pyramid, the greater the social cost and the greater the hindrance to further innovation. Thus, this Court stated in *Benson* that “[p]henomena of nature . . . , mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work,” 409 U.S., at 67. Business methods are similarly often closer to “big ideas,” as they are the basic tools of *commercial* work. They are also, in many cases, the basic tools of further business innovation: Innovation in business methods is often a sequential and complementary process in which imitation may be a “spur to innovation” and patents may “become an *impediment*.” Bessen & Maskin, *Sequential Innovation, Patents, and Imitation*, 40 RAND J. Econ. 611, 613 (2009). “Think how the airline industry might now be structured if the first company to offer frequent flyer miles had enjoyed the sole right to award them.” Dreyfuss 264. “[I]mitation and refinement through imitation are both necessary to invention itself and the very lifeblood of a competitive economy.” *Bonito Boats*, 489 U.S., at 146.

* * * * *

VII.

The Constitution grants to Congress an important power to promote innovation. In its exercise of that power, Congress has established an intricate system of intellectual property. The scope of patentable subject matter under that system is broad. But it is not endless. In the absence of any clear guidance from Congress, we have only limited textual, historical, and functional clues on which to rely. Those clues all point toward the

⁴⁵See generally W. Landes & R. Posner, *The Economic Structure of Intellectual Property Law* 13–15 (2003).

⁴⁹See also Pollack[, *The Multiple Unconstitutionality of Business Method Patents: Common Sense, Congressional Consideration, and Constitutional History*, 28 Rutgers Computer & Tech. L.J. 61,] 75–76 [(2002)] (“Since business methods are ‘useful’ when they directly earn revenue, they are inherently unlikely to be under produced”).

same conclusion: that petitioners' claim is not a "process" within the meaning of § 101 because methods of doing business are not, in themselves, covered by the statute. In my view, acknowledging as much would be a far more sensible and restrained way to resolve this case. Accordingly, while I concur in the judgment, I strongly disagree with the Court's disposition of this case.

JUSTICE BREYER, with whom JUSTICE SCALIA joins as to Part II, concurring in the judgment.

* * * * *

II.

In addition to the Court's unanimous agreement that the claims at issue here are unpatentable abstract ideas, it is my view that the following four points are consistent with both the opinion of the Court and JUSTICE STEVENS' opinion concurring in the judgment:

First, although the text of § 101 is broad, it is not without limit. "[T]he underlying policy of the patent system [is] that 'the things which are worth to the public the embarrassment of an exclusive patent,' . . . must outweigh the restrictive effect of the limited patent monopoly." *Graham v. John Deere Co. of Kansas City*, 383 U. S. 1, 10–11 (1966). The Court has thus been careful in interpreting the Patent Act to "determine not only what is protected, but also what is free for all to use." In particular, the Court has long held that "[p]henomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable" under § 101, since allowing individuals to patent these fundamental principles would "wholly pre-empt" the public's access to the "basic tools of scientific and technological work."

Second, in a series of cases that extend back over a century, the Court has stated that "[t]ransformation and reduction of an article to a different state or thing is *the clue* to the patentability of a process claim that does not include particular machines." *Diehr, supra*, at 184 (emphasis added; internal quotation marks omitted). . . . Application of this test, the so-called

"machine-or transformation test," has thus repeatedly helped the Court to determine what is "a patentable 'process.'"

Third, while the machine-or-transformation test has always been a "useful and important clue," it has never been the "sole test" for determining patentability. Rather, the Court has emphasized that a process claim meets the requirements of § 101 when, "considered as a whole," it "is performing a function which the patent laws were designed to protect (e.g., transforming or reducing an article to a different state or thing)." *Diehr, supra*, at 192. The machine-or-transformation test is thus an *important example* of how a court can determine patentability under § 101, but the Federal Circuit erred in this case by treating it as the *exclusive test*.

Fourth, although the machine-or-transformation test is not the only test for patentability, this by no means indicates that anything which produces a "'useful, concrete, and tangible result,'" *State Street Bank & Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368, 1373 (CA Fed. 1998), is patentable. . . . Indeed, the introduction of the "useful, concrete, and tangible result" approach to patentability, associated with the Federal Circuit's *State Street* decision, preceded the granting of patents that "ranged from the somewhat ridiculous to the truly absurd." *In re Bilski*, 545 F.3d 943, 1004 (CA Fed. 2008) (Mayer, J., dissenting) (citing patents on, *inter alia*, a "method of training janitors to dust and vacuum using video displays," a "system for toilet reservations," and a "method of using color-coded bracelets to designate dating status in order to limit 'the embarrassment of rejection'"). To the extent that the Federal Circuit's decision in this case rejected that approach, nothing in today's decision should be taken as disapproving of that determination.

In sum, it is my view that, in reemphasizing that the "machine-or-transformation" test is not necessarily the *sole* test of patentability, the Court intends neither to deemphasize the test's usefulness nor to suggest that many patentable processes lie beyond its reach.

* * * * *

**USPTO Guidelines for Examination of Applications
for Compliance With the Utility Requirement, 66 Fed. Reg. 1092 (2001).**

A. Introduction

The following Guidelines establish the policies and procedures to be followed by Office personnel in the evaluation of any patent application for compliance with the utility requirements of 35 U.S.C. 101 and 112. These Guidelines have been promulgated to assist Office personnel in their review of applications for compliance with the utility requirement. The Guidelines do not alter the substantive requirements of 35 U.S.C. 101 and 112, nor are they designed to obviate the examiner's review of applications for compliance with all other statutory requirements for patentability. The Guidelines do not constitute substantive rulemaking and hence do not have the force and effect of law. Rejections will be based upon the substantive law, and it is these rejections which are appealable. Consequently, any perceived failure by Office personnel to follow these Guidelines is neither appealable nor petitionable.

B. Examination Guidelines for the Utility Requirement

Office personnel are to adhere to the following procedures when reviewing patent applications for compliance with the "useful invention" ("utility") requirement of 35 U.S.C. 101 and 112, first paragraph.

1. Read the claims and the supporting written description.

- (a) Determine what the applicant has claimed, noting any specific embodiments of the invention.
- (b) Ensure that the claims define statutory subject matter (i.e., a process, machine, manufacture, composition of matter, or improvement thereof).
- (c) If at any time during the examination, it becomes readily apparent that the claimed invention has a well-established utility, do not impose a rejection based on lack of utility. An invention has a well-established utility (1) if a person of ordinary skill in the art would immediately appreciate why the invention is useful based on the characteristics of the invention (e.g., properties or applications of a product or process), and (2)

the utility is specific, substantial, and credible.

2. Review the claims and the supporting written description to determine if the applicant has asserted for the claimed invention any specific and substantial utility that is credible:

- (a) If the applicant has asserted that the claimed invention is useful for any particular practical purpose (i.e., it has a "specific and substantial utility") and the assertion would be considered credible by a person of ordinary skill in the art, do not impose a rejection based on lack of utility.
 - (1) A claimed invention must have a specific and substantial utility. This requirement excludes "throw-away," "insubstantial," or "nonspecific" utilities, such as the use of a complex invention as landfill, as a way of satisfying the utility requirement of 35 U.S.C. 101.
 - (2) Credibility is assessed from the perspective of one of ordinary skill in the art in view of the disclosure and any other evidence of record (e.g., test data, affidavits or declarations from experts in the art, patents or printed publications) that is probative of the applicant's assertions. An applicant need only provide one credible assertion of specific and substantial utility for each claimed invention to satisfy the utility requirement.
- (b) If no assertion of specific and substantial utility for the claimed invention made by the applicant is credible, and the claimed invention does not have a readily apparent well-established utility, reject the claim(s) under § 101 on the grounds that the invention as claimed lacks utility. Also reject the claims under § 112, first paragraph, on the basis that the disclosure fails to teach how to use the invention as claimed. The § 112, first paragraph, rejection imposed in conjunction with a § 101 rejection should incorporate by reference the grounds of the corresponding § 101 rejection.

(c) If the applicant has not asserted any specific and substantial utility for the claimed invention and it does not have a readily apparent well-established utility, impose a rejection under § 101, emphasizing that the applicant has not disclosed a specific and substantial utility for the invention. Also impose a separate rejection under § 112, first paragraph, on the basis that the applicant has not disclosed how to use the invention due to the lack of a specific and substantial utility. The §§ 101 and 112 rejections shift the burden of coming forward with evidence to the applicant to:

- (1) Explicitly identify a specific and substantial utility for the claimed invention; and
- (2) Provide evidence that one of ordinary skill in the art would have recognized that the identified specific and substantial utility was well established at the time of filing. The examiner should review any subsequently submitted evidence of utility using the criteria outlined above. The examiner should also ensure that there is an adequate nexus between the evidence and the properties of the now claimed subject matter as disclosed in the application as filed. That is, the applicant has the burden to establish a probative relation between the submitted evidence and the originally disclosed properties of the claimed invention.

3. Any rejection based on lack of utility should include a detailed explanation why the claimed invention has no specific and substantial credible utility. Whenever possible, the examiner should provide documentary evidence regardless of publication date (e.g., scientific or technical journals, excerpts from treatises or books, or U.S. or foreign patents) to support the factual basis for the *prima facie* showing of no specific and substantial credible utility. If documentary evidence is not available, the examiner should specifically explain the scientific basis for his or her factual conclusions.

- (a) Where the asserted utility is not specific or substantial, a *prima facie* showing must establish that it is more likely than not that

a person of ordinary skill in the art would not consider that any utility asserted by the applicant would be specific and substantial. The *prima facie* showing must contain the following elements:

- (1) An explanation that clearly sets forth the reasoning used in concluding that the asserted utility for the claimed invention is not both specific and substantial nor well-established;
- (2) Support for factual findings relied upon in reaching this conclusion; and
- (3) An evaluation of all relevant evidence of record, including utilities taught in the closest prior art.

- (b) Where the asserted specific and substantial utility is not credible, a *prima facie* showing of no specific and substantial credible utility must establish that it is more likely than not that a person skilled in the art would not consider credible any specific and substantial utility asserted by the applicant for the claimed invention.

The *prima facie* showing must contain the following elements:

- (1) An explanation that clearly sets forth the reasoning used in concluding that the asserted specific and substantial utility is not credible;
- (2) Support for factual findings relied upon in reaching this conclusion; and
- (3) An evaluation of all relevant evidence of record, including utilities taught in the closest prior art.

- (c) Where no specific and substantial utility is disclosed or is well-established, a *prima facie* showing of no specific and substantial utility need only establish that applicant has not asserted a utility and that, on the record before the examiner, there is no known well-established utility.

4. A rejection based on lack of utility should not be maintained if an asserted utility for the claimed invention would be considered specific, substantial, and credible by a person of ordinary skill in the art in view of all evidence of record.

Office personnel are reminded that they must treat as true a statement of fact made by an

applicant in relation to an asserted utility, unless countervailing evidence can be provided that shows that one of ordinary skill in the art would have a legitimate basis to doubt the credibility of such a statement. Similarly, Office personnel must accept an opinion from a qualified expert that is based upon relevant facts whose accuracy is not being questioned; it is improper to disregard the opinion solely because of a disagreement over the significance or meaning of the facts offered.

Once a *prima facie* showing of no specific and substantial credible utility has been properly established, the applicant bears the burden of rebutting it. The applicant can do this by amending the claims, by providing reasoning or arguments, or by providing evidence in the form of a declaration under 37 CFR 1.132 or a patent or a printed publication that rebuts the basis or logic of the *prima facie* showing. If the appli-

cant responds to the *prima facie* rejection, the Office personnel should review the original disclosure, any evidence relied upon in establishing the *prima facie* showing, any claim amendments, and any new reasoning or evidence provided by the applicant in support of an asserted specific and substantial credible utility. It is essential for Office personnel to recognize, fully consider and respond to each substantive element of any response to a rejection based on lack of utility. Only where the totality of the record continues to show that the asserted utility is not specific, substantial, and credible should a rejection based on lack of utility be maintained.

If the applicant satisfactorily rebuts a *prima facie* rejection based on lack of utility under § 101, withdraw the § 101 rejection and the corresponding rejection imposed under § 112, first paragraph.

Dated: December 29, 2000.

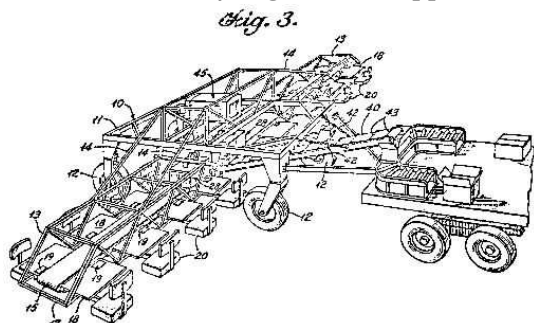
Application of Antle, 444 F.2d 1168 (C.C.P.A. 1971) (excerpt).

RICH, Judge.

This appeal is from the decision of the Patent Office Board of Appeals affirming the examiner's rejection of claims 60-64 in appellant's application serial No. 510,723, filed October 1, 1965, as a continuation of application serial No. 132,672, filed August 21, 1961. We affirm.

The Invention

Appellant claims mobile produce packing plants, illustrated by Fig. 3 of his application:



The produce is cut or picked in the field by one crew of workers, then wrapped and heat-sealed in clear plastic film which permits respiration by another crew of workers riding on the vehicle in seats 20, then passed on conveyors 15 through

warm-air heating chambers 28 which shrink the film to tightly encase the produce, and further transported on conveyor 40 to the unnumbered, mounted platform at the right in the picture, on which the wrapped produce units are packed for shipping Claims 63 and 62 (subparagraphing supplied) are representative, respectively, of the broad and narrow claims on appeal:

63. A vehicle for continuously harvesting and packaging crop products in the field adapted to move directionally on the ground through spaced rows of growing crops comprising

a machine supported by wheels positioned on said machine;

oppositely positioned, retractable wing-like frame projections horizontally supported by said machine, said frame projections being adaptable to be extended and positioned over a plurality of rows of crops,

said machine having positioned thereon a plurality of spaced product wrapping stations each adapted to be

manned by a workman in proximity to said growing crops;

a supply of breathable plastic film positioned at each wrapping station adapted to encase tightly units of crop products when wrapped therein immediately after harvesting in the field so as to retain in the crop products their field-freshness;

a conveyor means positioned on said machine for continuously collecting and moving the tightly encased units of crop products from said wrapping stations; and

a packing station operably associated with said conveyor means for receiving the encased units of product for packaging them in boxes while on said vehicle for shipment to market.

62. A vehicle adapted to move directionally along the ground through spaced rows of growing crops comprising

a central frame;

wheels positioned on said frame for supporting movement of the vehicle;

oppositely positioned projections horizontally supported by said frame;

a conveyor means positioned on each of said projections having its movement toward said central frame and extending part way therein;

a plurality of spaced wrapping stations positioned on each of said projections, each wrapping station having positioning means for a workman mounted on said projections so as to locate the workman in close proximity to said growing crops;

heat sealing means positioned on each wrapping station;

a roll of plastic film positioned at each wrapping station;

means for severing a sheet of plastic from each roll;

shrinking means positioned in each projection with the conveyor means in

each projection passing therethrough; and

a third conveyor means positioned at substantially right angles and under the ends of the conveyor means extending from the projections into the central frame, said third conveyor being inclined upwardly and extending out of said central frame.

Claim 64, which depends from claim 63, additionally recites means for heat shrinking the breathable plastic film about the produce. Claim 60, which is independent, is substantially similar to claim 62 except that it recites the last element recited in claim 62 functionally and adds the recitation "means for packaging in shipping cases while on said vehicle for shipment to market." Claim 61, which depends from claim 60, adds "heat sealing means for tack sealing said plastic film after it is wrapped about the units of crop products."

The Rejection

The references are:

McLaren	2,337,615	Dec. 28, 1943
Allen	2,865,765	Dec. 23, 1958
Payton et al.	2,906,627	Sept. 29, 1959
Miller	2,987,864	June 13, 1961

The examiner rejected claims 63 and 64 under 35 U.S.C. § 103 as unpatentable over McLaren in view of Allen and claims 60–62 under 35 U.S.C. § 103 as unpatentable over McLaren in view of Allen, Payton, and Miller. The board affirmed the rejection of all five claims on the same ground and for substantially the same reasons.

McLaren discloses a mobile produce packing plant in which the produce is packed directly in crates without previously having been encased in film. Across the rear of the vehicle and extending to the sides of the main body thereof is a structure, the ends of which may be "collapsed (back into the body) when the machine is conditioned for road travel." On this structure three platforms are provided for workmen who pack produce picked or cut by other, dismounted workmen into crates, after which the crates are transported into a refrigerated storage compartment at the front of the vehicle by means of a Tshaped

conveyor system running in from the platforms to the center of the vehicle.

Allen teaches the use of heat-shrinkable, “breathable,” plastic film to encase produce “for preserving the nutritious and flavorful [sic] ingredients in freshly picked produce right up to the instant of eating.” The produce is heatsealed in the film and the film then tightly shrunk around the produce by immersion in hot water.

Payton discloses an apparatus for shrinking film wrappers around food by passing the wrapped units through a warm-air heating chamber.

Miller discloses a wrapping device comprising a roll of heat-sealable wrapping film, a wrapping table, a hot wire for cutting the wrapping material at the desired length, and a heat sealing plate.

Opinion

The machine disclosed by McLaren differs considerably in detail from appellant’s preferred embodiment, but we agree with the solicitor that, but for the plastic wrapping, the shrinking thereof, and the location of the actual crating operation, appellant’s claims may be read on McLaren’s device. Furthermore, we agree with the Patent Office that all the other elements of appellant’s claims except the location of the crating operation are disclosed in the other references and that, if adapting the plastic-wrapping technology to McLaren’s mobile produce packing plant was obvious, the latter would be such a straightforward matter of design that no reference disclosing it would be required to make it *prima facie* obvious. However, the fundamental question in this case, which involves a combination of various elements known in the prior art, is whether the combination of the old elements would have been obvious to one of ordinary skill in the art at the time the invention was made.

Appellant argues that the references may only be combined through hindsight, using appellant’s own disclosure as a guide. The solicitor, on the other hand, relies on *In re Winslow*, 365 F.2d 1017 (C.C.P.A. 1966), for the proposition that a combination of features shown by references is legally obvious if it would have been obvious to “the inventor * * * working in his shop with the prior art references—which he is presumed to know—hanging on the walls around him,” *id.* 365 F.2d at 1020, a statement made by the writer and

limited by reference to “a case like this,” which limitation it is desired to emphasize. As we have often remarked, *language* from an opinion should not be divorced from the facts of the case in which the language was used.

In *Winslow* we said that the principal secondary reference was “in the very same art” as appellant’s invention and characterized all the references as “very pertinent art.” The language relied on by the solicitor, quoted above, therefore, does not apply in cases where the very point in issue is whether one of ordinary skill in the art would have *selected*, without the advantage of hindsight and knowledge of the applicant’s disclosure, the particular references which the examiner applied. As we also said in *Winslow*, “Section 103 requires us to presume full knowledge by the inventor of the *prior art in the field of his endeavor*” (emphasis, except of “prior,” added), but it does not require us to presume full knowledge by the inventor of prior art *outside* the field of his endeavor, i.e., of “non-analogous” art. In that respect, it only requires us to presume that the inventor would have that ability to select and utilize knowledge from other arts reasonably pertinent to his particular problem which would be expected of a man of ordinary skill in the art to which the subject matter pertains.

In this case, McLaren, the principal reference, is also a mobile produce packing plant, i.e., it is “in the very same art,” and Allen, the principal secondary reference, is for a process of preserving fresh produce, which is the whole object of appellant’s invention. McLaren discloses that it is an object of his invention “to permit greater flexibility in the harvesting of crops by eliminating the usual packing plant and performing all the packaging in the field,” and Allen specifies that “The steps of the present invention should be carried out in rapid succession subsequent to picking the produce directly out of the fields or orchards.” Taken together, these two statements would certainly seem to suggest combining at least these two references. Furthermore, while Payton and Miller might initially be thought to be in arts foreign to mobile produce packing technology, once the motive to combine McLaren and Allen is established, the additional combination of Payton and Miller therewith tends to flow from the close relationship of *Allen* with Payton and Miller.

For the above reasons, it seems to us that the

Patent Office made out a strong case of prima facie obviousness and the burden fell on appellant to rebut it, if he could, with objective evidence of non-obviousness. . . . However, for the most part appellant has contented himself with arguing the superiority of his devices to McLaren's vintage 1940 mobile field packing plant and the superiority of immediate field packing to subsequent packing elsewhere, which he obviously was not

the first to appreciate. Appellant has not submitted any persuasive evidence that the particular manner of combining prior-art knowledge suggested by the Patent Office would not have been obvious to a person of ordinary skill in the designing of equipment for commercial farming at the time appellant made his invention.

Accordingly, the decision of the board is affirmed.

**In re Paulsen,
30 F.3d 1475 (Fed. Cir. 1994) (excerpt).**

LOURIE, Circuit Judge.

AST Research, Inc., (AST) appeals from the July 23, 1993 decision of the United States Patent and Trademark Office (PTO) Board of Patent Appeals and Interferences sustaining the final rejection upon reexamination of claims 1-4, 6, 9-12, and 18-34 of U.S. Patent 4,571,456. We affirm.

Background

The '456 patent, entitled "Portable Computer," was issued to David C. Paulsen *et al.*, on February 18, 1986. The claims of the patent are directed to a portable computer contained within a compact metal case.² A salient feature of the claimed invention is its "clam shell" configuration, in which the computer's display housing is connected to the computer at its midsection by a hinge assembly that enables the display to swing from a closed, latched position for portability and protection to an open, erect position for viewing and operation. Computers consistent with this

design are commonly referred to as "laptop" computers.

On April 27, 1990, and subsequently on June 12, 1990 and October 22, 1990, requests were filed in the PTO for reexamination of the '456 patent. *See* 35 U.S.C. § 302 (1988). The requests were consolidated into a single proceeding for the reexamination of claims 1 through 34. On August 9, 1991, the examiner issued a final office action in the reexamination rejecting claims 1-4, 6, 7, 9-12, and 18-34. Independent claims 1 and 18 were rejected under 35 U.S.C. § 102(b) (1988) as being anticipated by Japanese Application 47-14961 to Yokoyama. Additionally, claims 1-4, 6, 7, 9-12, and 18-34 were rejected under 35 U.S.C. § 103 (1988) as being obvious over the Yokoyama reference in view of other prior art.⁴

On appeal, the Board affirmed the examiner's rejections except as to claim 7. In sustaining the rejections of claims 1 and 18, the Board rejected the appellant's contention that Yokoyama

²Claim 1 is the broadest claim in the '456 patent and is illustrative of the claimed invention. The claim reads as follows:

1. A portable computer constructed to be contained within an outer case for transport and to be erectable to a viewing and operating configuration for use, said computer comprising
a base,
a display housing,
a top cover, a rear cover,

hinge means for permitting swinging movement of the display housing about an axis of rotation adjacent the rear end of the display housing and from a closed and latched position of the display housing on the base to an erected position for viewing by an operator, and including stop means for holding the display housing at the desired angle for viewing,

the hinge means being located in a mid portion of the base and wherein the hinge means permit swinging movement of the display housing to an erected position in which the inner surface of the display housing is held in an upward and rearwardly inclined angle for viewing by an operator in front of the computer, and

including a keyboard in the portion of the base which is exposed by the movement of the display housing to the erected position.

⁴Claims 5, 8, and 13-17 were allowed by the examiner in the reexamination proceeding. These claims are not at issue in this appeal.

is not a proper prior art reference under sections 102 or 103. The Board concluded that although Yokoyama discloses a calculator, a calculator is a type of computer. The Board also rejected the appellant's argument that Yokoyama is a non-enabling reference. Respecting the § 103 rejection of claims 2–4, 6, 9–12, and 19–34, the Board adopted the examiner's determination that the cited prior art would have suggested the claimed subject matter to a person of ordinary skill in the art.

AST, the present assignee of the '456 patent, now appeals from the Board's decision.

Discussion

* * * *

Claims 2–4, 6, and 28–34

Next, AST challenges the Board's rejection of claims 2–4, 6, and 28–34 on the ground of obviousness.

* * * *

1. Non-Analogous Art

AST argues that claims 2, 6, and 28–34, which add particular features to the hinge and latch means of the display housing,¹⁰ were erroneously rejected over non-analogous references directed to hinges and latches as used in a desktop telephone directory, a piano lid, a kitchen cabinet, a washing machine cabinet, a wooden furniture cabinet, or a two-part housing for storing audio cassettes. AST maintains that because the references pertain to fields of endeavor entirely unrelated to computers and are not pertinent to the problems faced by the present inventors, they do not render the claims obvious. It argues that the cited references, dealing with such articles as cabinets and washing machines, do not deal with the particular environment presented in portable computers. This argument rests on too narrow a view of what prior art is pertinent to the invention here.

Whether a prior art reference is “analogous” is a fact question that we review under the “clearly erroneous” standard. *In re Clay*, 966 F.2d 656, 658 (Fed. Cir. 1992). Although there is little dispute that the prior art references cited here (other than Yokoyama) are not within the same

field of endeavor as computers, such references may still be analogous if they are “reasonably pertinent to the particular problem with which the inventor is involved.” *Id.*; see also *Heidelberg Druckmaschinen AG v. Hantscho Commercial Prods., Inc.*, 21 F.3d 1068, 1072 (Fed. Cir. 1994). The problems encountered by the inventors of the '456 patent were problems that were not unique to portable computers. They concerned how to connect and secure the computer's display housing to the computer while meeting certain size constraints and functional requirements. The prior art cited by the examiner discloses various means of connecting a cover (or lid) to a device so that the cover is free to swing radially along the connection axis, as well as means of securing the cover in an open or closed position. We agree with the Board that given the nature of the problems confronted by the inventors, one of ordinary skill in the art “would have consulted the mechanical arts for housings, hinges, latches, springs, etc.” Thus, the cited references are “reasonably pertinent” and we therefore conclude that the Board's finding that the references are analogous was not clearly erroneous.

2. Secondary Considerations

In support of its contention that the Board erred in rejecting claims 2–4, 6, and 28–34 as obvious, AST points to evidence of commercial success, copying, and professional recognition of Grid laptop computers, devices covered by claims 1 and 18 of the '456 patent. For example, from the introduction of their laptop computers in 1983 to the end of 1990, Grid enjoyed cumulative sales of approximately \$489 million in addition to licensing royalties of \$7.5 million. Grid also received several design awards and exceptional praise from the industry press.

Although such evidence is indeed impressive, AST has not shown that it is relevant to the claims at issue and thus entitled to weight. When a patentee offers objective evidence of nonobviousness, there must be a sufficient relationship between that evidence and the patented invention. See *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir.), *cert. denied*, 488 U.S. 956 (1988). “The term ‘nexus’ is used, in this context, to designate

¹⁰Generally, claims 2 and 6, both depending from claim 1, recite torsion spring means and recessed latch means for the display housing, respectively. Claims 28, 29, 30, 33, and 34 are directed to a portable computer having concealed hinges, and claims 31 and 32 recite recessed latch means and retractable legs, respectively.

a legally and factually sufficient connection between the proven success and the patented invention, such that the objective evidence should be considered in the determination of nonobviousness. The burden of proof as to this connection or nexus resides with the patentee.” *Id.* Here, AST has failed to carry its burden.

AST limits its argument respecting the evidence adduced to demonstrate nonobviousness to laptop computers covered by claims 1 and 18, claims which we have previously concluded are unpatentable under section 102. AST has not established that the commercial success, copying, and professional recognition experienced by Grid laptop computers are probative of the nonobviousness of the inventions of claims 2–4, 6, and 28–34. It has not been shown that such evidence is relevant to a computer within the scope of these claims, *i.e.*, that it is attributable to the inventions of these claims, rather than to extraneous factors such as advertising and marketing or to the features possessed by the computers of claims 1 and 18. Because AST has failed to establish a sufficient legal relationship between the purported evidence of nonobviousness and the

claimed invention, evidence pertinent to claims 1 and 18 therefore carries no weight with respect to claims 2–4, 6, and 28–34.

3. Obviousness Generally

Beyond what we have said respecting the applicability of the cited prior art and the asserted evidence of secondary considerations, we have considered AST’s basic contention that the prior art does not suggest the invention of the rejected claims and view it to be unpersuasive. In reviewing the Board’s obviousness conclusions, we have been guided by the well-settled principles that the claimed invention must be considered as a whole, multiple cited prior art references must suggest the desirability of being combined, and the references must be viewed without the benefit of hindsight afforded by the disclosure. *See Hodosh v. Block Drug Co., Inc.*, 786 F.2d 1136, 1143 n.5 (Fed. Cir.), *cert. denied*, 479 U.S. 827 (1986). We have carefully reviewed the prior art of record and conclude that the Board did not err in rejecting claims 2–4, 6, and 28–34 as having been obvious.

* * * * *

OddzOn Products, Inc. v. Just Toys, Inc., 122 F.3d 1396 (Fed. Cir. 1997).

LOURIE, Circuit Judge.

* * * * *

Background

OddzOn is a toy and sporting goods company that sells the popular “Vortex” tossing ball, a foam football-shaped ball with a tail and fin structure. The Vortex ball is OddzOn’s commercial embodiment of its design patent, U.S. Patent D 346,001, which issued on April 12, 1994. Figure 1 of the patent is shown below:

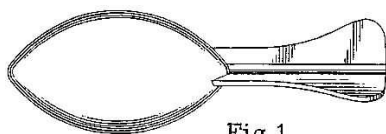
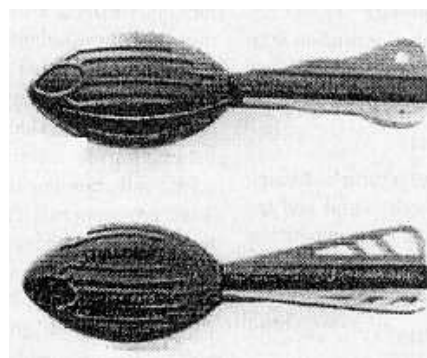


Fig.1

Just Toys, Inc., another toy and sporting goods company, sells a competing line of “Ultra Pass” balls. Two versions of the allegedly infringing Ultra Pass balls are shown below:



OddzOn sued Just Toys for design patent infringement, trade dress infringement, and state-law unfair competition, asserting that the Ultra Pass line of tossing balls was likely to be confused with OddzOn’s Vortex ball, and that the Ultra Pass packaging was likely to be confused with the Vortex packaging. Just Toys denied infringement and asserted that the patent was invalid. On cross-motions for summary judgment, the district court held that the patent was not shown to be invalid and was not infringed. The

court also held that Just Toys did not infringe OddzOn's trade dress.

The district court determined that two confidential designs that had been disclosed to the inventor qualified as subject matter encompassed within the meaning of 35 U.S.C. § 102(f) (1994) and concluded that these designs could be combined with other prior art designs for purposes of a challenge to the validity of the patent under 35 U.S.C. § 103 (1994). Nonetheless, the district court held that the patented design would not have been obvious in light of the prior art, including the two confidential designs.

* * * * *

Discussion

* * * * *

A. The Prior Art Status of § 102(f) Subject Matter

The district court ruled that two confidential ball designs (the "disclosures") which "inspired" the inventor of the OddzOn design were prior art for purposes of determining obviousness under § 103. The district court noted that this court had recently declined to rule definitively on the relationship between § 102(f) and § 103, *see Lamb-Weston, Inc. v. McCain Foods, Ltd.*, 78 F.3d 540, 544 (Fed. Cir. 1996), but relied on the fact that the United States Patent and Trademark Office (PTO) interprets prior art under § 103 as including disclosures encompassed within § 102(f). OddzOn challenges the court's determination that subject matter encompassed within § 102(f) is prior art for purposes of an obviousness inquiry under § 103. OddzOn asserts that because these disclosures are not known to the public, they do not possess the usual hallmark of prior art, which is that they provide actual or constructive public knowledge. OddzOn argues that while the two disclosures constitute patent-defeating subject matter under 35 U.S.C. § 102(f), they cannot be combined with "real" prior art to defeat patentability under a combination of § 102(f) and § 103.

The prior art status under § 103 of subject matter derived by an applicant for patent within the meaning of § 102(f) has never expressly been decided by this court. We now take the opportunity to settle the persistent question whether § 102(f) is a prior art provision for purposes of § 103. As will be discussed, although there is a basis to suggest that § 102(f) should not be considered as

a prior art provision, we hold that a fair reading of § 103, as amended in 1984, leads to the conclusion that § 102(f) is a prior art provision for purposes of § 103.

Section 102(f) provides that a person shall be entitled to a patent unless "he did not himself invent the subject matter sought to be patented." This is a derivation provision, which provides that one may not obtain a patent on that which is obtained from someone else whose possession of the subject matter is inherently "prior." It does not pertain only to public knowledge, but also applies to private communications between the inventor and another which may never become public. Subsections (a), (b), (e), and (g), on the other hand, are clearly prior art provisions. They relate to knowledge manifested by acts that are essentially public. Subsections (a) and (b) relate to public knowledge or use, or prior patents and printed publications; subsection (e) relates to prior filed applications for patents of others which have become public by grant; and subsection (g) relates to prior inventions of others that are either public or will likely become public in the sense that they have not been abandoned, suppressed, or concealed. Subsections (c) and (d) are loss-of-right provisions. Section 102(c) precludes the obtaining of a patent by inventors who have abandoned their invention. Section 102(d) causes an inventor to lose the right to a patent by delaying the filing of a patent application too long after having filed a corresponding patent application in a foreign country. Subsections (c) and (d) are therefore not prior art provisions.

In *In re Bass*, 474 F.2d 1276, 1290 (C.C.P.A. 1973), the principal opinion of the Court of Customs and Patent Appeals held that a prior invention of another that was not abandoned, suppressed, or concealed (102(g) prior art) could be combined with other prior art to support rejection of a claim for obviousness under § 103. The principal opinion noted that the provisions of § 102 deal with two types of issues, those of novelty and loss-of-right. It explained: "Three of [the subsections,] (a), (e), and (g), deal with events prior to applicant's *invention* date and the other, (b), with events more than one year prior to the U.S. *application* date. These are the 'prior art' subsections." *Id.* (emphasis in original). The principal opinion added, in dictum (§ 102(f) not being at issue), that "[o]f course, (c), (d), and (f)

have no relation to § 103 and no relevancy to what is ‘prior art’ under § 103.” *Id.* There is substantial logic to that conclusion. After all, the other prior art provisions all relate to subject matter that is, or eventually becomes, public. Even the “secret prior art” of § 102(e) is ultimately public in the form of an issued patent before it attains prior art status.

Thus, the patent laws have not generally recognized as prior art that which is not accessible to the public. It has been a basic principle of patent law, subject to minor exceptions, that prior art is:

technology already available to the public. It is available, in legal theory at least, when it is described in the world’s accessible literature, including patents, or has been publicly known or in . . . public use or on sale “in this country.” That is the real meaning of “prior art” in legal theory—it is knowledge that is available, including what would be obvious from it, at a given time, to a person of ordinary skill in the art.

Kimberly-Clark Corp. v. Johnson & Johnson, 745 F.2d 1437, 1453 (Fed. Cir. 1984) (citations omitted).

Moreover, as between an earlier inventor who has not given the public the benefit of the invention, *e.g.*, because the invention has been abandoned without public disclosure, suppressed, or concealed, and a subsequent inventor who obtains a patent, the policy of the law is for the subsequent inventor to prevail. *See W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1550 (Fed. Cir. 1983) (“Early public disclosure is a linchpin of the patent system. As between a prior inventor [who does not disclose] and a later inventor who promptly files a patent application . . . , the law favors the latter.”). Likewise, when the possessor of secret art (art that has been abandoned, suppressed, or concealed) that predates the critical date is faced with a later-filed patent, the later-filed patent should not be invalidated in the face of this “prior” art, which has not been made available to the public. Thus, prior, but non-public, inventors yield to later inventors who utilize the patent system.

However, a change occurred in the law after *Bass* was decided. At the time *Bass* was decided, § 103 read as follows:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

35 U.S.C. § 103. The prior art being referred to in that provision arguably included only public prior art defined in subsections 102(a), (b), (e), and (g).

In 1984, Congress amended § 103, adding the following paragraph:

Subject matter developed by another person, *which qualifies as prior art only under subsection (f) or (g) of section 102 of this title*, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

35 U.S.C. § 103 (now § 103(c)) (emphasis added). It is historically very clear that this provision was intended to avoid the invalidation of patents under § 103 on the basis of the work of fellow employees engaged in team research. *See Section-by-Section Analysis: Patent Law Amendments Act of 1984*, 130 Cong. Rec. 28069, 28071 (Oct. 1, 1984), *reprinted in* 1984 U.S.C.C.A.N. 5827, 5833 (stating that the amendment, which encourages communication among members of research teams, was a response to *Bass* and *In re Clemens*, 622 F.2d 1029 (C.C.P.A. 1980), in which “an earlier invention which is not public may be treated under Section 102(g), and possibly under 102(f), as prior art”). There was no clearly apparent purpose in Congress’s inclusion of § 102(f) in the amendment other than an attempt to ameliorate the problems of patenting the results of team research. However, the language appears in the

statute; it was enacted by Congress. We must give effect to it.

The statutory language provides a clear statement that subject matter that qualifies as prior art under subsection (f) or (g) cannot be combined with other prior art to render a claimed invention obvious and hence unpatentable when the relevant prior art is commonly owned with the claimed invention at the time the invention was made. While the statute does not expressly state in so many words that § 102(f) creates a type of prior art for purposes of § 103, nonetheless that conclusion is inescapable; the language that states that § 102(f) subject matter is not prior art under limited circumstances clearly implies that it is prior art otherwise. That is what Congress wrote into law in 1984 and that is the way we must read the statute.

This result is not illogical. It means that an invention, *A'*, that is obvious in view of subject matter *A*, derived from another, is also unpatentable. The obvious invention, *A'*, may not be unpatentable to the inventor of *A*, and it may not be unpatentable to a third party who did not receive the disclosure of *A*, but it is unpatentable to the party who did receive the disclosure.

The PTO's regulations also adopt this interpretation of the statute. 37 C.F.R. § 1.106(d) (1996) ("Subject matter which is developed by another

person which qualifies as prior art only under 35 U.S.C. § 102(f) or (g) may be used as prior art under 35 U.S.C. § 103."). Although the PTO's interpretation of this statute is not conclusive, we agree with the district court that it is a reasonable interpretation of the statute.

It is sometimes more important that a close question be settled one way or another than which way it is settled. We settle the issue here (subject of course to any later intervention by Congress or review by the Supreme Court), and do so in a manner that best comports with the voice of Congress. Thus, while there is a basis for an opposite conclusion, principally based on the fact that § 102(f) does not refer to public activity, as do the other provisions that clearly define prior art, nonetheless we cannot escape the import of the 1984 amendment. We therefore hold that subject matter derived from another not only is itself unpatentable to the party who derived it under § 102(f), but, when combined with other prior art, may make a resulting obvious invention unpatentable to that party under a combination of §§ 102(f) and 103. Accordingly, the district court did not err by considering the two design disclosures known to the inventor to be prior art under the combination of §§ 102(f) and 103.

* * * * *

**Allied Colloids, Inc. v. American Cyanamid Co.,
64 F.3d 1570 (Fed. Cir. 1995) (excerpt).**

NEWMAN, Circuit Judge.

In this patent infringement action tried to a jury, the district court directed the grant of judgment as a matter of law in favor of the defendant American Cyanamid Company ("Cyanamid"), upon completion of the case in chief presented by the plaintiffs Allied Colloids Inc. and Allied Colloids Ltd. (collectively "Colloids"). The court held that a reasonable jury could reach only the verdict that the patents in suit, United States Patents Nos. 4,720,346 and 4,943,378, were invalid based on the public use bar of 35 U.S.C. § 102(b). The principal issue on appeal is the correctness of that judgment. An additional issue is the correctness of the district court's ruling that Colloids' patents are unenforceable for inequitable conduct because Col-

loids did not tell the Patent and Trademark Office ("PTO") about this public use.

I

The Public Use Bar

* * * * *

A

The occurrence of the events on which the district court's judgment rested is not in dispute. However, the factual inferences and legal conclusions that the court drew from these events are challenged. In brief outline:

Colloids is a purveyor of sewage treatment materials. The patents in suit are directed to certain polymeric flocculents and the method of treating sewage with these materials. Colloids

told officials of the City of Detroit that these materials, which were developed in England, might be useful in treating Detroit municipal waste. Colloids had previously treated Detroit waste, but had lost the business. At Colloids' invitation samples of Detroit sludge were sent to England for testing. After some favorable test results in England, about twenty samples of Colloids' sewage treatment materials were brought to Detroit for testing on fresh Detroit sewage. These samples were about two to four ounces in size. They were tested on April 16–17, 1985, in a laboratory located at a Detroit sewage treatment plant. The tests showed promising results for some of Colloids' products. Additional laboratory tests were conducted in Detroit in July 1985, and plant-scale trials were conducted in Detroit in December 1985. Colloids' patent application was filed in the United States on April 23, 1986; thus only the first series of tests is relevant to the asserted public use bar, *i.e.* the April 16–17, 1985 tests.

The district court held, after the plaintiff's case, that the tests on April 16–17 were an invalidating public use as a matter of law, on the principal grounds that the tests had a "commercial objective" and were not performed under a confidentiality agreement with the City of Detroit. Colloids argued that the tests were of an experimental nature. The district court did not disagree, but held that the experimental nature did not avoid the public use bar because the activity was "commercially motivated."

B

35 U.S.C. § 102 provides that a person is entitled to a patent unless

(b) the invention was . . . in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States.

A "public use" for the purpose of barring access to the patent system is a use more than a year before the patent filing date, whereby a completed invention is used in public, without restriction and in circumstances other than "substantially for the purposes of experiment." *Smith & Griggs Mfg. Co. v. Sprague*, 123 U.S. 249, 256 (1887). The public use bar serves the policies of the patent system, for it encourages prompt filing

of patent applications after inventions have been completed and publicly used, and sets an outer limit to the term of exclusivity.

The law recognizes that the inventor may test the invention, in public if that is reasonably appropriate to the invention, without incurring a public use bar. In *City of Elizabeth v. American Nicholson Pavement Co.*, 97 U.S. 126 (1878) (distinguishing "public knowledge" from "public use or sale"), the Court wrote:

When the subject of invention is a machine, it may be tested and tried in a building, either with or without closed doors. In either case, such use is not a public use, within the meaning of the statute, so long as the inventor is engaged, in good faith, in testing its operation. He may see cause to alter it and improve it, or not. His experiments will reveal the fact whether any and what alterations may be necessary.

97 U.S. at 134–35. See *Manville Sales Corp. v. Paramount Sys., Inc.*, 917 F.2d 544, 551 (Fed. Cir. 1990) (determining whether invention is "operable for its intended purpose in its intended environment" is not a statutory public use).

Thus the public use bar of § 102(b) requires that (1) the invention was used in public and (2) the use was not primarily experimental in purpose. The determination of these aspects requires considering and weighing such factors as the nature of the activity that occurred in public; the public access to and knowledge of the public use; whether there was any confidentiality obligation imposed on persons who observed the use; whether progress records or other indicia of experimental activity were kept; whether persons other than the inventor or acting for the inventor conducted the experiments; how many tests were conducted; the scale of the tests compared with commercial conditions; the length of the test period in comparison with tests of similar products; and whether payment was made for the product of the tests. See *Baker Oil Tools, Inc. v. Geo Vann, Inc.*, 828 F.2d 1558, 1564 (Fed. Cir. 1987); *In re Brigance*, 792 F.2d 1103, 1107–08 (Fed. Cir. 1986); *Hycor Corp. v. Schlueter Co.*, 740 F.2d 1529, 1535 (Fed. Cir. 1984); *TP Labs., Inc. v. Professional Positioners, Inc.*, 724 F.2d 965, 971–72 (Fed. Cir.), *cert. denied*, 469 U.S. 826 (1984).

There may be additional factors in a particular case, relevant to the public nature of the use or any asserted experimental aspect. All of the circumstances must be considered. *Baker Oil Tools*, 828 F.2d at 1564.

Patent invalidity based on public use is required to be proved by clear and convincing evidence. *Moleculon Research Corp. v. CBS, Inc.*, 793 F.2d 1261, 1266 (Fed. Cir. 1986), *cert. denied*, 479 U.S. 1030 (1987).

* * * * *

The district court held that the April 16–17 tests in the Detroit sewage treatment laboratory were an invalidating public use even if the tests were for purposes of experimentation, for the reason that they were “commercially motivated.” This was an error of law. *See Manville Sales*, 917 F.2d at 551 (testing to determine whether the invention performs as intended negates § 102(b) bar). As illustrated in precedent, public acts may range from experimentation where there are many unknowns, to simply using an already proven product in an unrestricted public location. Commercial purpose underlies virtually every contact between inventor and potential customer. When testing an invention entails customer contact, that does not convert an otherwise experimental purpose into a public use.

C

Colloids presented testimony that the April 16–17 tests were part of its project to ascertain which if any of the various formulations would successfully treat Detroit sewage. Witnesses testified that the earlier tests in England, using sludge that had been shipped from Detroit, gave useful preliminary results, and led to continuing the testing using fresh Detroit sewage. There was testimony that the biological nature of sewage varies; that the results of laboratory testing did not guarantee the same result with testing in situ; and that site testing of Detroit’s sewage was required.

It was not contradicted, during the plaintiff’s case, that no Detroit personnel watched the tests, or knew the composition of the products that were being tested, or knew the test results. The tests were done in an area away from the actual sewage treatment operation. Colloids’ witnesses testified that a City technician occasionally entered the room for other purposes, but did not observe and had no connection with these tests.

The tests were conducted by Colloids’ personnel, who kept a research log of the experiments.

The tests were not observed by anyone other than Colloids’ employees. Mr. Whitwell, Colloids’ Technical Services Manager who was present at the tests, testified that no one from the City of Detroit was involved in the tests or knew what products were being tested. Mr. Field, an inventor who was not himself present at the tests, testified that representatives of the City of Detroit “were there” at the municipal plant, but were not “observing the experiments.” No witness testified that anyone other than Colloids’ employees conducted or observed the experiments. It was undisputed that Colloids maintained strict control over the test samples, and that those samples were small in the context of municipal waste treatment.

In *Grain Processing Corp. v. American Maize-Products Co.*, 840 F.2d 902, 906 (Fed. Cir. 1988), the court held that there was no public use when “the testing period was short, very small quantities of the samples were shipped, and they were free of charge.” Colloids received no payment from the City of Detroit for these tests, and tested 20–30 different small samples, not all of which were related to the patent in suit.

The district court referred to the absence of a written confidentiality agreement between Colloids and the City of Detroit. Although a written promise of confidentiality is a factor to be considered in appropriate circumstances, such as when persons other than the patentee conduct the experiments, *see Hycor*, 740 F.2d at 1535; *TP Labs.*, 724 F.2d at 971–72, the absence of such a promise does not make a use “public” as a matter of law, or outweigh the undisputed fact that no information of a confidential nature was communicated to others, *see Moleculon Research*, 793 F.2d at 1265–66; *TP Labs.*, 724 F.2d at 972.

That Colloids hoped to obtain Detroit’s business is not dispositive of the § 102(b) analysis. Undoubtedly the Detroit tests were conducted in order to determine whether Colloids had or could make products that would satisfactorily treat Detroit sewage. Such testing at the potential customer’s site does not raise a public use bar as a matter of law. All of the circumstances must be considered, to ascertain whether on the entirety of the evidence it has been proved that the patented invention was publicly used.

The district court apparently concluded that Colloids itself viewed its April 16–17 tests as a bar under § 102(b). The court referred to a letter from Colloids’ British patent attorney, written in March 1985, stating that the patent application should be filed before a “commercial sampling” in Detroit “the end of April.” Colloids argues that this letter does not establish the nature of the April 16–17 tests. We agree that this letter was inadequate ground for the grant of judgment as a matter of law. Cautionary advice from a foreign patent attorney, advice that was not implemented, is not an admission of United States law or fact.

A public use under § 102(b) does not start the one-year period until the invention has left the experimental stage. *See Manville Sales*, 917 F.2d at 551 (determining when tests were completed and invention was found to work as intended, in order to determine when grace period began and ended). The criteria that have been developed as a guide to this determination were not correctly considered. For example, the district court stated that it was not relevant that Colloids received no payment for the Detroit tests. We have explained that this is a factor to be considered, for the absence of payment supports the inference that the tests were for the benefit of the patentee, and thus contravenes the inference of public use for or by the potential customer.

The district court also stated that it was not relevant that Colloids prepared detailed records of the tests. Precedent teaches that this action is highly relevant, for the keeping of detailed test records is a routine indicium of the experimental mode. As in *TP Labs.*, such facts “indicate the inventor was testing the device, not the market.” 724 F.2d at 973. The district court indeed termed the April 16–17 tests an “experiment,” but held that whether “there was some future or further improvements contemplated or necessary” was “not relevant to the public use bar.” Whether future improvements were contemplated or necessary is indeed relevant, for experimental use is determined on all the evidence. *Baker Oil Tools*, 828 F.2d at 1563.

The law recognizes

an inventor’s need to test the invention, to ascertain whether the work is complete or further changes should be made, and to show that the invention

will work for its intended purpose.... [S]uch testing and development may encompass or even require disclosure to the public, without barring the inventor’s access to the patent system.

Id. at 1563. *See also, e.g., Grain Processing*, 840 F.2d at 906 (test had to be run in customer’s plant “because ingredients [in patented product] may interact adversely with other food ingredients in the manufacturers’ products”). That the testing leads to and is followed by commercial success does not convert the test activity into an invalidating public use. The dispositive consideration is whether the inventor was in fact testing the invention. As the Court wrote in *City of Elizabeth*, it is not necessary

in such a case, that the machine should be put up and used only in the inventor’s own shop or premises. He may have it put up and used in the premises of another, and the use may inure to the benefit of the owner of the establishment. Still, if used under the surveillance of the inventor, and for the purpose of enabling him to test the machine, and ascertain whether it will answer the purpose intended, and make such alterations and improvements as experience demonstrates to be necessary, it will still be a mere experimental use, and not a public use, within the meaning of the statute.

97 U.S. at 135. This law endures, and has many times been reinforced.

D

On the evidence adduced during Colloids’ case in chief, construed as required by Rule 50(a)(1), a reasonable jury could have found, applying the correct law, that there was not a public use bar under § 102(b). *See Orthokinetics, Inc. v. Safety Travel Chairs, Inc.*, 806 F.2d 1565, 1573 (Fed. Cir. 1986) (reversing grant of judgment n.o.v. of an invalidating public use, holding that the jury could have construed the testimony as establishing there was no offer of sale or public use). It was thus incorrect to grant judgment of invalidity under § 102(b) as a matter of law. That judgment is vacated.

* * * * *

**Griffith v. Kanamaru,
816 F.2d 624 (Fed. Cir. 1987).**

NICHOLS, Senior Circuit Judge.

Owen W. Griffith (Griffith) appeals the decision of the Board of Patent Appeals and Interferences (Board) (Patent Interference No. 101,562) that Griffith failed to establish a *prima facie* case that he is entitled to an award of priority against the filing date of Tsuneo Kanamaru, *et al.* (Kanamaru) for a patent on aminocarnitine compounds. We affirm.

Background

This patent interference case involves the application of Griffith, an Associate Professor in the Department of Biochemistry at Cornell University Medical College, for a patent on an aminocarnitine compound, useful in the treatment of diabetes, and a patent issued for the same invention to Kanamaru, an employee of Takeda Chemical Industries. The inventors assigned their rights to the inventions to the Cornell Research Foundation, Inc. (Cornell) and to Takeda Chemical Industries respectively. The technology established by this invention is not at issue in this appeal and is therefore not described further.

Griffith had established conception by June 30, 1981, and reduction to practice on January 11, 1984. Kanamaru filed for a United States patent on November 17, 1982. The board found, however, that Griffith failed to establish reasonable diligence for a *prima facie* case of prior invention and issued an order to show cause under 37 C.F.R. § 1.617 as to why summary judgment should not be issued.

The board considered the additional evidence submitted by Griffith pursuant to the show cause order and decided that Griffith failed to establish a *prima facie* case for priority against Kanamaru's filing date. This result was based on the board's conclusion that Griffith's explanation for inactivity between June 15, 1983, and September 13, 1983, failed to provide a legally sufficient excuse to satisfy the "reasonable diligence" requirement of 35 U.S.C. § 102(g). Griffith appeals on the issue of reasonable diligence.

Analysis

I

This is a case of first impression and presents the novel circumstances of a university suggesting that it is reasonable for the public to wait for disclosure until the most satisfactory funding arrangements are made. The applicable law is the "reasonable diligence" standard contained in 35 U.S.C. § 102(g) and we must determine the appropriate role of the courts in construing this exception to the ordinary first-in-time rule. The statute states as follows:

A person shall be entitled to a patent unless—

* * *

(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

35 U.S.C. § 102(g).

Griffith must establish a *prima facie* case of reasonable diligence, as well as dates of conception and reduction to practice, to avoid summary judgment on the issue of priority. 37 C.F.R. § 1.617(a). As a preliminary matter we note that, although the board focused on the June 1983 to September 1983 lapse in work, and Griffith's reasons for this lapse, Griffith is burdened with establishing a *prima facie* case of reasonable diligence from immediately before Kanamaru's filing date of November 17, 1982, until Griffith's reduction to practice on January 11, 1984. 35 U.S.C. § 102(g); 37 C.F.R. § 1.617(a).

On appeal, Griffith presents two grounds intended to justify his inactivity on the aminocarnitine project between June 15, 1983, and September 13, 1983. The first is that, notwithstanding Cornell University's extraordinary endowment, it

is reasonable, and as a policy matter desirable, for Cornell to require Griffith and other research scientists to obtain funding from outside the university. The second reason Griffith presents is that he reasonably waited for Ms. Debora Jenkins to matriculate in the Fall of 1983 to assist with the project. He had promised her she should have that task which she needed to qualify for her degree. We reject these arguments and conclude that Griffith has failed to establish grounds to excuse his inactivity prior to reduction to practice.

II

The reasonable diligence standard balances the interest in rewarding and encouraging invention with the public's interest in the earliest possible disclosure of innovation. 6 C. Gholz, I. Kayton, D. Conlin & R. Schwaab, *Patent Practice* 24–9 (1985) citing *Hull v. Davenport*, 90 F.2d 103, 105 (C.C.P.A. 1937). Griffith must account for the entire period from just before Kanamaru's filing date until his reduction to practice. 3 D. Chisum, *Patents* § 10.07 at 10-120 (1986). As one of our predecessor courts has noted:

Public policy favors the early disclosure of inventions. This underlies the requirement for “reasonable diligence” in reducing an invention to practice, not unlike the requirement that, to avoid a holding of suppression or concealment, there be no unreasonable delay in filing an application once there has been a reduction to practice.

Naber v. Cricchi, 567 F.2d 382, 385 n.5 (C.C.P.A. 1977), cert. denied, 439 U.S. 826 (1978) (citation omitted).

The board in this case was, but not properly, asked to pass judgment on the reasonableness of Cornell's policy regarding outside funding of research. The correct inquiry is rather whether it is reasonable for Cornell to require the public to wait for the innovation, given the well settled policy in favor of early disclosure. As the board notes, Chief Judge Markey has called early public disclosure the “linchpin of the patent system.” *Horwath v. Lee*, 564 F.2d 948, 950 (C.C.P.A. 1977). A review of caselaw on excuses for inactivity in reduction to practice reveals a common thread that courts may consider the reasonable everyday problems and limitations encountered

by an inventor. See, e.g., *Bey v. Kollonitsch*, 806 F.2d 1024 (Fed. Cir. 1986) (delay in filing excused where attorney worked on a group of related applications and other applications contributed substantially to the preparation of Bey's application); *Reed v. Tornqvist*, 436 F.2d 501 (C.C.P.A. 1971) (concluding it is not unreasonable for inventor to delay completing a patent application until after returning from a three week vacation in Sweden, extended by illness of inventor's father); *Keizer v. Bradley*, 270 F.2d 396 (C.C.P.A. 1959) (delay excused where inventor, after producing a component for a color television, delayed filing to produce an appropriate receiver for testing the component); *Courson v. O'Connor*, 227 F. 890, 894 (7th Cir. 1915) (“exercise of reasonable diligence * * * does not require an inventor to devote his entire time thereto, or to abandon his ordinary means of livelihood”); *De Wallace v. Scott*, 15 App. D.C. 157 (1899) (where applicant made bona fide attempts to perfect his invention, applicant's poor health, responsibility to feed his family, and daily job demands excused his delay in reducing his invention to practice); *Texas Co. v. Globe Oil & Refining Co.*, 112 F. Supp. 455 (N.D.Ill.1953) (delay in filing application excused because of confusion relating to war).

Griffith argues that the admitted inactivity of three months between June 15, 1983, and September 13, 1983, which he attributes to Cornell's “reasonable” policy requiring outside funding and to Griffith's “reasonable” decision to delay until a graduate student arrived, falls within legal precedent excusing inactivity in the diligence context. We disagree. We first note that, in regard to waiting for a graduate student, Griffith does not even suggest that he faced a genuine shortage of personnel. He does not suggest that Ms. Jenkins was the *only* person capable of carrying on with the aminocarnitine experiment. We can see no application of precedent to suggest that the convenience of the timing of the semester schedule justifies a three-month delay for the purpose of reasonable diligence. Neither do we believe that this excuse, absent even a suggestion by Griffith that Jenkins was uniquely qualified to do his research, is reasonable.

Griffith's second contention that it was reasonable for Cornell to require outside funding, therefore causing a delay in order to apply for such funds, is also insufficient to excuse his inactiv-

ity. The crux of Griffith's argument is that outside funding is desirable as a form of peer review, or monitoring of the worthiness of a given project. He also suggests that, as a policy matter, universities should not be treated as businesses, which ultimately would detract from scholarly inquiry. Griffith states that these considerations, if accepted as valid, would fit within the scope of the caselaw excusing inactivity for "reasonable" delays in reduction to practice and filing.

These contentions on delay do not fit within the texture and scope of the precedent cited by the parties or discussed in this opinion. Griffith argues this case is controlled by the outcome of *Litchfield v. Eigen*, 535 F.2d 72 (C.C.P.A. 1976). We disagree. In *Litchfield*, Judge Rich held that the inventors failed to establish due diligence because of their inactivity between April 1964 and September 1965. *Id.* at 76–77. The court based this conclusion on the finding that the inventors possessed the capacity to test the invention and chose instead to test other compounds. *Id.* Judge Rich did not reach the issue of the alleged budgetary limitations imposed by the sponsor and stated that the inventors failed to show any evidence of such financial limitations and that, therefore, the court could not consider this contention. *Id.*

Griffith's excuses sound more in the nature of commercial development, not accepted as an excuse for delay, than the "hardship" cases most commonly found and discussed *supra*. Delays in reduction to practice caused by an inventor's efforts to refine an invention to the most marketable and profitable form have not been accepted as sufficient excuses for inactivity. D. Chisum, *Patents* § 10.07[2] at 10-122 & n.4 (1986) (citations omitted). Griffith's case is analogous to that in *Seeberger v. Dodge*, 24 App. D.C. 476 (1905). In that case, the inventor was the first to conceive of an improvement in an escalator and was attempting to show diligence. The court noted:

The testimony shows that he [Seeberger] was a man of means, and might have constructed an escalator had he undertaken to do so. Instead of this, his constant effort was to organize corporations, or to interest capital in other ways, for the purpose of engaging in the general manufacture

of escalators.

Id. at 484–85.

The court held this unacceptable:

One having the first complete conception of an invention cannot hold the field against all comers by diligent efforts, merely, to organize and procure sufficient capital to engage in the manufacture of his device or mechanism for commercial purposes. This is a different thing from diligence in actual reduction to practice.

Id. at 485 (citation omitted).

The comparison we draw is that Cornell University, like Seeberger, has made a clear decision against funding Griffith's project in order to avoid the risks and distractions, albeit different in each case, that would result from directly financing these inventions. Griffith has placed in the record, and relies on, an able article by President Bok of Harvard, *Business and the Academy*, *Harvard Magazine*, May–June 1981, 31, App. at 81. Bok is explaining the policy issues respecting academic funding of scientific research, for the benefit of Harvard's alumni who must, of course, make up by their contributions the University's annual deficit. While much academic research could produce a profit, pursuit of such profit may be business inappropriate for a university though it would be right and proper for a commercial organization. For example, it might produce conflicts between the roles of scientists as inventors and developers against their roles as members of the university faculty. However large the university's endowment may be, it may be better to enlist private funding and let this source of funds develop the commercial utilization of any invention as perhaps, the beneficial owner. If there is a patent, the source of funds may end up assignee of the patent. It seems also implicit in this policy choice that faculty members may not be allowed single-minded pursuit of reduction to practice whenever they conceive some idea of value, and at times the rights of other inventors may obtain a priority that a single-minded pursuit would have averted. Bok says diligent reduction to practice, to satisfy the patent laws, may interfere with a faculty member's other duties. Bok is asking the approval of his alumni, not of the

courts. The management of great universities is one thing, at least, the courts have not taken over and do not deem themselves qualified to undertake. Bok does not ask that the patent laws or other intellectual property law be skewed or slanted to enable the university to have its cake and eat it too, *i.e.*, to act in a noncommercial manner and yet preserve the pecuniary rewards of commercial exploitation for itself.

If, as we are asked to assume, Cornell also follows the policy Bok has so well articulated, it seems evident that Cornell has consciously chosen to assume the risk that priority in the invention might be lost to an outside inventor, yet, having chosen a noncommercial policy, it asks us to save it the property that would have inured to it if it had acted in single-minded pursuit of gain.

III

The board in this case considered primarily Griffith's contention that the Cornell policy was reasonable and therefore acceptable to excuse his delay in reduction to practice. Although we agree with the board's conclusion, it is appropriate to go further and consider other circumstances as they apply to the reasonable diligence analysis of 35 U.S.C. § 102(g). The record reveals that from the relevant period of November 17, 1982 (Kanamaru's filing date), to September 13, 1983 (when Griffith renewed his efforts towards reduction to practice), Griffith interrupted and often

put aside the aminocarnitine project to work on other experiments. Between June 1982 and June 1983 Griffith admits that, at the request of the chairman of his department, he was primarily engaged in an unrelated research project on mitochondrial glutathione metabolism. Griffith also put aside the aminocarnitine experiment to work on a grant proposal on an unrelated project. Griffith's statement in the record that his unrelated grant application, if granted, might "support" a future grant request directed to the aminocarnitine project does not overcome the conclusion that he preferred one project over another and was not "continuously" or "reasonably" diligent. Griffith made only minimal efforts to secure funding directly for the aminocarnitine project.

The conclusion we reach from the record is that the aminocarnitine project was second and often third priority in laboratory research as well as the solicitation of funds. We agree that Griffith failed to establish a *prima facie* case of reasonable diligence or a legally sufficient excuse for inactivity to establish priority over Kanamaru.

Conclusion

Griffith has failed to establish a *prima facie* case of "reasonable diligence" to establish grounds for the award of priority as against Kanamaru's filing date.

AFFIRMED.

DISCUSSION QUESTIONS ON PATENT PRIORITY

As a matter of policy, the United States aims to award patents to the **first to invent** an invention, whether or not that person is also the **first to file** a patent application. The pertinent statute, 35 U.S.C. § 102(g), states the principles applicable to priority disputes between two or more inventors, each of whom claims to have been the first to invent. After familiarizing yourself with the statute and with the courts' decisions in *Griffith v. Kanamaru* and *Paulik v. Rizkalla*, please attempt to determine which party is entitled to priority in each of the following circumstances. Each relevant event is assumed to occur on a time line running from left to right, and the following abbreviations are used:

C: Date of *conception*

RTP: Date of *reduction to practice*

F: Date of *filing* of patent application

Problem #1

Inventor A		F
Inventor B	F	

Problem #2

Inventor A	C _____ RTP	
Inventor B		C _____ RTP

Problem #3

Inventor A	C _____ RTP	
Inventor B		C _____ RTP

Problem #4

Inventor A	C _____ RTP _____ F	
Inventor B		F

Must Inventor A show diligence?

Problem #5

Inventor A	C _____ RTP	
Inventor B		C _____ RTP

Must Inventor A show diligence?

Problem #6

[illegible]

Problem #7

Inventor A $C_{(\text{original})}$ ——— invention abandoned ——— $C_{(\text{renewed})}$ ——— RTP ——— F

Inventor B C ——— RTP ——— F

In the following problems, the letter **D** marks the time when the inventor began to act *diligently* to reduce the invention to practice.

Problem #8

Inventor A C D _____ RTP _____ F
Inventor B F

Problem #9

Inventor A C D _____ RTP _____ F
Inventor B F

Problem #10

Inventor A C D _____ RTP _____ F
Inventor B C _____ F

Problem #11

Inventor A C D _____ RTP _____ F
Inventor B C D _____ F

Problem #12

Inventor A C D _____ F
Inventor B C D _____ F
Inventor C C _____ F

Consider three possible priority disputes: (1) A vs. B, (2) B vs. C, and (3) A vs. C. Overall, who do you think should prevail?

**Adam B. Jaffe & Josh Lerner, *Innovation and Its Discontents:
How Our Broken Patent System is Endangering Innovation and Progress,
and What to Do About It* 163–68 (2004) (excerpt).**

The difficulties that federal officials have faced in reforming the patent system are well illustrated by the efforts to change U.S. policy so that a patent goes to the “first to file” a patent application on a given invention, rather than to the “first to invent.” While this policy reform is not directly linked to the patent quality and patent litigation problems that we have highlighted, it is nonetheless interesting, because the case for changing U.S. policy seems so straightforward. Every other nation in the world awards patents to the applicant that is the “first-to-file” for patent protection. The primary reason for the preference for “first-to-file” elsewhere is straightforward: while determining the party who is first to conceptualize an idea is often exceedingly difficult, it is easy to determine the filing date.

The United States, however, has clung to the first-to-invent system. In the United States, a patent is awarded to the party who can demonstrate (through laboratory notebooks and other evidence) that he was the initial discoverer of a new invention, even if he did not file for patent protection until after others did (within certain limits). The American patent system turned its back on the way the rest of the world operates in the very earliest days of the nation’s history. The reason for this divergence from the rest of the world is shrouded with mystery today. . . . Whatever its origins, and despite the arguments for shifting away from “first-to-invent,” this system has persisted for more than two centuries.

Over the years, a number of blue-ribbon commissions examining the workings of the U.S. patent system have recommended switching to a “first-to-file” system. For instance, this was the first and central recommendation of President Johnson’s Commission on the Patent System. As they noted, replacing the first-to-invent system would have multiple advantages: “A first to file system will: encourage prompt disclosure of newly discovered technology; substitute for the delays and expense of interference proceedings a fair and inexpensive means by which an inventor can establish priority; and bring U.S. practice into harmony with that prevailing in almost all industrial nations.”

Much of the discussion of the Commission report (and in the supporting measures) highlighted the weakness of the system for resolving priority disputes in the “first-to-file” world. Unlike relying on filing dates—which can be objectively and unambiguously determined—the process of determining which party is the first to invent a discovery is far from trivial. Disputes over priority of invention are resolved through an “interference” proceeding before the PTO’s Board of Patent Appeals and Interferences. In contested cases, the Board holds a hearing to determine which inventor first made the discovery.

The interference process has been characterized as “an archaic procedure, replete with traps for the unwary.” These procedures operate under their own rules, which are sufficiently complex that even the Court of Appeals for the Federal Circuit has misunderstood the process. Deadlines and rules are characterized by “very strict and unforgiving enforcement,” which means that hiring one of the relatively few (but very expensive) lawyers specializing in this area is truly essential. Moreover, the process can be quite protracted. For instance, the party with the first-issued patent in the dispute can impose considerable delays by asking that its patent be re-issued before the proceeding begins, a process that can take many months. Reflecting these difficulties, in only about sixty cases annually has the party that was second-to-file been determined to have been the first-to-invent. Thus, the United States persists in this complex, costly, and idiosyncratic system in order to reverse the priority of 0.03 percent of the patent applications filed each year. . . .

By way of contrast, under a “first-to-file” system, disputes could be much more expeditiously resolved: the filing date can be readily determined by the patent office. Moreover, a “first-to-file” system would encourage inventors to file and hence disclose inventions in a timely manner. Despite these powerful arguments and the Johnson Administration’s backing, the legislation embodying the 1966 Commission’s recommendations languished in Congress.

The next major effort to fix this mess began in 1992, when the Secretary of Commerce’s Ad-

visory Commission on Patent Law Reform made the abolition of the first-to-invent system its top priority. The report highlighted that the persistence of this feature of the U.S. system was a major barrier to the harmonization of the patent systems around the globe. In particular, in 1985, the World Intellectual Property Organization (also known as WIPO, this Geneva-based international organization is responsible for administering the Paris Convention and subsequent treaties), began an effort to hammer out a draft treaty that set up a model patent law that, it was hoped, all nations could accept and adopt.

The 1992 Commission highlighted the fact that the United States had much to gain from the harmonization of the global patent system, since this nation is a net “exporter” of intellectual property. Worldwide harmonization would generally enhance the value of patents worldwide; as the world’s greatest producer of invention, we would be the greatest beneficiary of such enhancement. For instance, the draft WIPO accord called for the worldwide adoption of the “doctrine of equivalents,” which allows a patent-holder to claim a broader swath of technology than that in his original award. This provision has been a longstanding part of American patent doctrine, but had been only rarely adopted elsewhere. The Commission noted that it was unlikely that other nations would agree to change aspects of their systems in ways desirable to us, unless the United States were willing to abandon an archaic practice in which it stands alone among the nations of the world.

Legislation embodying the 1992 Commission recommendation on changing first-to-file—like that motivated by the 1966 report before it—soon encountered intense opposition. A frequently invoked argument for the first-to-invent system is that this provides protection for—you guessed it—small inventors, who supposedly take longer to translate a discovery into a completed patent application. If small inventors take longer to prepare patent applications, then they might lose out to better-financed rivals in a first-to-file world. Advocates have gone so far as to describe proposals to abolish the first-to-invent criterion—though without presenting evidence to support their claim other than a few well-worn anecdotes—as “the death knell of independent inventors.”

This argument appears to be specious for several reasons:

1. There are already strong pressures to file first. Economically important discoveries are typically the subject of patent filings in a number of countries: only relatively unimportant discoveries will be filed in the United States alone. Since virtually all nations outside the United States employ a first-to-file system, there is already an enormous pressure for inventors of all sizes to file quickly. Moreover, as noted above, in the vast majority of disputed cases under the U.S. system, the party who filed first still wins. At least in large part, this pattern reflects the features of the interference system that makes it easier for the party who is first to file to prove his case.

2. Another recent reform of the U.S. system, adopted in the wake of the 1992 Commission report (and other contemporaneous reform efforts), created new provisional patent applications, which are simpler to file than full-fledged applications. Thus, obtaining a priority date is no longer a matter of completing a complex filing. As long as the applicant completes a full patent application by the first-year anniversary of the preliminary filing, he preserves the original filing date.

3. Furthermore, small entities, in fact, are frequently the loser in interference proceedings under the current system. In many cases, they lack the resources or the management wherewithal to keep the kind of detailed records that are needed to prove that they were the original inventor. Moreover, the cost of this litigation—which can run into the hundreds of thousands of dollars—is frequently prohibitive to small private firms without “deep pockets” or ready access to the capital markets.

4. Finally, it is questionable how much weight should be assigned to the arguments of independent inventors, even if it were true that they benefit from the current system. As Bruce Lehman, PTO Commissioner at the time, noted, many of the most vocal independent inventors opposing the adoption of first-to-file are “week-end hobbyists ... [rather than representatives of] knowledge-based industries.”

Once again, a legislative effort to adopt the recommendations fizzled: in January 1994, Commerce Secretary Ron Brown announced the ad-

ministration would abandon the effort to convert the American system to first-to-file. Not surprisingly, this decision to renege on the part of the Clinton Administration led to an abandonment of the WIPO treaty process. Worldwide patent harmonization remains a distant and elusive goal of U.S. policy.

While the voices raised in protest over the reform initiative in the 1990s—as those opposing earlier reform efforts—were led by advocates for small inventors, it is difficult not to conclude that the greatest beneficiary from the first-to-invent system is not small inventors, or any subset of inventors. It is rather the small set of patent attorneys that specializes in interferences. Perhaps it is not surprising that the recommenda-

tion that appears to have been most influential in the Clinton Administration’s decision to abandon this goal was a negative recommendation by the American Bar Association’s House of Delegates. In fact, some first-to-invent supporters have gone so far as to drop the thin cloak of language about “fairness” that surrounds their arguments, and acknowledged the substantial financial stake that the patent bar has in the current system. While the overall expenditures on interferences per active patent lawyer may be modest, a few hundred attorneys handle the bulk of the interferences. These individuals have a considerable stake in the survival of the current system, and will fight vigorously to preserve it.



US005830035A

United States Patent [19]
Budreck

[11] **Patent Number:** **5,830,035**
[45] **Date of Patent:** **Nov. 3, 1998**

[54] **TOE PUPPET**

[76] Inventor: **David J. Budreck**, 109 E. Woodruff
St., Port Washington, Wis. 53074

[21] Appl. No.: **794,294**

[22] Filed: **Feb. 3, 1997**

Related U.S. Application Data

[63] Continuation of Ser. No. 553,885, Nov. 6, 1995, abandoned.

[51] **Int. Cl.**⁶ **A63H 03/14**

[52] **U.S. Cl.** **446/366; 446/26; 446/327**

[58] **Field of Search** 446/26, 327, 328,
446/329, 486, 359, 365, 366, 367

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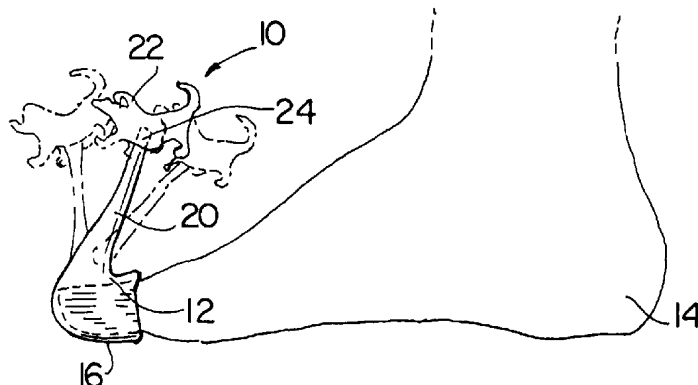
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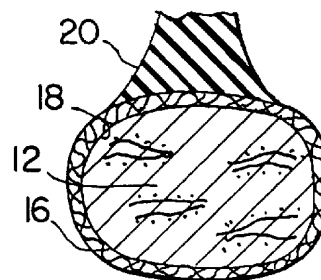
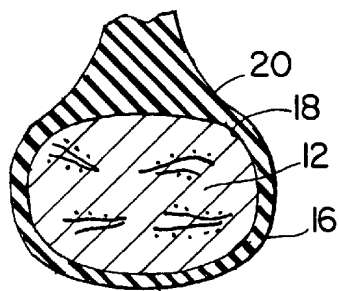
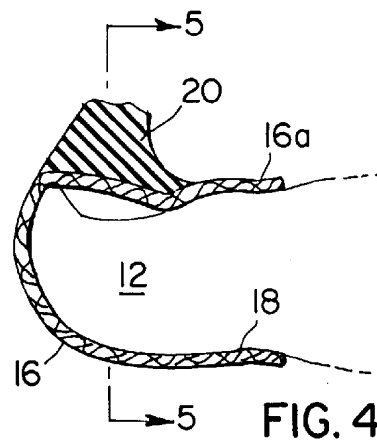
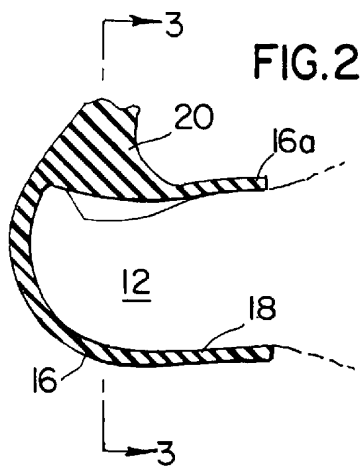
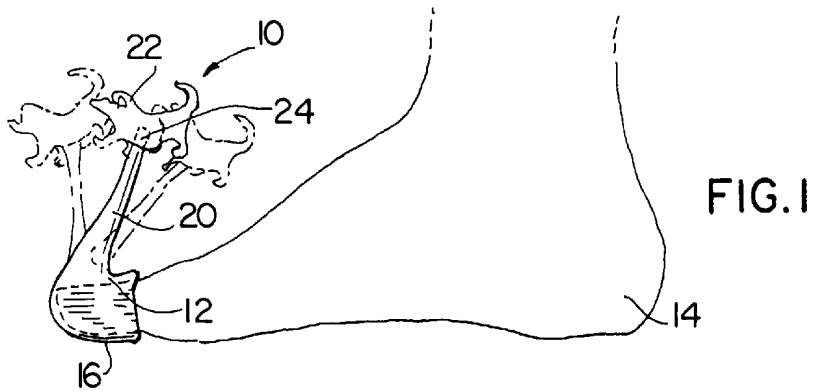
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ABSTRACT

A puppet is adapted to be mounted on a single human digit for providing animated motion of a figurine responsive to movement of the single human digit. The puppet comprises a hollow, elastic cap having an interior wall defining a cavity into which the single human digit is snugly received. The cap includes a resilient neck portion for supporting the figurine at a distance spaced from the single human digit such that movement of the single human digit causes the neck portion and the figurine to oscillate to and fro under the influence of the weight of the figurine.

11 Claims, 1 Drawing Sheet





1 TOE PUPPET

CROSS REFERENCE TO RELATED APPLICATION

This application is a continuation of application Ser. No. 08/553,885, filed Nov. 6, 1995 now abandoned.

FIELD OF THE INVENTION

This invention relates broadly to puppets, and more particularly, pertains to a puppet adapted to be mounted on a single digit of a human appendage, such as a toe on one's foot, for providing animated motion of a figurine responsive to flexure or similar movement of the single digit.

BACKGROUND OF THE INVENTION

Although the prior art is replete with puppets providing animated movement through the use of two or more digits or fingers, there has been limited development in creating single digit-mounted puppets which provide a three dimensional, amusing effect. One example of a finger puppet worn on a single digit is disclosed in U.S. Pat. No. 3,911,618 issued Oct. 14, 1975 to Gerst. In this patent, correspondingly different facial expressions can be generated by differential movement of the finger joint. That is, when digit flexure occurs at one or more joints, animated movement of a nose, nostrils, and upper lip movement in combination with jaw movement produces a comic facial animation.

It remains desirable to provide a simplified, single digit-mounted puppet in which a minimal amount of flexure will produce a fully animated motion such that a character or figurine moves in a predominantly backward and forward path. It is also desirable to provide a single digit-mounted puppet which may be snugly worn on one's finger or toe. It is further desirable to provide a single digit mounting structure for a puppet which permits adjustability and interchangeability of various characters or figurines.

SUMMARY OF THE INVENTION

The present invention advantageously provides a novelty or amusement device in the form of a toe or finger-mounted puppet which provides a relatively high degree of comic animation in response to a nominal amount of toe or finger flexure. The puppet depends upon a unique, yet simple mounting structure which mimics the advance and retreat of a chosen character or figurine.

In one aspect of the invention, a puppet is adapted to be mounted on a single human digit for providing animated motion of a figurine responsive to movement of the single human digit. The puppet comprises a hollow, elastic cap having an interior wall defining a cavity into which the single human digit is snugly received. The cap includes a resilient neck portion for supporting the figurine at a distance spaced from the single human digit such that movement of the single human digit causes the neck portion and the figurine to oscillate to and fro. In the preferred embodiment, the neck portion is constructed and arranged to be one-piece with the elastic cap. In an alternative embodiment, the neck portion is a separate element constructed and arranged to be attached to the elastic cap.

In another aspect of the invention, a puppet is adapted to be mounted on a single digit of a human appendage for providing animated motion of a figurine responsive to flexure of the single digit. The puppet comprises a hollow, elastic cap having an interior wall defining a cavity into which the single digit is snugly received. The cap includes

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a resilient, solid, elongated neck portion extending upwardly and rearwardly with respect to the single digit for supporting the entirety of the figurine at a distance spaced from the single digit such that flexure of the single digit causes the figurine to travel in a predominantly forward and backward path relative to the human appendage.

In yet another aspect of the invention, a toe puppet is adapted to be mounted on the large toe for providing animated motion of a character responsive to wiggling movement of the large toe. The puppet comprises a hollow, elastic cap having an interior wall defining a cavity into which the large toe is snugly received. The cap includes a resilient, solid, elongated neck portion extending upwardly and rearwardly with respect to one's foot for supporting the character at a distance spaced from the large toe such that, due to the length of the neck portion and the weight of the character, wiggling movement of the large toe causes the character to traverse back and forth. The character is friction fit on the neck portion to allow adjustability and interchangeability of the character on the neck portion.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will become better understood by reference to the following detailed description of the preferred exemplary embodiment when read in conjunction with the appended drawing wherein like numerals denote like elements; and

FIG. 1 is a perspective view of a human foot showing a mounting digit in the form of a large toe provided with the puppet embodying the present invention;

FIG. 2 is an enlarged, fragmentary sectional view illustrating the elastic cap integrally formed with the neck portion embodying the present invention;

FIG. 3 is a sectional view taken on line 3—3 of FIG. 2;

FIG. 4 is an enlarged, fragmentary sectional view illustrating an alternative embodiment of the invention illustrating the elastic cap bonded or otherwise affixed to the neck portion; and

FIG. 5 is a sectional view taken on line 5—5 of FIG. 4.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to FIG. 1, there is shown a puppet generally identified by the reference numeral 10 as mounted on a single digit of a human appendage, in this case, the large toe 12 of a person's foot 14.

The puppet 10 comprises a hollow, elastic cap 16 preferably formed of soft rubber or the like. The cap 16 has an interior wall 18 defining a cavity into which the large toe 12 is snugly received. The cap 16 includes a resilient, solid, elongated neck portion 20 constructed preferably of rubber, which extends from an upper portion 16a of the cap 16 upwardly and rearwardly with respect to the large toe 12. The neck portion 20 functions as a mounting structure to support a figurine or character 22 at a predetermined distance spaced from the large toe 12. In the preferred embodiment shown in FIGS. 2 and 3, the cap 16 is molded or otherwise formed in one piece with the neck portion 20. In an alternative embodiment shown in FIGS. 4 and 5, the neck portion 20 is a separate element which is bonded or similarly attached to the elastic cap 16 which is formed of an elastic fabric material such as spandex or the like. In each embodiment, the neck portion 20 has a free end 24 which is typically friction fit into the figurine or character 22 in such a manner that an interchangeable figurine or character 22 may be readily attached and detached from the neck portion 20.

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Due to the length and resiliency of the neck portion and the weight of the figurine or character **22**, minimal flexure or wiggling movement of the large toe **12** fitted with the puppet **10** will cause the figurine or character **22** to traverse to and fro or oscillate in a predominantly backward and forward path which mimics the advance and retreat of the figurine or character **22** and provides an amusing effect. However, depending on the dexterity and control of one's single digit, one may also move or oscillate the figurine or character **22** to and fro in a limited lateral or circular motion.

Neck portion **20** is constructed such that it provides a relatively gradual and constant taper in its depth between upper wall **16a** and free end **24**. Neck portion **20** has a relatively great reduction in its width at its base adjacent upper wall **16a**, as shown in FIGS. **3** and **5**, and thereabove tapers gradually and constantly toward free end **24**. This provides a reduction in the overall cross-section of neck portion **20** toward free end **24**. During movement of the user's toe **12**, figurine **22** experiences compound back and forth movement under the influence of its own weight movement caused by flexure of neck portion **20** due to its tapered cross-section, and movement of neck portion **20** as a whole relative to cap **16**.

It should be appreciated that by virtue of the friction fit mounting of the figurine or character **22** on the neck portion **20**, the figurine or character **22** may be adjustably positioned upwardly or downwardly as well as from side-to-side depending on the male and female design of the figurine or character **22** and the free end **24** of the neck portion **20**. It should also be understood that other figurines or characters **22** may be mounted on other single digits of the hand or foot to provide the desired effect.

While the invention has been described with reference to a preferred embodiment, those skilled in the art will appreciate that certain substitutions, alterations and omissions may be made without departing from the spirit thereof. For example, while the puppet **10** of the present invention is shown mounted on the large toe of a human foot, the elastic cap of the puppet is also conformable to the shape of a finger on one's hand. Accordingly, the foregoing description is meant to be exemplary only, and should not be deemed limitative on the scope of the invention set forth with following claims.

I claim:

1. A puppet adapted to be mounted on a human digit for providing animated motion of a figurine responsive to movement of the human digit, the puppet comprising:

- a hollow, elastic cap having an interior wall defining an axially-extending cavity for snugly receiving said human digit; and
- a resilient neck having a proximal end connected to said cap and a distal end secured to said figurine, said neck extending along an axis transverse to the cavity axis wherein the neck is tapered so as to decrease in transverse dimension in a direction from said proximal end toward said distal end, and wherein said figurine is mounted to the distal end of said neck and is spaced from said cap, said neck and said figurine being oscillatable to and fro in response to movement of said human digit.

2. The puppet of claim **1**, wherein said figurine is removable from said neck and interchangeable with another figurine.

3. The puppet of claim **1**, wherein said neck is constructed and arranged to be one-piece with said elastic cap.

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4. The puppet of claim **1**, wherein said neck is a separate element constructed and arranged to be attached to said elastic cap.

5. The puppet of claim **1**, wherein said neck is a solid member extending from an upper portion of said elastic cap.

6. A puppet adapted to be mounted on a digit of a human appendage for providing animated motion of a figurine responsive to flexure of the digit, the puppet comprising:

- a hollow, elastic cap having an interior wall defining an axially-extending cavity for snugly receiving said digit of said human appendage; and
- a resilient, solid, elongated neck extending upwardly with respect to said cap along an axis transverse to the cavity axis, wherein the figurine is mounted to the neck and the entirety of said figurine is supported at a distance relative to the cap, said figurine being movable in a predominantly forward and backward path relative to the human appendage in response to flexure of said digit.

7. The puppet of claim **8**, wherein said figurine is adjustable, and attachable and detachable from said neck by means of a friction fit.

8. The puppet of claim **6**, wherein said elastic cap is constructed of a material enabling the cap to be conformable to the shape of the digit.

9. A toe puppet adapted to be mounted on a person's toe for providing animated motion of a character responsive to wiggling movement of the toe, the puppet comprising:

- a hollow, elastic cap having wall and an end wall defining an open-ended axially-extending cavity for snugly receiving said toe, said cap including a resilient, elongated tapered neck portion extending upwardly with respect to the side wall along an axis transverse to the axis of the cavity and supporting said character at a distance spaced upwardly from said cap, said character being movable back and forth in response to movement of said cap due to the taper and length of said neck portion and the weight of said character, and said character being friction fit on said neck portion to allow adjustability and interchangeability of said character on said neck portion.

10. A puppet, comprising:

- a cap having a side wall and an end wall defining a passage for receiving a digit of a human appendage, wherein the cap defines spaced first and second ends and wherein the passage extends inwardly from the first end along a first longitudinal axis;
- a resilient neck connected to the cap and extending therefrom along a second longitudinal axis transverse to the first longitudinal axis, wherein the neck is connected to the cap at a location spaced from the first end of the cap such that a portion of the side wall is disposed between the neck and the first end of the cap; and
- a figure secured to the neck, wherein movement of the cap is transferred through the neck to the figure so as to move the figure in response to movement of the digit.

11. The puppet of claim **10**, wherein the neck defines a proximal end adjacent the cap and a distal end adjacent the figure, and wherein the neck tapers in transverse dimension from the proximal end toward the distal end.

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**UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION**

PATENT NO. : 5,830,035
DATED : November 3, 1998
INVENTOR(S) : DAVID J. BUDRECK

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Claim 7, column 4, line 21, delete "8" and substitute therefor -- 6 --; Claim 9, column 4, line 31, after "having" insert -- a side --.

Signed and Sealed this
Twelfth Day of September, 2000

Attest:



Q. TODD DICKINSON

Attesting Officer

Director of Patents and Trademarks

**Markman v. Westview Instruments, Inc.,
517 U.S. 370 (1996) (excerpt).**

JUSTICE SOUTER delivered the opinion of the Court.

The question here is whether the interpretation of a so-called patent claim, the portion of the patent document that defines the scope of the patentee's rights, is a matter of law reserved entirely for the court, or subject to a Seventh Amendment guarantee that a jury will determine the meaning of any disputed term of art about which expert testimony is offered. We hold that the construction of a patent, including terms of art within its claim, is exclusively within the province of the court.

I

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Petitioner in this infringement suit, Markman, owns United States Reissue Patent No. 33,054 for his "Inventory Control and Reporting System for Drycleaning Stores." The patent describes a system that can monitor and report the status, location, and movement of clothing in a dry-cleaning establishment. The Markman system consists of a keyboard and data processor to generate written records for each transaction, including a bar code readable by optical detectors operated by employees, who log the progress of clothing through the dry-cleaning process. Respondent Westview's product also includes a keyboard and processor, and it lists charges for the dry-cleaning services on bar-coded tickets that can be read by portable optical detectors.

Markman brought an infringement suit against Westview and Althon Enterprises, an operator of dry-cleaning establishments using Westview's products (collectively, Westview). Westview responded that Markman's patent is not infringed by its system because the latter functions merely to record an inventory of receivables by tracking invoices and transaction totals, rather than to record and track an inventory of articles of clothing. Part of the dispute hinged upon the meaning of the word "inventory," a term found in Markman's independent claim 1, which states that Markman's product can "maintain an inventory total" and "detect and localize spurious additions to inventory." The case was tried before a jury, which heard, among others, a witness produced by Markman who testified

about the meaning of the claim language.

After the jury compared the patent to Westview's device, it found an infringement of Markman's independent claim 1 and dependent claim 10. The District Court nevertheless granted Westview's deferred motion for judgment as a matter of law, one of its reasons being that the term "inventory" in Markman's patent encompasses "both cash inventory and the actual physical inventory of articles of clothing." 772 F. Supp. 1535, 1537–1538 (E.D. Pa. 1991). Under the trial court's construction of the patent, the production, sale, or use of a tracking system for dry cleaners would not infringe Markman's patent unless the product was capable of tracking articles of clothing throughout the cleaning process and generating reports about their status and location. Since Westview's system cannot do these things, the District Court directed a verdict on the ground that Westview's device does not have the "means to maintain an inventory total" and thus cannot "detect and localize spurious additions to inventory as well as spurious deletions therefrom," as required by claim 1. *Id.*, at 1537.

Markman appealed, arguing it was error for the District Court to substitute its construction of the disputed claim term "inventory" for the construction the jury had presumably given it. The United States Court of Appeals for the Federal Circuit affirmed, holding the interpretation of claim terms to be the exclusive province of the court and the Seventh Amendment to be consistent with that conclusion. 52 F.3d 967 (1995). Markman sought our review on each point, and we granted certiorari. 515 U.S. 1192 (1995). We now affirm.

II

The Seventh Amendment provides that "[i]n Suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved..." U.S. Const., Amdt. 7. Since Justice Story's day, *United States v. Wonson*, 28 F. Cas. 745, 750 (No. 16,750) (C.C. Mass. 1812), we have understood that "[t]he right of trial by jury thus preserved is the right which existed under the English common law when the Amendment was adopted." *Baltimore & Carolina Line, Inc. v. Redman*, 295 U.S. 654, 657

(1935). In keeping with our long-standing adherence to this “historical test,” Wolfram, *The Constitutional History of the Seventh Amendment*, 57 Minn. L. Rev. 639, 640–643 (1973), we ask, first, whether we are dealing with a cause of action that either was tried at law at the time of the Founding or is at least analogous to one that was, see, e.g., *Tull v. United States*, 481 U.S. 412, 417 (1987). If the action in question belongs in the law category, we then ask whether the particular trial decision must fall to the jury in order to preserve the substance of the common-law right as it existed in 1791.

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C

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The closest 18th-century analogue of modern claim construction seems, then, to have been the construction of specifications, and as to that function the mere smattering of patent cases that we have from this period shows no established jury practice sufficient to support an argument by analogy that today’s construction of a claim should be a guaranteed jury issue. Few of the case reports even touch upon the proper interpretation of disputed terms in the specifications at issue, see, e.g., *Bramah v. Hardcastle*, 1 Carp. P.C. 168 (K.B. 1789); *King v. Else*, 1 Carp. P.C. 103, Dav. Pat. Cas., 144 (K.B. 1785); *Dollond’s Case*, 1 Carp. P.C. 28 (C.P. 1758); *Administrators of Calthorp v. Waymans*, 3 Keb. 710, 84 Eng. Rep. 966 (K.B. 1676), and none demonstrates that the definition of such a term was determined by the jury. This absence of an established practice should not surprise us, given the primitive state of jury patent practice at the end of the 18th century, when juries were still new to the field. Although by 1791 more than a century had passed since the enactment of the Statute of Monopolies, which provided that the validity of any monopoly should be determined in accordance with the common law, patent litigation had remained within the jurisdiction of the Privy Council until 1752 and hence without the option of a

jury trial. E. Walterscheid, *Early Evolution of the United States Patent Law: Antecedents (Part 3)*, 77 J. Pat. & Tm. Off. Soc. 771, 771–776 (1995). . . .

Markman seeks to supply what the early case reports lack in so many words by relying on decisions like *Turner v. Winter*, 1 T.R. 602, 99 Eng. Rep. 1274 (K.B. 1787), and *Arkwright v. Nightingale*, Dav. Pat. Cas. 37 (C.P. 1785), to argue that the 18th-century juries must have acted as definers of patent terms just to reach the verdicts we know they rendered in patent cases turning on enablement or novelty. But the conclusion simply does not follow. There is no more reason to infer that juries supplied plenary interpretation of written instruments in patent litigation than in other cases implicating the meaning of documentary terms, and we do know that in other kinds of cases during this period judges, not juries, ordinarily construed written documents.⁷ The probability that the judges were doing the same thing in the patent litigation of the time is confirmed by the fact that as soon as the English reports did begin to describe the construction of patent documents, they show the judges construing the terms of the specifications. See *Bovill v. Moore*, Dav. Pat. Cas. 361, 399, 404 (C.P. 1816) (judge submits question of novelty to the jury only after explaining some of the language and “stat[ing] in what terms the specification runs”); cf. *Russell v. Cowley & Dixon*, Webs. Pat. Cas. 457, 467–470 (Exch. 1834) (construing the terms of the specification in reviewing a verdict); *Haworth v. Hardcastle*, Webs. Pat. Cas. 480, 484–485 (1834) (same). This evidence is in fact buttressed by cases from this Court; when they first reveal actual practice, the practice revealed is of the judge construing the patent. See, e.g., *Winans v. New York & Erie R. Co.*, 21 How. 88, 100 (1859); *Winans v. Denmead*, 15 How. 330, 338 (1854); *Hogg v. Emerson*, 6 How. 437, 484 (1848); cf. *Parker v. Hulme*, 18 F. Cas. 1138 (No. 10,740) (C.C. E.D. Pa. 1849). These indications of our patent practice are the more impressive for

⁷See, e.g., Devlin, *Jury Trial of Complex Cases: English Practice at the Time of the Seventh Amendment*, 80 Colum. L. Rev. 43, 75 (1980); Weiner, *The Civil Jury Trial and the Law-Fact Distinction*, 54 Calif. L. Rev. 1867, 1932 (1966). For example, one historian observed that it was generally the practice of judges in the late 18th century “to keep the construction of writings out of the jury’s hands and reserve it for themselves,” a “safeguard” designed to prevent a jury from “constru[ing] or refin[ing] it at pleasure.” 9 J. Wigmore, *Evidence* § 2461, p. 194 (J. Chadbourn rev. ed. 1981) (emphasis in original; internal quotation marks omitted). The absence of any established practice supporting Markman’s view is also shown by the disagreement between Justices Willis and Buller, reported in *Macbeath v. Haldimand*, 1 T.R. 173, 180–182, 99 Eng. Rep. 1036, 1040–1041 (K.B. 1786), as to whether juries could ever construe written documents when their meaning was disputed.

being all of a piece with what we know about the analogous contemporary practice of interpreting terms within a land patent, where it fell to the judge, not the jury, to construe the words.⁸

* * * *

III

Since evidence of common law practice at the time of the Framing does not entail application of the Seventh Amendment's jury guarantee to the construction of the claim document, we must look elsewhere to characterize this determination of meaning in order to allocate it as between court or jury. We accordingly consult existing precedent and consider both the relative interpretive skills of judges and juries and the statutory policies that ought to be furthered by the allocation.

A

The two elements of a simple patent case, construing the patent and determining whether infringement occurred, were characterized by the former patent practitioner, Justice Curtis. "The first is a question of law, to be determined by the court, construing the letters-patent, and the description of the invention and specification of claim annexed to them. The second is a question of fact, to be submitted to a jury." *Winans v. Denmead*, 15 How., at 338; see *Winans v. New York & Erie R. Co.*, 21 How., at 100; *Hogg v. Emerson*, *supra*, at 484; cf. *Parker v. Hulme*, *supra*, at 1140.

* * * *

B

Where history and precedent provide no clear answers, functional considerations also play their part in the choice between judge and jury to define terms of art. We said in *Miller v. Fenton*, 474 U.S. 104, 114 (1985), that when an issue "falls somewhere between a pristine legal standard and a simple historical fact, the fact/law distinction at times has turned on a determination that, as a matter of the sound administration of justice, one judicial actor is better posi-

tioned than another to decide the issue in question." So it turns out here, for judges, not juries, are the better suited to find the acquired meaning of patent terms.

The construction of written instruments is one of those things that judges often do and are likely to do better than jurors unburdened by training in exegesis. Patent construction in particular "is a special occupation, requiring, like all others, special training and practice. The judge, from his training and discipline, is more likely to give a proper interpretation to such instruments than a jury; and he is, therefore, more likely to be right, in performing such a duty, than a jury can be expected to be." *Parker v. Hulme*, 18 F. Cas., at 1140. Such was the understanding nearly a century and a half ago, and there is no reason to weigh the respective strengths of judge and jury differently in relation to the modern claim; quite the contrary, for "the claims of patents have become highly technical in many respects as the result of special doctrines relating to the proper form and scope of claims that have been developed by the courts and the Patent Office." Woodward, *Definiteness and Particularity in Patent Claims*, 46 Mich. L. Rev. 755, 765 (1948).

Markman would trump these considerations with his argument that a jury should decide a question of meaning peculiar to a trade or profession simply because the question is a subject of testimony requiring credibility determinations, which are the jury's forte. It is, of course, true that credibility judgments have to be made about the experts who testify in patent cases, and in theory there could be a case in which a simple credibility judgment would suffice to choose between experts whose testimony was equally consistent with a patent's internal logic. But our own experience with document construction leaves us doubtful that trial courts will run into many cases like that. In the main, we expect, any credibility determinations will be subsumed within the necessarily sophisticated analysis of the whole document, required by the

⁸As we noted in *Brown v. Huger*, 21 How. 305, 318 (1859):

"With regard to the second part of this objection, that which claims for the jury the construction of the patent, we remark that the patent itself must be taken as evidence of its meaning; that, like other written instruments, it must be interpreted as a whole . . . and the legal deductions drawn therefrom must be conformable with the scope and purpose of the entire document. This construction and these deductions we hold to be within the exclusive province of the court."

standard construction rule that a term can be defined only in a way that comports with the instrument as a whole. See *Bates v. Coe*, 98 U.S. 31, 38 (1878); 6 Lipscomb § 21:40, at 393; 2 Robinson, *supra*, § 734, at 484; Woodward, *supra*, at 765; cf. *U.S. Industrial Chemicals, Inc. v. Carbide & Carbon Chemicals Co.*, 315 U.S. 668, 678 (1942); cf. 6 Lipscomb § 21:40, at 393. Thus, in these cases a jury's capabilities to evaluate demeanor, cf. *Miller, supra*, at 114, 117, to sense the "mainsprings of human conduct," *Commissioner v. Duberstein*, 363 U.S. 278, 289 (1960), or to reflect community standards, *United States v. McConney*, 728 F.2d 1195, 1204 (CA9 1984) (*en banc*), are much less significant than a trained ability to evaluate the testimony in relation to the overall structure of the patent. The decisionmaker vested with the task of construing the patent is in the better position to ascertain whether an expert's proposed definition fully comports with the specification and claims and so will preserve the patent's internal coherence. We accordingly think there is sufficient reason to treat construction of terms of art like many other responsibilities that we cede to a judge in the normal course of trial, notwithstanding its evidentiary underpinnings.

C

Finally, we see the importance of uniformity in the treatment of a given patent as an independent reason to allocate all issues of construction to the court. As we noted in *General Elec. Co. v. Wabash Appliance Corp.*, 304 U.S. 364, 369 (1938), "[t]he limits of a patent must be known for the protection of the patentee, the encouragement of the inventive genius of others and the assurance that the subject of the patent

will be dedicated ultimately to the public." Otherwise, a "zone of uncertainty which enterprise and experimentation may enter only at the risk of infringement claims would discourage invention only a little less than unequivocal foreclosure of the field," *United Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 236 (1942), and "[t]he public [would] be deprived of rights supposed to belong to it, without being clearly told what it is that limits these rights." *Merrill v. Yeomans*, 94 U.S. 568, 573 (1877). It was just for the sake of such desirable uniformity that Congress created the Court of Appeals for the Federal Circuit as an exclusive appellate courts for patent cases, H.R. Rep. No. 97-312, pp. 20-23 (1981), observing that increased uniformity would "strengthen the United States patent system in such a way as to foster technological growth and industrial innovation." *Id.*, at 20.

Uniformity would, however, be ill served by submitting issues of document construction to juries. Making them jury issues would not, to be sure, necessarily leave evidentiary questions of meaning wide open in every new court in which a patent might be litigated, for principles of issue preclusion would ordinarily foster uniformity. Cf. *Blonder-Tongue Laboratories, Inc. v. University of Ill. Foundation*, 402 U.S. 313 (1971). But whereas issue preclusion could not be asserted against new and independent infringement defendants even within a given jurisdiction, treating interpretive issues as purely legal will promote (though it will not guarantee) intrajurisdictional certainty through the application of stare decisis on those questions not yet subject to interjurisdictional uniformity under the authority of the single appeals court.

* * * * *

**Cybor Corp. v. FAS Technologies, Inc.,
138 F.3d 1448 (Fed. Cir. 1998) (en banc).**

ARCHER, Senior Circuit Judge.

Cybor Corporation (Cybor) appeals from the judgment of the United States District Court for the Northern District of California, 93-CV-20712 (Oct. 31, 1995), that Cybor pump, Model 5226, infringes the claims of U.S. Patent No. 5,167,837 (the '837 patent), currently owned by FASStar, Ltd. and exclusively licensed to FAS Technologies, Inc. (collectively FAS). FAS cross-appeals the judgment as to the damages calculation, the denial of enhanced damages, and the refusal to declare the case exceptional and to award attorney fees. A panel heard oral argument on January 29, 1997. Before its opinion issued, however, this court *sua sponte* on September 5, 1997 ordered that this case be decided in banc.

We affirm the district court's judgment in its entirety. In so doing, we conclude that the Supreme Court's unanimous affirmance in *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996) (*Markman II*), of our in banc judgment in that case fully supports our conclusion that claim construction, as a purely legal issue, is subject to *de novo* review on appeal. See *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (in banc) (*Markman I*).

Background

* * * * *

On September 23, 1993, Cybor sued FAS for a declaratory judgment of non-infringement, invalidity, and unenforceability of the '837 patent. FAS counterclaimed for infringement of all twenty claims and sought damages and injunctive relief. The case proceeded to trial, and the jury found by special verdict that the claims were not invalid, that Cybor literally infringed all the claims except 11, 12, and 16, and that these three remaining claims were infringed under the doctrine of equivalents. The jury determined the infringement to be willful for all claims except claim 16.

After the jury rendered its liability verdict, the district court denied Cybor's renewed motion for Judgment as a Matter of Law (JMOL) that it did not infringe the '837 patent, and also denied FAS's motion for an exceptional case award of attorney fees pursuant to 35 U.S.C. § 285 (1994). Prior to the entry of final judgment, however,

this court decided *Markman I*, which held that claim construction is a matter of law to be determined exclusively by the judge. Cybor then filed a motion for reconsideration of its JMOL motion in light of that decision, but the district court denied reconsideration. After further proceedings on damages, the district court on October 11, 1995, filed its Findings of Fact and Conclusions of Law permanently enjoining Cybor from making, using, or selling its system, awarding FAS \$130,912 in damages, and denying FAS's motion for enhanced damages under 35 U.S.C. § 284 (1994). The district court entered its final judgment on October 31, 1995, and these appeals followed.

Discussion

I.

* * * * *

An infringement analysis involves two steps. First, the court determines the scope and meaning of the patent claims asserted, see *Markman II*, 517 U.S. at 371-73, and then the properly construed claims are compared to the allegedly infringing device, see *Read Corp.*, 970 F.2d at 821. Although the law is clear that the judge, and not the jury, is to construe the claims, this case presents the issue of the proper role of this court in reviewing the district court's claim construction.

In *Markman I*, we held that, because claim construction is purely a matter of law, this court reviews the district court's claim construction *de novo* on appeal. See *Markman I*, 52 F.3d at 979, 981. In reaching this conclusion, we recognized that

[t]hrough this process of construing claims by, among other things, using certain extrinsic evidence that the court finds helpful and rejecting other evidence as unhelpful, and resolving disputes *en route* to pronouncing the meaning of claim language as a matter of law based on the patent documents themselves, the court is not crediting certain evidence over other evidence or making factual evidentiary findings. Rather, the court is

looking to the extrinsic evidence to assist in its construction of the written document, a task it is required to perform. The district court's claim construction, enlightened by such extrinsic evidence as may be helpful, is still based upon the patent and prosecution history. It is therefore still construction, and is a matter of law subject to *de novo* review.

Id. at 981 (emphasis in original and footnote omitted).

After the Supreme Court's decision in *Markman II*, panels of this court have generally followed the review standard of *Markman I*. See *Serrano v. Telular Corp.*, 111 F.3d 1578 (Fed. Cir. 1997); *Alpex Computer Corp. v. Nintendo Co.*, 102 F.3d 1214 (Fed. Cir. 1996); *Insituform Techs., Inc. v. Cat Contracting, Inc.*, 99 F.3d 1098 (Fed. Cir. 1996); *General Am. Transp. v. Cryo-Trans, Inc.*, 93 F.3d 766 (Fed. Cir. 1996). In some cases, however, a clearly erroneous standard has been applied to findings considered to be factual in nature that are incident to the judge's construction of patent claims. See *Eastman Kodak Co. v. Goodyear Tire & Rubber Co.*, 114 F.3d 1547, 1555–56 (Fed. Cir. 1997); *Serrano*, 111 F.3d at 1586 (Mayer, J., concurring); *Wiener v. NEC Elecs. Inc.*, 102 F.3d 534, 539 (Fed. Cir. 1996); *Metaullics Sys. Co. v. Cooper*, 100 F.3d 938, 939 (Fed. Cir. 1996). We ordered that this case be decided in banc resolve this conflict, and we conclude that the *de novo* standard of review as stated in *Markman I* remains good law.

The Supreme Court framed the question before it in *Markman II* in the alternative: “whether the interpretation of a so-called patent claim . . . is a matter of law reserved entirely for the court, or subject to a Seventh Amendment guarantee that a jury will determine the meaning of any disputed term of art about which expert testimony is offered.” *Markman II*, 517 U.S. at 372 (emphasis added). When it answered that question by stating that “[w]e hold that the construction of a patent, including terms of art within its claim, is exclusively within the province of the court,” *id.*, the Court held that the totality of claim construction is a legal question to be decided by the judge. Nothing in the Supreme

Court's opinion supports the view that the Court endorsed a silent, third option—that claim construction may involve subsidiary or underlying questions of fact.⁴ To the contrary, the Court expressly stated that “treating interpretive issues as *purely legal* will promote (though not guarantee) intrajurisdictional certainty through the application of *stare decisis* on those questions not yet subject to interjurisdictional uniformity under the authority of the single appeals court.” *Id.* at 391 (emphasis added); see also *id.* at 387 (“Questions of construction are questions of law for the judge, not questions of fact for the jury” (quoting A. Walker, *Patent Laws* § 75 at 173 (3d ed. 1895))). Indeed, the sentence demonstrates that the Supreme Court endorsed this court's role in providing national uniformity to the construction of a patent claim, a role that would be impeded if we were bound to give deference to a trial judge's asserted factual determinations incident to claim construction.

The opinions in some of our cases suggesting that there should be deference to what are asserted to be factual underpinnings of claim construction assert support from the language in *Markman II* stating that “construing a term of art after receipt of evidence” is a “mongrel practice,” *id.* at 378, and that the issue may “fall[] somewhere between a pristine legal standard and a simple historical fact,” *id.* at 388 (quoting *Miller v. Fenton*, 474 U.S. 104, 114 (1985)). These characterizations, however, are only prefatory comments demonstrating the Supreme Court's recognition that the determination of whether patent claim construction is a question of law or fact is not simple or clear cut; they do not support the view that the Court held that while construction is a legal question for the judge, there may also be underlying fact questions. To the contrary, the court noted that

when an issue “falls somewhere between a pristine legal standard and a simple historical fact, the *fact/law distinction* at times has turned on a determination that, as a matter of sound administration of justice, one judicial actor is better positioned than another to decide the issue in question.”

⁴If this were so, surely the Supreme Court would have discussed whether subsidiary or underlying fact questions should be decided by the judge or the jury.

Id. (quoting *Miller v. Fenton*, 474 U.S. 104, 114 (1985)) (emphasis added). Thus, the Supreme Court was addressing under which category, fact or law, claim construction should fall and not whether it should be classified as having two components, fact and law.

Further supporting the conclusion that claim construction is a pure issue of law is the Supreme Court's analysis of the role of expert testimony in claim construction. Generally, the Court has recognized the important role played by juries in evaluating the credibility of a witness, a key consideration in determining the appropriate judicial actor to decide an issue. See *Miller*, 474 U.S. at 114. In the context of claim construction, however, the Court reasoned that, while credibility determinations theoretically could play a role in claim construction, the chance of such an occurrence is "doubtful" and that "any credibility determinations will be subsumed within the necessarily sophisticated analysis of the whole document, required by the standard construction rule that a term can be defined only in a way that comports with the instrument as a whole." *Markman II*, 517 U.S. at 389; see also *id.* at 388 ("[T]he testimony of witnesses may be received But in the actual interpretation of the patent the court proceeds upon its own responsibility, as an arbiter of the law, giving to the patent its true and final character and force." (quoting 2 W. Robinson, *Law of Patents* § 732 at 481–83 (1890))). Such a conclusion is consistent with the view that claim construction, as a form of "document construction," *id.* at 388–90, is solely a question of law subject to *de novo* review, as noted above. See *Markman I*, 52 F.3d at 981.

Moreover, while the Supreme Court's opinion conclusively and repeatedly states that claim construction is purely legal, another view of the Court's decision also demonstrates that our standard of review remains intact. The Court's primary concern in *Markman II* was the Seventh Amendment issue of whether a right to a jury trial on claim construction inured to a party due to any potential factual issues involved. Because the Court did not discuss the appellate standard of review, *Markman II* can be read as addressing solely the respective roles of the judge and jury at the trial level and not the relationship between the district courts and this court. Although our conclusion in *Markman I* that claim

construction is a matter of law was affirmed in all respects, even this narrower view of *Markman II* leaves *Markman I* as the controlling authority regarding our standard of review.

Thus, we conclude that the standard of review in *Markman I*, as discussed above, was not changed by the Supreme Court's decision in *Markman II*, and we therefore reaffirm that, as a purely legal question, we review claim construction *de novo* on appeal including any allegedly fact-based questions relating to claim construction. Accordingly, we today disavow any language in previous opinions of this court that holds, purports to hold, states, or suggests anything to the contrary, see, e.g., *Fromson*, 132 F.3d at 1444 ("The district court's findings of scientific/technological fact were material to the issue of construction of the term 'anodizing.'"); *Eastman Kodak*, 114 F.3d at 1555–56 (affirming district court's claim construction "recognizing both the trial court's 'trained ability to evaluate [expert] testimony in relation to the overall structure of the patent' and the trial court's 'better position to ascertain whether an expert's proposed definition fully comports with the specification and claims . . .'" (quoting *Markman II*, 517 U.S. at 388–90)); *Wiener*, 102 F.3d at 539 (citing *Markman II* as controlling our standard of review and parenthetically quoting language from *Markman II* that claim construction "falls somewhere between a pristine legal standard and a simple historical fact."); *Metaullics*, 100 F.3d at 939 ("[B]ecause claim construction is a mixed question of law and fact, we may be required to defer to a trial court's factual findings. Where a district court makes findings of fact as part of claim construction, we may not set them aside absent clear error." (citations omitted)).

* * * * *

PLAGER, Circuit Judge, concurring.

The concerned reader of the several opinions in this case might be led to believe that there is more to this case than there is. This otherwise unremarkable case was taken in banc for the sole purpose of laying to rest any residual doubts about how, in claim construction, the verbalizations surrounding the familiar “fact-law” dichotomy should be understood. I join the court’s opinion and judgment, eliminating the unnecessary obfuscation that seems to have emerged since our decision in *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (in banc) (hereinafter *Markman I*).

In *Markman I* we held that “claim construction is a matter of law,” and that “the construction given the claims is reviewed de novo on appeal.” *Id.* at 979. The Supreme Court agreed with our view, and concluded that the Seventh Amendment right to trial by jury was not an obstacle. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 379–86 (1996) (*Markman II*).

At the trial stage of a patent infringement suit, this means that the trial judge is obligated to determine the meaning of the claims, and, if a jury is used for the infringement phase, to instruct the jury accordingly. In the course of seeking to understand the nature and scope of the invention set forth in the claims, it is standard doctrine that the judge focuses on the language of the claims, as explained by the patent’s written description, and as constrained by the course of the patent’s prosecution. If need be, the trial judge may seek understanding outside the patent proper, from relevant texts and materials, and from experts in the art. None of this involves “fact-finding” in the sense of the traditional fact-law dichotomy. See, for example, the Supreme Court’s effort to decide whether a tomato was a “fruit” or a “vegetable.” Regarding the meaning of those words, the Court said: “Of that meaning the court is bound to take judicial notice, as it does in regard to all words in our own tongue; and upon such a question dictionaries are admitted, not as evidence, but only as aids to the memory and understanding of the court.” *Nix v. Hedden*, 149 U.S. 304, 306–07 (1893).

The effort is to understand the meaning of the terms in the claims. To the extent that involves delving into factual matters, such materials simply become part of the process of understanding. It hardly seems necessary to state that the point of seeking understanding of the terms in which the claims are cast is not for the sake of understanding in the abstract, but to ensure as much as the intrinsic nature of language permits that the court’s interpretation is a correct one.

On appeal, this court has the benefit of the trial judge’s considered view, and the record of the effort made at trial to assist the judge in understanding the terms of the claim. Though we review that record “de novo,” meaning without applying a formally deferential standard of review, common sense dictates that the trial judge’s view will carry weight. That weight may vary depending on the care, as shown in the record, with which that view was developed, and the information on which it is based.

It may or may not be true that the trial judge will have had virtually unlimited time and opportunity to pursue the matter. In any event, just where the comparative advantage in claim construction effort and accuracy lies in any particular case will be observable on appeal, and will no doubt influence the weight given to the trial court’s view. And just as three minds are deemed better than one in deciding appeals, four minds may often be better than three when a complex claim construction is at issue.

This court’s decision in *Markman I*, reaffirmed today, simply means that we do not spend our and appellate counsels’ time debating whether the trial court’s information base constitutes findings of “fact” or conclusions of “law,” with verbally different standards of review. Instead both they and we can focus on the question that the trial court addressed, the question that counts: what do the claims mean? As we all recognize, that is not always easy to know, and much turns on the answer.

The decision today should help institute a simplified and clarified method by which both trial and appellate courts address claim construction issues, pursuant to the rules established in this court’s *Markman I* opinion. Our purpose is to improve the process of patent infringement litigation for the benefit of patentees and their competitors, and ultimately the public. Whether this

approach to patent litigation will in the long run prove beneficial remains to be seen. There is every reason to believe it will, and certainly to believe it is better than what we had. But it may be some time before we have enough experience with “Markman hearings” and with appellate review under the new regime to draw any empirically sound conclusions. In such circumstances there is much to be said for refraining from premature and argumentative judgments about what it all means, and for allowing sufficient time to actually see how it works.

BRYSON, Circuit Judge, concurring.

While I join the opinion of the court without reservation, I think it important to note that our adoption of the rule that claim construction is an issue of law does not mean that we intend to disregard the work done by district courts in claim construction or that we will give no weight to a district court’s conclusion as to claim construction, no matter how the court may have reached that conclusion. Simply because a particular issue is denominated a question of law does not mean that the reviewing court will attach no weight to the conclusion reached by the tribunal it reviews. In fact, reviewing courts often acknowledge that as to particular legal issues lower tribunals have special competence and their judgments on those legal issues should be accorded significant weight. For example, the Supreme Court typically defers to the construction of a state statute adopted by the regional court of appeals that includes that state. *See Propper v. Clark*, 337 U.S. 472, 486–87 (1949). Similarly, this court has routinely noted that although contract interpretation is a question of law, the interpretation of a contract by a Board of Contract Appeals, in light of the Board’s expertise in such matters, “is afforded careful consideration and great respect.” *Alvin, Ltd. v. United States Postal Serv.*, 816 F.2d 1562 (Fed. Cir. 1987). Indeed, the Supreme Court has made much the same point in referring to its review of this court’s decisions on patent law, noting that the Court would “leave such refinement [of the legal test for applying the doctrine of equivalents] to [the Federal Circuit’s] sound judgment in this area of its special expertise.” *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 117 S. Ct. 1040, 1054 (1997).

The Supreme Court in *Markman* stated that it would be a rare case in which claim construction would turn on an issue such as a credibility judgment between two competing expert witnesses. *See* 517 U.S. at 388–90. Such cases, however, may arise, and in those cases it would be entirely appropriate—and consistent with our characterization of claim construction as a question of law—to factor into our legal analysis the district court’s superior access to one of the pertinent tools of construction.

That does not mean that we defer to a district court on legal matters unless we find that the court has committed clear error with respect to an issue that should be characterized as factual. What it means is that we approach the legal issue of claim construction recognizing that with respect to certain aspects of the task, the district court may be better situated than we are, and that as to those aspects we should be cautious about substituting our judgment for that of the district court.

MAYER, Chief Judge, with whom PAULINE NEWMAN, Circuit Judge, joins, concurring in the judgment.

I am compelled to concur in the judgment of the court, but I respectfully disagree with the opinion because it profoundly misapprehends *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996). The Supreme Court concluded there that the historical record is insufficiently firm to declare that juries construed patent claims in England when the Seventh Amendment to the Constitution was adopted in 1791. So it decided as a matter of *policy* that judges, not juries, are better able to perform this task given the complexity of evidence and documentation. This was a perilous decision of last resort. For juries regularly render verdicts in civil cases based on complex forensic and documentary evidence of equal or greater difficulty than seen in patent cases. And the implications for criminal cases under Article III and the Sixth Amendment are even more profound. Increasingly complex cases involving scientific and complicated documentary evidence are presented to criminal juries which, of course, decide matters of life and liberty, not merely money. Nevertheless, having so ruled, it seems to me the Court would not also have repealed part of the Federal Rules of Civil Procedure and Evidence without so much as a men-

tion that district courts no longer have discretion to admit expert evidence, *see Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993), and need not find facts when evidence is disputed in these cases. Nor would it have so excused this court from the normal, historical role of appellate courts to review for reversible error, and installed it as a collegial trial court.

I. Standard of Review

* * * *

Our review of claim construction is controlled by the Supreme Court's judgment in *Markman*, 517 U.S. 370, not the opinion of this court it reviewed, 52 F.3d 967 (Fed. Cir. 1995); the Supreme Court did not adopt this court's reasoning as its own. Though it could have done so easily, the Court chose not to accept our formulation of claim construction: as a pure question of law to be decided *de novo* in all cases on appeal.¹ If it had, there would have been no need for its extensive exegesis about the Seventh Amendment and whether juries must construe claims that have evidentiary underpinnings or whether the importance of uniformity is best served by giving these evidentiary questions of meaning to a judge. It would have been a simple matter for the Court to give short shrift to this argument by proclaiming construction purely, solely, and always a matter of law that would never have gone to the jury.

The Supreme Court recognized that in some cases there will be conflicting evidence that has to be resolved—where there are factual determinations that are more than just incident to claim construction—such as the understanding of one skilled in the art at the time the patent application was filed. In these cases, all that *Markman* stands for is that the judge will do the resolving, not the jury. Wisely, the Supreme Court stopped short of authorizing us to find facts *de novo* when evidentiary disputes exist as part of the construction of a patent claim and the district court has made these findings without committing clear error. *See Fromson v. Anitec Printing Plates, Inc.*, 132 F.3d 1437, 1446 (Fed. Cir. 1998) (findings of fact made by a district court to resolve disputes

as to the meaning of claim terms are affirmed absent clear error); *Eastman Kodak Co. v. Goodyear Tire & Rubber Co.*, 114 F.3d 1547, 1555–56 (Fed. Cir. 1997) (reliance on expert testimony to clarify ambiguous claim term is acceptable and deference is given to the trial court's credibility determination). Rather, when the judge finds facts or accepts the factual determinations of a jury, those facts are entitled to greater deference than *de novo* fact finding on appeal.

In *Fromson*, the trial judge admitted expert testimony to develop the record on the meaning of the word “anodized,” as it was understood by one skilled in the art at the time of the invention. *Fromson*, 132 F.3d at 1444–45. Based on that extrinsic evidence, he found “in 1973 no reasonable practitioner of this process would have had the opinion that a non-porous non-adherent oxide coating, as thin as the native 5 nanometer coating found naturally in the environment, of phosphoric oxide, constituted an anodized surface.” *Id.* at 1444. This finding limited the meaning of the word anodized beyond what a standard definition required: “[T]o subject [a metal] to action by making [it] the anode of a cell before coating with a protective or decorative film.” *Id.*, 132 F.3d 1437 (quoting Webster's Third Int'l Dictionary). This finding also conflicted with the alleged infringer's description of its own oxide coating process as anodization. Nevertheless, the district court construed the word anodized to mean: “an electrolytically formed, adherent, porous aluminum oxide coating sufficiently thick (meaning thicker than native oxide) . . .” *Id.* at 1445. Because the accused process did not form an oxide coating thicker than native oxide, the district court entered a judgment of noninfringement.

Even had we disagreed with the construction given by the trial court in *Fromson*, we were not tasked by our standard of review to reexamine *de novo* each of the days of testimony and volumes of record relating to interpretation of the word anodized. This court did not affirm the trial court's judgment because it had educed the best construction of the word anodized. It did so be-

¹Rather than bluntly force the square peg of claim construction into the round hole of fact or law, the Court described the questions presented by claim construction in more chary terms: “[b]ut the sounder course, when available, is to classify a mongrel practice,” “no clear answers,” “in theory there could be a case,” “leaves us doubtful,” “[i]n the main,” “[w]e accordingly think there is sufficient reason to treat construction of terms of art like many other responsibilities that we ceded to a judge,” “independent reason to allocate,” “treating interpretive issues as purely legal will promote . . .” *Markman*, 517 U.S. at 377–91 (emphasis added). Even a cursory reading of that opinion indicates that the Court meant to determine who should interpret the claims, without mandating a standard of appellate review to be used under all circumstances.

cause the district court's construction was properly predicated on a factual finding about what anodized meant to one skilled in the art in 1973, which on the appellate record presented by the parties was not clearly erroneous. The Supreme Court never contemplated in *Markman* that we feign first-hand experience with the technology, or that we embellish our abilities by construing a claim without the respect due both a trial court's decision that a factual dispute underlies the meaning of a claim term and its resolution of that dispute.

Provided that no factual findings about disputed terms were necessarily made in the course of construing the claim, our making a claim construction that supersedes that of the district court is not inconsistent with the Court's opinion. See *Serrano v. Telular Corp.*, 111 F.3d 1578 (Fed. Cir. 1997) (construction of the claims involved no factual dispute between the parties); *International Communication Materials, Inc. v. Ricoh Co.*, 108 F.3d 316, 318–19 (Fed. Cir. 1997); *Alpex*, 102 F.3d 1214 (using Alpex's expert testimony against Alpex, there were no factual dispute between the parties); *Metaullics Sys. Co. v. Cooper*, 100 F.3d 938, 939 (Fed. Cir. 1996); *Insituform Techs., Inc. v. Cat Contracting, Inc.*, 99 F.3d 1098 (Fed. Cir. 1996) (attorney argument regarding claim construction presented no factual dispute about the technology); 1 S. Childress & M. Davis, *Federal Standards of Review: Civil Cases and General Review Principles*, §§ 2.13, 2.14 (2d ed. 1991). If this court does not believe the claim construction to be erroneous based on an independent review of the legal conclusions and a review of the constituent factual findings for substantial evidence, it must affirm. See *Bose Corp. v. Consumers Union of United States*, 466 U.S. 485, 514 n.31 (1984); see also *Pullman-Standard v. Swint*, 456 U.S. 273, 287–88 (1982).

This court may not, however, independently review the constituent facts or disregard the jury's findings, absent proof that they lack sufficient evidence that “a reasonable mind might accept as adequate to support” them. *Consolidated Edison Co. v. NLRB*, 305 U.S. 197, 229 (1938); see *Genentech, Inc. v. Wellcome Found. Ltd.*, 29 F.3d 1555, 1565 (Fed. Cir. 1994). Nor may we construe a claim in a manner that is inconsistent with our function as a court of review; we cannot divine new interpretations of terms in a claim or

make findings of fact from a record that cannot support them. See *Avia Group Int'l, Inc. v. L.A. Gear California, Inc.*, 853 F.2d 1557, 1561 (Fed. Cir. 1988).

Sometimes it may be necessary for an appellate court to pronounce new legal principles during an appeal. However, even if this court identifies a question of claim construction as one of law—though its resolution is relevant to only the particular litigation or document—it cannot elevate the activity to one of determining legal principles, as is for example, statutory construction. See *Markman*, 517 U.S. at 391 (“[I]ssue preclusion could not be asserted against new and independent infringement defendants even within a given jurisdiction . . .”); *In re Freeman*, 30 F.3d 1459, 1466 (Fed. Cir. 1994); *Jackson Jordan, Inc. v. Plasser American Corp.*, 747 F.2d 1567, 1574–75 (Fed. Cir. 1984) (second alleged infringer not bound by prior claim construction unless it had, *inter alia*, a full and fair opportunity to litigate the construction in the first infringement action). Thus, regardless of the labels we attach to these questions, without the benefit of a full record from the trial court, it is neither the function of this court nor is it within our capacity as an appellate court to adopt new interpretations, most especially not if the interpretation under review is of terms informed by conflicting evidence. Such indiscriminate and conclusive review deprives the parties of important substantive and procedural mechanisms provided in the trial courts, where interpretation can be informed by additional discovery and expert testimony, and where it can be checked by appellate review as a matter of right. If claim construction is only a question of law to be reviewed by this court *de novo*, then the absence of review as a matter of right over *our* claim constructions, which may be new and unsupported by legal analysis, or may never have been tested by the adversarial process, would transform this court into a trial court of first and usually last resort.

* * * * *

“As in all cases involving assertions of equivalency, wherein the patentee seeks to apply its claims to structures not disclosed by the patentee, the court is required to exercise judgment.” *Texas Instruments, Inc. v. United States Int'l Trade Comm'n*, 846 F.2d 1369, 1371 (Fed. Cir.

1988). Here, the district court exercised its judgment, made a partial, though legally sufficient interpretation of these limitations, and presented them to the jury for resolution of factual disputes on the way to determining equivalents under paragraph 112(6). Based on these interpretations and the jury's verdict, we presume that the jury found that the combination of one of Cybor's Model 5016 pumps with the external reservoir it uses in its Model 5226 pump created a structural equivalent to the "second pumping means" or the "means to enable said second pumping means" claimed in the '837 patent and described by the specification under paragraph 112(6). Because we have not been shown that the jury lacked substantial evidence to support this finding of equivalents or infringement, we must affirm.

However, if the court is correct that claim construction is purely and solely a question of law to be reviewed *de novo* on appeal, it could not affirm the judgment of infringement. Infringement was determined in this case by a jury at the same time that it was asked to construe these claims by resolving factual disputes about their meaning and to determine whether the scope of these claims should be limited by arguments made during prosecution of the patent. Ordinarily, a jury's verdict of infringement permits us to presume the existence of factual findings necessary to that verdict. But we are in no way entitled to presume factual findings or even to rely on the verdict of infringement where neither the jury, nor the judge on a motion for judgment as a matter of law, articulated a construction of the claims upon which the findings are premised. As explained above, there are five possible combinations of claim term interpretations and findings of paragraph 112(6) equivalents that could have led the jury to its infringement verdict. In light of the possibilities, it is difficult to imagine how the court can affirm the jury's finding of infringement based upon its own *de novo* claim construction, which merely presumes a claim construc-

tion by the district court and that admits of no deference to the findings of fact.

The effect of allowing such a combination of presumptions in this case has been to deny Cybor meaningful review of anything more than the district judge's decision not to apply prosecution history estoppel, since it was the only legal determination that can be located outside of those presumptions. Not surprisingly, this is the decision Cybor contests most strenuously on appeal. The effect has also been to allow this court to presume that it made the same claim construction as the jury, without so much as articulating its own construction of these two claim terms, and then to presume that the jury's infringement finding is still valid. Penultimately, Cybor is left with little more than the ability to make presumptions as to our own claim interpretations in any motion it may file for reconsideration. Worse still is the message the court is sending to district courts: we will affirm a finding of infringement as long as the district court avoids articulating its construction of the claims—which coincidentally leaves us free to arrive at our own constructions—and as long as we can presume that the jury used our constructions to arrive at that finding of infringement.

* * * * *

RADER, Circuit Judge, dissenting from the pronouncements on claim interpretation in the en banc opinion, concurring in the judgment, and joining part IV of the en banc opinion.

* * * * *

I.

The question of the proper standard of review seems an esoteric legal topic of interest only to law professors and appellate judges. In most cases, however, the review standard influences greatly both the trial judges who preside over the trial process and patent practitioners who must advise clients to accommodate their business plans to an uncertain legal regime.

¹The following is an incomplete list of procedural deviations required by *Markman I*:

1. Multiple trials, problem I: If hearings are necessary to interpret complex claims, the trial court must set aside time in its crowded docket for one proceeding to interpret claims and a second (potentially with a jury) to determine infringement and other issues.
2. Claim interpretation, problem I: Fearing that it may not receive the opportunity to supplement expert reports or reopen discovery after the judge's interpretation, a party often argues alternative claim construction theories from the outset of litigation. This extends the time and expense of the claim interpretation proceedings.
3. Bias toward summary judgments: In practical terms, *Markman I* directs the proceedings toward summary judgment

From the vantage point of trial judges, *Markman I* dictates many deviations from the normal procedural course for litigation.¹ Perhaps the central deviation, however, affects the trial court's discretion to use expert testimony. When confronted with sophisticated technology, district court judges often seek testimony from experts to help them understand and interpret the claim. Under the guise of setting standards for claim construction, this court instructs experienced trial judges that they may use experts to understand, but not to interpret, the claim terms. As a matter of logic, this instruction is difficult to grasp. What is the distinction between a trial judge's understanding of the claims and a trial judge's interpretation of the claims to the jury? Don't judges instruct the jury in accordance with their understanding of the claims? In practice, how does this court's lofty appellate logic work? As this court acknowledges, a trial court must often resort to experts to learn complex new technologies. See, e.g., *Markman I*, 52 F.3d at 986. What happens when that learning influences a trial judge's interpretation of the claim terms? Are trial judges supposed to disguise the real reasons for their interpretation? How will this perverse incentive to "hide the ball" improve appellate review?

As a matter of legal analysis, the en banc court's direction to trial judges is equally hard

to justify. The objective of claim interpretation is to discern the meaning of the claim terms to one of ordinary skill in the art at the time of invention. See *Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.3d 1473, 1477 (Fed. Cir. 1998) ("It is the person of ordinary skill in the field of the invention through whose eyes the claims are construed."). What then defeats the relevance of the testimony of one of skill in the art at the time of invention? Of course this relevant testimony must not conflict with or attempt to trump contemporaneous intrinsic evidence from the patent document itself, see *Vitronics Corp. v. Conceptor, Inc.*, 90 F.3d 1576, 1582–83 (Fed. Cir. 1996), but both trial and appellate judges are poised to halt that abuse. Moreover, by assigning claim interpretation to the judge, *Markman II* has already corrected the major source of the problem with experts, namely their ability to influence lay jurors with the strength of their resumes rather than the strength of their reasoning. In any event, it seems a contradiction to bar those of skill in the art at the time of invention from a search for the meaning of terms to one of skill in the art at the time of the invention. In effect, the *en banc* opinion has *sub silentio* redefined the claim construction inquiry as "how a lawyer or judge would interpret the term."

District courts have already expressed their frustration with the strictures of *Markman I*:

on the central issue of the litigation at a potentially premature stage of issue development. Prematurely addressing issues, even at the appellate level, can result in expensive repetition of effort. See *CVI/Beta Ventures, Inc. v. Tura LP*, 112 F.3d 1146, 1157–58, 1160 n.7 (Fed. Cir. 1997) (finding error in a claim construction that had been affirmed in an earlier appeal), *cert. denied*, 522 U.S. 1109 (1998).

4. Claim interpretation, problem II: As soon as the trial court issues a claim interpretation, both sides often seek to shift their original claim interpretations to accommodate the judge's views. Thus, the parties seek to revise expert reports or reopen discovery to account for the judge's interpretation. This maneuvering leads to procedural battles over surprise and motions for additional time to prepare for trial. See *Loral Fairchild Corp. v. Victor Co.*, 906 F. Supp. 798 (E.D.N.Y. 1995) (interpreting claims); *Loral Fairchild Corp. v. Victor Co.*, 911 F. Supp. 76, 80–81 (E.D.N.Y. 1996) (preventing plaintiff from changing theory of infringement in response to claim interpretation).
5. The new evidence dilemma: As a result of the new and perhaps somewhat unexpected interpretation, the parties scramble to create and acquire new evidence for their infringement arguments.
6. The learning curve problem: Like all human endeavors, claim interpretation is a learning process. The trial judge makes every effort to state the precise scope of the claims at the close of the initial proceeding, but often, with the additional learning during the infringement trial, realizes that the initial interpretation was too broad or too narrow in some respects. The judge then faces the dilemma of changing the rules in the middle of the game.
7. The judge as a trial issue: With the judge's claim interpretation central to the issues of infringement, trial counsel will try to exploit the judge's stature with the jury to show that the court is on their side.
8. Multiple trials, problem II: In the words of United States District Court Judge Roderick McKelvie: "[I]n spite of a trial judge's ruling on the meaning of disputed words in a claim, should a three-judge panel of the Federal Circuit disagree, the entire case could be remanded for retrial on [a] different [claim interpretation]." *Elf Atochem North Am., Inc. v. Libbey-Owens-Ford Co.*, 894 F. Supp. 844, 857 (D. Del. 1995).

Trial judges can often address each of the above with careful case management, but at the cost of expending scarce trial court resources.

When two experts testify differently as to the meaning of a technical term, and the court embraces the view of one, the other, or neither while construing a patent claim as a matter of law, the court *has* engaged in weighing evidence and making credibility determinations But when the Federal Circuit Court of Appeals states that the trial court does not do something that the trial court does and must do to perform the judicial function, the court knowingly enters a land of sophistry and fiction.

Lucas Aerospace, Ltd. v. Unison Indus., LP, 890 F. Supp. 329, 333–34 n.7 (D. Del. 1995); see also *Elf Atochem North Am., Inc. v. Libbey-Owens-Ford Co.*, 894 F. Supp. 844, 857 (D. Del. 1995); *In re Mahurkar Double Lumen Hemodialysis Catheter Patent Litigation*, 831 F. Supp. 1354, 1359 (N.D. Ill. 1993) (“[J]udges should not pretend that all nominally ‘legal’ issues may be resolved without reference to facts What seems clear to a judge may read otherwise to [one skilled in the art].”).

II.

From the patent practitioner’s standpoint, this court’s enthusiastic assertion of its unfettered review authority has the potential to undercut the benefits of *Markman I*. *Markman I* potentially promised to supply early certainty about the meaning of a patent claim. This certainty, in turn, would prompt early settlement of many, if not most, patent suits. Once the parties know the meaning of the claims, they can predict with some reliability the likelihood of a favorable judgment, factor in the economics of the infringement, and arrive at a settlement to save the costs of litigation.² *Markman I* promised to provide this benefit early in the trial court process. To provide fairness under the *Markman I* regime, trial judges would provide claim interpretations before the expense of trial. Patent practitioners

would then be armed with knowledge of the probable outcome of the litigation and could facilitate settlement.

The problem with this plan was in its implementation because as a question of law, claim interpretation is subject to free review by the appellate court. The Federal Circuit, according to its own official 1997 statistics, reversed in whole or in part 53% of the cases from district courts (27% fully reversed; 26% reversed-in-part). Granted this figure deals with all issues in cases with many issues. Nonetheless, one study shows that the plenary standard of review has produced reversal, in whole or in part, of almost 40% of all claim constructions since *Markman I*. A reversal rate in this range reverses more than the work of numerous trial courts; it also reverses the benefits of *Markman I*. In fact, this reversal rate, hovering near 50%, is the worst possible. Even a rate that was much higher would provide greater certainty.

Instead, the current *Markman I* regime means that the trial court’s early claim interpretation provides no early certainty at all, but only opens the bidding. The meaning of a claim is not certain (and the parties are not prepared to settle) until nearly the last step in the process—decision by the Court of Appeals for the Federal Circuit. To get a certain claim interpretation, parties must go past the district court’s *Markman I* proceeding, past the entirety of discovery, past the entire trial on the merits, past post trial motions, past briefing and argument to the Federal Circuit—indeed past every step in the entire course of federal litigation, except Supreme Court review. In implementation, a *de novo* review of claim interpretations has postponed the point of certainty to the end of the litigation process, at which point, of course, every outcome is certain anyway.

In practical terms, this implementation record has other perverse effects. Trial attorneys must devote much of their trial strategy to positioning themselves for the “endgame”—claim construc-

²Three variables affect the settlement calculus of each party to litigation: p , the probability of the plaintiff obtaining damages; J , the expected value of a judgment for the plaintiff; and c , the cost of litigation. See Richard A. Posner, *The Federal Courts: Challenge and Reform* 89–94 (1996). If $p \times J$ (pJ) exceeds c , then plaintiff will sue. The plaintiff values the case at $pJ - c$. If the defendant agrees on the values assigned to the variables, the suit will cost him $pJ + c$. This rough model poses an interesting question. Because the costs of litigation invariably exceed the costs of settlement, why do not all cases settle? Chief Judge Posner answers: “[U]ncertainty as to outcome is the key to the settlement rate” *Id.* at 90. This uncertainty leads each party to overestimate its chance of prevailing. Accordingly, each party will assign different values to the variables, most notably p , thereby diminishing the likelihood of settlement.

tion on appeal. As the focus shifts from litigating for the correct claim construction to preserving ways to compel reversal on appeal, the uncertainty, cost, and duration of patent litigation only increase. Thus, the *en banc* court's *de novo* regime belies the purpose and promise of *Markman I*.

Several high profile appeals have illustrated the problem created by the Federal Circuit's high reversal rate. In *Lubrizol*, 64 F.3d 1553, and *J.T. Eaton & Co. v. Atlantic Paste & Glue Co.*, 106 F.3d 1563 (Fed. Cir. 1997), this appellate court rejected not only the trial judge's claim reading, but also the readings advocated by both parties at trial and the readings advocated by all experts in the trial. In fact, in *Eaton*, the Federal Circuit did not base its interpretation on the specification or the totality of the prosecution history, but instead found its meaning in a brief excerpt from the affidavit of a single expert witness at the end of a lengthy prosecution. See 106 F.3d at 1568, 1570. If the parties might succeed in convincing the Federal Circuit to reverse an entire trial result with an argument never presented to the trial court or with a brief excerpt from hundreds of pages of prosecution (again not presented to the trial court), would they be wise to settle after a trial court's reading of the claims?

One other case makes the point even more persuasively. In *CVI/Beta Ventures, Inc. v. Tura LP*, 112 F.3d 1146 (Fed. Cir. 1997) (*Tura*), the Federal Circuit reversed its own earlier claim interpretation as a question of law when the defendant and stage of the proceedings changed. On a motion for a preliminary injunction in an infringement action, a Maryland district court interpreted the 3% elasticity limitation in a claim for flexible eyeglass frames. On appeal the Federal Circuit reviewed this claim interpretation as a question of law and affirmed in a nonprecedential opinion. See *CVI/Beta Ventures, Inc. v. Custom Optical Frames, Inc.*, 1996 WL 338388 (Fed. Cir. 1996) (nonprecedential); see also *Tura*, 112 F.3d at 1160 n.7. Understanding that the law must not change from case to case or from circumstance to circumstance, a New York district court applied the Federal Circuit's claim interpretation in a separate infringement action involving the same patent. After trial, the defendant appealed. This time the Federal Circuit reversed the district court's claim interpretation. See *Tura*, 112 F.3d at 1149

("We conclude that the district court did err in its claim construction.") (emphasis added). Although this court referred to the New York district court's "error," the Federal Circuit had in fact reversed itself.

One potential trial court response to the *CVI/Beta* problem might be the issuance of "tentative" claim constructions as a matter of law. See *International Communication Materials, Inc. v. Ricoh Co., Ltd.*, 108 F.3d 316 (Fed. Cir. 1997). This response, of course, would further frustrate the parties' desire to receive a certain claim construction as early as possible.

Regardless, if the Federal Circuit's reading of the very same claim can vary from one appeal to the next, every patent litigant has an incentive to appeal every action to the Federal Circuit in hopes that the statistics will hold up and eventually the appellate court will reverse. Even the Federal Circuit's claim interpretations as questions of law are not certain. Is this the "uniformity" outlined by the Supreme Court in *Markman II*?

III.

Because patent trial practitioners understand the distinct prospect of overturning trial court results on appeal, the trial arena loses some of its luster as the center stage of the dispute resolution drama. Instead the trial court becomes a ticket to the real center stage, the Court of Appeals for the Federal Circuit. Taking a cue from the Supreme Court, this court would more wisely take a functional approach to setting a standard of review for claim construction.

In *Markman II*, the Supreme Court noted that neither history nor precedent provided "clear answers" about the role of the jury and the factual or legal nature of claim construction. 517 U.S. at 388–90. Therefore, the Court pursued a functional inquiry to determine whether the judge or jury could best balance the complexities of claim construction. See *id.* A similar functional inquiry might best clarify the roles of the trial and appellate benches during claim interpretation.

The Supreme Court has provided some guidelines for such a functional approach. The Court counsels appellate courts to defer "when it appears that the district court is 'better positioned' than the appellate court to decide the issue in question or that probing appellate scrutiny will not contribute to the clarity of legal doctrine."

Salve Regina College v. Russell, 499 U.S. 225, 233 (1991). At another point, the Court cautions: “[T]he reviewing attitude that a court of appeals takes toward a district court decision should depend upon ‘the respective institutional advantages of trial and appellate courts.’” *First Options of Chicago, Inc. v. Kaplan*, 514 U.S. 938, 948 (1995) (quoting *Salve Regina*, 499 U.S. at 233).

Applying this general counsel, the trial judge enjoys a potentially superior position to engage in claim interpretation. For the complex case where the claim language and specification do not summarily dispose of claim construction issues, the trial court has tools to acquire and evaluate evidence that this court lacks. Trial judges can spend hundreds of hours reading and rereading all kinds of source material, receiving tutorials on technology from leading scientists, formally questioning technical experts and testing their understanding against that of various experts, examining on site the operation of the principles of the claimed invention, and deliberating over the meaning of the claim language. If district judges are not satisfied with the proofs proffered by the parties, they are not bound to a prepared record but may compel additional presentations or even employ their own court-appointed expert.

An appellate court has none of these advantages. It cannot depart from the record of the trial proceedings. To properly marshal its resources, the appellate bench must enforce strict time and page limits in oral and written presentations.⁵ Moreover a sterile written record can never convey all the nuances and intangibles of the decisional process. Indeed a careful consideration of the institutional advantages of the district court would counsel deference. This court’s categorical response that claim interpretation involves no factual assessments does not advance a functional analysis of trial and appellate roles in claim construction. As a matter of fact (so to speak), claim construction requires assessment of custom and usage in the relevant art, assessment of events during prosecution, assessment of the level of ordinary skill in the art, assessment of the understanding of skilled artisans at

the time of invention—to name just a few factual components of the complex process of claim interpretation. A careful functional analysis counsels deference for district court claim interpretations.

IV.

The Supreme Court may have offered a path out of this predicament. At least three times in *Markman II*, as noted earlier, the Court alluded to the factual component of claim interpretation. At no point did *Markman II* address the appropriate standard of review. Nonetheless this court misses the opportunity to improve certainty in patent practice by giving appropriate deference to trial court claim interpretations, particularly in complex cases. If this court accords more deference to trial court interpretations in the complex cases, soon the district courts will provide the desired certainty early in the process. At that point, *Markman I* will fulfill its promise. Administration of patent law will move toward less costly disputes and earlier settlements.

Markman I set out to improve patent law administration by removing uncertainties from the dispute resolution process (the chief uncertainty, of course, being jury results). Inadvertently the reasoning in *Markman I* has postponed the point of certainty to the extreme end of the judicial process. This delay both disrupts the orderliness of trials and practitioners’ hopes for more efficient and earlier claim constructions. The Supreme Court removed the jury uncertainty with its decision and, by recognizing a factual component in claim interpretation, provided a way for this court to accomplish much of its early goals. By according some deference where appropriate, this court can restore the trial court’s prominence in the claim interpretation function and bring again more certainty at an earlier stage of the judicial process. Applying the Supreme Court’s reasoning for habeas proceedings to claim construction, “adoption of [a rule of appropriate deference] . . . will have the salutary effect of making the [district court’s] trial on the merits the ‘main event,’ so to speak, rather than a ‘tryout on the road’ for what will later be the determi-

⁵These necessary strictures contribute to the Federal Circuit’s perception of claim construction. Pressured by these necessary rules, parties before the Federal Circuit strive mightily to reduce their cases to a few issues controlled by a few passages from the specification or the prosecution history. For these reasons, the appeal process does not present a fair picture of the complex task of untangling the knot of legal and factual issues presented for trial. A seemingly simple issue of claim construction on appeal takes on an entirely different complexion in its proper context as one tiny facet of a massive corpus of litigation.

native [appeal to the Federal Circuit].” *Wainwright v. Sykes*, 433 U.S. at 90. This certainty, in turn, would stimulate more settlements and efficient decision making—the promise of *Markman I*. With this reasoning in mind, I respectfully dissent from the claim interpretation pronouncements of the en banc opinion, concur in the judgment, and join only part IV of the en banc opinion.

PAULINE NEWMAN, Circuit Judge, with whom Chief Judge MAYER joins; additional views.

As this case illustrates, perfection is elusive in the aftermath of the Federal Circuit’s decision in *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996). The expectation of greater stability in the application of patent law—thus enhancing consistency in result, reducing the cost of litigation, and indeed reducing litigation by diminishing the uncertainties of jury trials—has not been well achieved.

Most of the shortfalls between expectation and reality arise from the manner of implementation of our de novo authority for claim interpretation. I cite three principal areas. The first area relates to the treatment of certified questions. Although the district courts have extended themselves, and so-called “*Markman* hearings” are common, this has not been accompanied by interlocutory review of the trial judge’s claim interpretation. The Federal Circuit has thus far declined all such certified questions. Indeed, the certified question issue was an early warning of the difficulties that could flow from premature claim interpretation, for it was often apparent from the petition that the claims could not be finally and correctly interpreted without evidence beyond the patent documents. The absence of extrinsic evidence, of resolution of conflicting positions, and of detailed analysis and findings by the trial judge, inhibited claim interpretation by certified question. Thus, instead of conducting the expected dispositive de novo review, we simply declined the question. The possibility of early finality to claim interpretation has not materialized, with two untoward consequences; first, the district court has had to conduct a perhaps unnecessary trial; and second, the eventual issuance of a new claim interpretation by the Federal Circuit, on appeal after final judgment, has sometimes required a second trial of the issue of infringement. None of

these consequences comports with our insistence that claim interpretation is purely a matter of law, that it needs no findings at trial, and that it will be decided de novo by the Federal Circuit.

The second area of disappointed expectations has flowed from the unexpectedly creative de novo claim interpretations that the Federal Circuit has issued in a few cases. This unpredictability in administration of the law of patent claiming has added a sporting element to our bench. It has not only released appellants’ imaginations on appeal, but it will surely add complexity to future trials, as lawyers attempt to guard against the judicial imagination.

A third concern, although rare in occurrence, is of great significance, for even one case wherein the Federal Circuit has deemed itself unconstrained by its own prior interpretation of the same patent removes finality and encourages re-litigation of every patent. The promise of uniformity and finality, flowing from decisions of national effect, is a failed promise if we are not bound by *stare decisis* in our own claim interpretation.

These flaws are of serious concern, no less because they are of our own making. They are not irremediable, although remedy may require a larger vision than we possess. However, today’s en banc opinion adds another encumbrance to the procedures for interpretation of claims, further inhibiting fruition of the *Markman* expectation. When the issues in litigation involve complex questions of science and technology, a special effort is required of the judicial process. In litigation of patent disputes the nature of the evidence that is received and considered, the balance between the trial and appellate functions, and the evidentiary rules governing opinion testimony and experts, are of particular importance. Today’s decision falls short in each of these areas.

Procedural and evidentiary rules should weigh toward facilitating judicial understanding of the issues and thereby reaching the correct result. Yet the Federal Circuit rules today that it will not consider factual findings of the trial court, expressly disavowing such actions by prior panels. The court continues to deny the need to make findings of disputed facts when interpreting claims: “[By] using certain extrinsic evidence that the court finds helpful and rejecting other evidence as unhelpful, and resolving disputes *en*

route to pronouncing the meaning of claim language ... the court is *not* crediting certain evidence over other evidence or making factual evidentiary findings.” *Maj. Op.* at 1454 (quoting *Markman*, 52 F.3d at 981). The court states that it neither accepts the trial judge’s findings of fact, nor accepts that there are factual issues in claim interpretation. With these strictures on evidence, witnesses, and findings, it is far from clear how the Federal Circuit proposes to reach the correct claim interpretation.

By continuing the fiction that there are no facts to be found in claim interpretation, we confound rather than ease the litigation process. Without doubt, factual disputes arise and must be resolved in order to interpret the claims. Such facts are normally resolved at trial—yet we now deny ourselves the opportunity even to consider the findings of the trial court. *See maj. op.* at 1456 (disavowing the procedure in a Federal Circuit opinion whereby the court recognized the trial court’s “‘trained ability to evaluate [expert] testimony in relation to the overall structure of the patent’ and the trial court’s ‘better position to ascertain whether an expert’s proposed definition fully comports with the specification and claims’”). The court today not only rejects the opportunity to give normal appellate deference to the proceedings and findings of trial, but also rejects the opportunity to consider them at all.

In *Markman* the en banc court took the position that in patent cases, unlike any other area of law, a disputed question of the meaning, scope, and usage of terms of technologic art is not a question of fact, or even of law based on underlying fact, but is pure law. However, the Supreme Court has relieved us of adherence to this fiction, by its recognition of the factual component of claim interpretation. Further, the Court’s affirmation that claim interpretation “is exclusively within the province of the court,” 517 U.S. at 371–73, did not shut out the trial judge along with the jury. In declining to affirm the Federal Circuit’s fact/law theory, the Court opened the door for retreat from this artificial construct. I urge us to do so, for experience shows that unforeseen and undesired consequences are flowing from its rigidity. Now that this fact/law rigor is no longer necessary for constitutional combat, let us review these consequences and accept this invitation to advance our procedures.

For example, in *Markman* the Federal Circuit stated that it is not a finding when one side’s evidence is accepted and the other side’s evidence is rejected. 52 F.3d at 981. Since accepting one side’s evidence and rejecting the other’s based on an assessment of validity would be a finding, some other criterion must be the basis for the choice. The court has never stated what this criterion could be, except that accepted evidence should be “helpful,” an answer that begs the question.

A fresh view of fact and law would also ameliorate the constraints we have placed on the presentation of extrinsic evidence on the issue of claim interpretation. Patent litigation now often starts with a preliminary hearing to interpret the disputed claim terms, and often produces an early summary judgment, a path perhaps fostered by our foreclosure of the certified question. This preliminary ruling can be dispositive of the dispute, for the scope of the claim often decides whether there can be literal infringement. Thus I add to my concerns the position of the Federal Circuit, here reaffirmed, that extrinsic evidence is of strictly limited availability in claim interpretation. Such evidence should be encouraged, not restrained, if summary disposition is at hand.

The value of extrinsic evidence in claim interpretation is not surprising, because patent documents are written by and for persons in the field of the invention, not for judges. Judges not only need a larger understanding of the science or technology, but we also need help with understanding how the particular terms as used in the patent are viewed by persons in the field of the invention. As Judge Schwarzer observed:

The context in which [issues of science and technology] arise varies widely, but generally they share one characteristic. They challenge the ability of judges and juries to comprehend the issues—and the evidence—and to deal with them in informed and effective ways. As a result, they tend to complicate the litigation, increase expense and delay, and jeopardize the quality of judicial and jury decision making.

Federal Judicial Center, *Reference Manual on Scientific Evidence* 1 (1994). The Federal Circuit’s ruling that extrinsic evidence must be restricted unless there is a facial ambiguity in the

meaning of the claim is an unnecessary restraint on potentially useful evidence. See *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579, 588 (1993) (“If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert . . . may testify thereto in the form of an opinion or otherwise.”) (quoting Fed. R. Evid. 702).

Of course the primary source of information concerning the claimed invention is the patent documents. But such documents are directed to persons knowledgeable in the field; additional evidence and expert testimony as to their meaning should be the rule, not the exception. So-called “extrinsic” evidence—the evidence of expert witnesses and of experimentation, exhibits, demonstrations, and explanation—should be treated like any other evidence, and received and given weight and value as appropriate. Our broad constraint on resort to such evidence is an unnecessary bar to enlightenment. It is also an incursion into the authority of the trial court. See *General Electric Co. v. Joiner*, 522 U.S. 136, —, 118 S.Ct. 512, 515 (1997) (decision of trial court to admit or exclude expert testimony is reviewed on abuse of discretion standard).

The real issue with respect to such evidence is not the threshold question of admissibility, as this court appears to hold, but of weight, upon examination of the evidence and in conjunction with the other evidence. These too are matters for the trial judge, and when the threshold criteria of relevance and reliability are met, see *Daubert*, the evidence should be received and considered as appropriate to its credibility and weight. It follows that the trial court’s factual findings with respect to evidence relevant to claim interpretation should be treated, on appeal, like any other finding of the trial court.

Thus it is quite discouraging to observe this en banc ruling wherein the Federal Circuit prohibits itself from considering the findings of fact made by the trial court. The majority opinion disavows this court’s prior statement that “[t]he

district court’s findings of scientific/technological fact were material to the issue of construction of the term.” This disavowal deprives the court, and the parties, of the accumulated progress and experience of the trial, including the findings of the trial judge, and leaves us on appeal with an expurgated record and generally inferior basis of decision. Recognizing that our appellate role is to decide whether the claims were correctly interpreted in light of all of the evidence, it is mysterious why we choose to self-censor what we will consider on appeal. It is equally obscure why this court would prohibit itself from relying on a trial court’s findings, or from choosing between disputed expert positions. I strongly disagree with the majority’s view of the role of extrinsic evidence, at trial and as considered on appeal.

In contrast, a return to the traditional trial/appellate relationship would achieve several important results. It would rationalize the admissibility of relevant extrinsic evidence, appellate deference would be restored instead of disavowed, and appellate review would be in accordance with the rules. The processes of both trial and appeal would benefit. This is particularly important because the evidence involved in claim interpretation, whether intrinsic or extrinsic, is often scientific or technologic. The evidence of what the invention is, how it works, what the technical words meant to persons in the field at some past time, can be of extreme complexity. When there is a dispute as to what a term of technical art or usage means or encompasses, such evidence is relevant and often is indispensable. Why would our court foreclose, or place obstacles in the path of, adducing and considering such evidence?

Surely the better view is to encourage judicial access to scientific evidence and findings based thereon. The ultimate beneficiary would be the parties, for the courts would be less restricted in the search for the correct and just result in patent cases. Thus I must, respectfully, dissent from the court’s rulings on these issues.

Rockwell Graphic Systems, Inc. v. DEV Industries, Inc.,
925 F.2d 174 (7th Cir. 1991).

POSNER, Circuit Judge.

This is a suit for misappropriation of trade secrets. Rockwell Graphic Systems, a manufacturer of printing presses used by newspapers, and of parts for those presses, brought the suit against DEV Industries, a competing manufacturer, and against the president of DEV, who used to be employed by Rockwell. The case is in federal court by virtue of the RICO ("Racketeer Influenced and Corrupt Organizations") statute, 18 U.S.C. §§ 1961 *et seq.* The predicate acts required for liability under RICO are acts of misappropriation (and related misconduct, such as alleged breaches of fiduciary duty) committed by the individual defendant, Fleck, and by another former employee of Rockwell and present employee of DEV, Peloso. These acts are alleged to violate Illinois law, and in pendent counts Rockwell seeks to impose liability for them directly under that law as well as indirectly under RICO. The district judge granted summary judgment for the defendants upon the recommendation of a magistrate who concluded that Rockwell had no trade secrets because it had failed to take reasonable precautions to maintain secrecy. Therefore there had been no misappropriation, which in turn was the foundation for the predicate acts; so the RICO count had to be dismissed. With the federal claim out of the case, the district judge relinquished jurisdiction over the pendent counts, resulting in a dismissal of the entire case. 730 F. Supp. 171 (N.D. Ill. 1990).

When we said that Rockwell manufactures both printing presses and replacement parts for its presses—"wear parts" or "piece parts," they are called—we were speaking approximately. Rockwell does not always manufacture the parts itself. Sometimes when an owner of one of Rockwell's presses needs a particular part, or when Rockwell anticipates demand for the part, it will subcontract the manufacture of it to an independent machine shop, called a "vendor" by the parties. When it does this it must give the vendor a "piece part drawing" indicating materials, dimensions, tolerances, and methods of manufacture. Without that information the vendor could not manufacture the part. Rockwell has not tried to patent the piece parts. It believes that the pur-

chaser cannot, either by inspection or by "reverse engineering" (taking something apart in an effort to figure out how it was made), discover how to manufacture the part; to do that you need the piece part drawing, which contains much information concerning methods of manufacture, alloys, tolerances, etc. that cannot be gleaned from the part itself. So Rockwell tries—whether hard enough is the central issue in the case—to keep the piece part drawings secret, though not of course from the vendors; they could not manufacture the parts for Rockwell without the drawings. DEV points out that some of the parts are for presses that Rockwell no longer manufactures. But as long as the presses are in service—which can be a very long time—there is a demand for replacement parts.

Rockwell employed Fleck and Peloso in responsible positions that gave them access to piece part drawings. Fleck left Rockwell in 1975 and three years later joined DEV as its president. Peloso joined DEV the following year after being fired by Rockwell when a security guard caught him removing piece part drawings from Rockwell's plant. This suit was brought in 1984, and pre-trial discovery by Rockwell turned up 600 piece part drawings in DEV's possession, of which 100 were Rockwell's. DEV claimed to have obtained them lawfully, either from customers of Rockwell or from Rockwell vendors, contrary to Rockwell's claim that either Fleck and Peloso stole them when they were employed by it or DEV obtained them in some other unlawful manner, perhaps from a vendor who violated his confidentiality agreement with Rockwell. Thus far in the litigation DEV has not been able to show which customers or vendors lawfully supplied it with Rockwell's piece part drawings.

The defendants persuaded the magistrate and the district judge that the piece part drawings weren't really trade secrets at all, because Rockwell made only perfunctory efforts to keep them secret. Not only were there thousands of drawings in the hands of the vendors; there were thousands more in the hands of owners of Rockwell presses, the customers for piece parts. The drawings held by customers, however, are not relevant. They are not piece part drawings, but as-

sembly drawings. (One piece part drawing in the record is labeled “assembly,” but as it contains dimensions, tolerances, and other specifications it is really a piece part drawing, despite the label.) An assembly drawing shows how the parts of a printing press fit together for installation and also how to integrate the press with the printer’s other equipment. Whenever Rockwell sells a printing press it gives the buyer assembly drawings as well. These are the equivalent of instructions for assembling a piece of furniture. Rockwell does not claim that they contain trade secrets. It admits having supplied a few piece part drawings to customers, but they were piece part drawings of obsolete parts that Rockwell has no interest in manufacturing and of a safety device that was not part of the press as originally delivered but that its customers were clamoring for; more to the point, none of these drawings is among those that Rockwell claims DEV misappropriated.

The distinction between assembly and piece part drawings is not esoteric. *A.H. Emery Co. v. Marcan Products Corp.*, 268 F. Supp. 289, 300 (S.D.N.Y. 1967), *aff’d*, 389 F.2d 11, 16 (2d Cir. 1968), marks it, and along with other cases declares—what is anyway obvious—that a firm’s act in making public some of its documents (or part of a document) does not destroy the status as trade secrets of information contained in other documents (or another part of the same document). *Alexander & Alexander, Inc. v. Drayton*, 378 F. Supp. 824, 833 (E.D. Pa. 1974), *aff’d without opinion*, 505 F.2d 729 (3d Cir. 1974); *Ecolaire Inc. v. Crissman*, 542 F. Supp. 196, 206 (E.D. Pa. 1982); *Laser Industries, Ltd. v. Eder Instrument Co.*, 573 F. Supp. 987, 991 (N.D. Ill. 1983). It is immaterial that Rockwell affixed the same legend enjoining the user to confidentiality to its assembly drawings as it did to its piece part drawings. Perhaps thinking of the doctrine of patent misuse (on which see *USM Corp. v. SPS Technologies, Inc.*, 694 F.2d 505, 510–12 (7th Cir. 1982), and cases cited there), DEV suggests that if a firm claims trade secret protection for information that is not really secret, the firm forfeits trade secret protection of information that is secret. There is no such doctrine—even the patent misuse doctrine does not decree forfeiture of the patent as the sanction for misuse—and it would make no sense. This is not only because

there are any number of innocent explanations for Rockwell’s action in “overclaiming” trade secret protection (if that is what it was doing)—such as an excess of caution, uncertainty as to the scope of trade secret protection, concern that clerical personnel will not always be able to distinguish between assembly and piece part drawings at a glance, and the sheer economy of a uniform policy—but also because it would place the owner of trade secrets on the razor’s edge. If he stamped “confidential” on every document in sight, he would run afoul of what we are calling (without endorsing) the misuse doctrine. But if he did not stamp confidential on every document he would lay himself open to an accusation that he was sloppy about maintaining secrecy—and in fact DEV’s main argument is that Rockwell *was* impermissibly sloppy in its efforts to keep the piece part drawings secret.

On this, the critical, issue, the record shows the following. (Because summary judgment was granted to DEV, we must construe the facts as favorably to Rockwell as is reasonable to do.) Rockwell keeps all its engineering drawings, including both piece part and assembly drawings, in a vault. Access not only to the vault, but also to the building in which it is located, is limited to authorized employees who display identification. These are mainly engineers, of whom Rockwell employs 200. They are required to sign agreements not to disseminate the drawings, or disclose their contents, other than as authorized by the company. An authorized employee who needs a drawing must sign it out from the vault and return it when he has finished with it. But he is permitted to make copies, which he is to destroy when he no longer needs them in his work. The only outsiders allowed to see piece part drawings are the vendors (who are given copies, not originals). They too are required to sign confidentiality agreements, and in addition each drawing is stamped with a legend stating that it contains proprietary material. Vendors, like Rockwell’s own engineers, are allowed to make copies for internal working purposes, and although the confidentiality agreement that they sign requires the vendor to return the drawing when the order has been filled, Rockwell does not enforce this requirement. The rationale for not enforcing it is that the vendor will need the drawing if Rockwell reorders the part. Rockwell even permits unsuc-

cessful bidders for a piece part contract to keep the drawings, on the theory that the high bidder this round may be the low bidder the next. But it does consider the ethical standards of a machine shop before making it a vendor, and so far as appears no shop has ever abused the confidence reposed in it.

The mere fact that Rockwell gave piece part drawings to vendors—that is, disclosed its trade secrets to “a limited number of outsiders for a particular purpose”—did not forfeit trade secret protection. *A.H. Emery Co. v. Marcan Products Corp.*, 389 F.2d 11, 16 (2d Cir. 1968). On the contrary, such disclosure, which is often necessary to the efficient exploitation of a trade secret, imposes a duty of confidentiality on the part of the person to whom the disclosure is made. *Jones v. Ulrich*, 95 N.E.2d 113, 117 (Ill. App. 1950); *Crocac Corp. v. Sheller-Globe Corp.*, 385 F. Supp. 251, 253 (N.D. Ill. 1974). But with 200 engineers checking out piece part drawings and making copies of them to work from, and numerous vendors receiving copies of piece part drawings and copying them, tens of thousands of copies of these drawings are floating around outside Rockwell’s vault, and many of these outside the company altogether. Although the magistrate and the district judge based their conclusion that Rockwell had not made adequate efforts to maintain secrecy in part at least on the irrelevant fact that it took no measures at all to keep its assembly drawings secret, DEV in defending the judgment that it obtained in the district court argues that Rockwell failed to take adequate measures to keep even the piece part drawings secret. Not only did Rockwell not limit copying of those drawings or insist that copies be returned; it did not segregate the piece part drawings from the assembly drawings and institute more secure procedures for the former. So Rockwell could have done more to maintain the confidentiality of its piece part drawings than it did, and we must decide whether its failure to do more was so plain a breach of the obligation of a trade secret owner to make reasonable efforts to maintain secrecy as to justify the entry of summary judgment for the defendants.

The requirement of reasonable efforts has both evidentiary and remedial significance, and this regardless of which of the two different conceptions of trade secret protection prevails. (Both

conceptions have footholds in Illinois law, as we shall see.) The first and more common merely gives a remedy to a firm deprived of a competitively valuable secret as the result of an independent legal wrong, which might be conversion or other trespass or the breach of an employment contract or of a confidentiality agreement. Under this approach, because the secret must be taken by improper means for the taking to give rise to liability, Ill. Rev. Stat. ch. 140, ¶¶ 352(a), (b)(1), (2)(A), (B); Restatement of Torts § 757 (1939); *ILG Industries, Inc. v. Scott*, 273 N.E.2d 393, 396 (Ill. 1971); *Brunswick Corp. v. Outboard Marine Corp.*, 404 N.E.2d 205, 207 (Ill. 1980), the only significance of trade secrecy is that it allows the victim of wrongful appropriation to obtain damages based on the competitive value of the information taken. The second conception of trade secrecy, illustrated by *E.I. duPont de Nemours & Co. v. Christopher*, 431 F.2d 1012 (5th Cir. 1970), and in Illinois by Ill. Rev. Stat. ch. 140, ¶ 352(b)(2)(C), and *Schulenburg v. Signalrol, Inc.*, 212 N.E.2d 865, 869 (Ill. 1965), is that “trade secret” picks out a class of socially valuable information that the law should protect even against nontrespassory or other lawful conduct—in *Christopher*, photographing a competitor’s roofless plant from the air while not flying directly overhead and hence not trespassing or committing any other wrong independent of the appropriation of the trade secret itself. See also *Brunswick Corp. v. Outboard Marine Corp.*, *supra*, 404 N.E.2d at 207; Restatement, *supra*, § 758(b).

Since, however, the opinion in *Christopher* describes the means used by the defendant as “improper,” 431 F.2d at 1015–17, which is also the key to liability under the first, more conventional conception of trade secret protection, it is unclear how distinct the two conceptions really are. It is not as if *Christopher* proscribes *all* efforts to unmask a trade secret. It specifically mentions reverse engineering as a proper means of doing so. *Id.* at 1015. This difference in treatment is not explained, but it may rest on the twofold idea that reverse engineering involves the use of technical skills that we want to encourage, and that anyone should have the right to take apart and to study a product that he has bought.

It should be apparent that the two different conceptions of trade secret protection are

better described as different emphases. The first emphasizes the desirability of deterring efforts that have as their sole purpose and effect the redistribution of wealth from one firm to another. The second emphasizes the desirability of encouraging inventive activity by protecting its fruits from efforts at appropriation that are, indeed, sterile wealth-redistributive—not productive—activities. The approaches differ, if at all, only in that the second does not limit the class of improper means to those that fit a pre-existing pigeonhole in the law of tort or contract or fiduciary duty—and it is by no means clear that the first approach assumes a closed class of wrongful acts, either.

Under the first approach, at least if narrowly interpreted so that it does not merge with the second, the plaintiff must prove that the defendant obtained the plaintiff's trade secret by a wrongful act, illustrated here by the alleged acts of Fleck and Peloso in removing piece part drawings from Rockwell's premises without authorization, in violation of their employment contracts and confidentiality agreements, and using them in competition with Rockwell. Rockwell is unable to prove directly that the 100 piece part drawings it got from DEV in discovery were stolen by Fleck and Peloso or obtained by other improper means. But if it can show that the probability that DEV could have obtained them otherwise—that is, without engaging in wrongdoing—is slight, then it will have taken a giant step toward proving what it must prove in order to recover under the first theory of trade secret protection. The greater the precautions that Rockwell took to maintain the secrecy of the piece part drawings, the lower the probability that DEV obtained them properly and the higher the probability that it obtained them through a wrongful act; the owner had taken pains to prevent them from being obtained otherwise.

Under the second theory of trade secret protection, the owner's precautions still have evidentiary significance, but now primarily as evidence that the secret has real value. For the precise means by which the defendant acquired it is less important under the second theory, though not completely unimportant; remember that even the second theory allows the unmasking of a trade secret by *some* means, such as reverse engineering. If Rockwell expended only paltry resources

on preventing its piece part drawings from falling into the hands of competitors such as DEV, why should the law, whose machinery is far from costless, bother to provide Rockwell with a remedy? The information contained in the drawings cannot have been worth much if Rockwell did not think it worthwhile to make serious efforts to keep the information secret.

The remedial significance of such efforts lies in the fact that if the plaintiff has allowed his trade secret to fall into the public domain, he would enjoy a windfall if permitted to recover damages merely because the defendant took the secret from him, rather than from the public domain as it could have done with impunity. *Brunswick Corp. v. Outboard Marine Corp.*, *supra*, 404 N.E.2d at 207; *Van Products Co. v. General Welding & Fabricating Co.*, 213 A.2d 769, 779–80 (Pa. 1965) (repudiating the interpretation of Pennsylvania law that this court had adopted in *Smith v. Dravo Corp.*, 203 F.2d 369, 374–75 (7th Cir. 1953)). It would be like punishing a person for stealing property that he believes is owned by another but that actually is abandoned property. If it were true, as apparently it is not, that Rockwell had given the piece part drawings at issue to customers, and it had done so without requiring the customers to hold them in confidence, DEV could have obtained the drawings from the customers without committing any wrong. The harm to Rockwell would have been the same as if DEV had stolen the drawings from it, but it would have had no remedy, having parted with its rights to the trade secret. This is true whether the trade secret is regarded as property protected only against wrongdoers or (the logical extreme of the second conception, although no cases—not even *Christopher*—has yet embraced it and the patent statute might preempt it) as property protected against the world. In the first case, a defendant is perfectly entitled to obtain the property by lawful conduct if he can, and he can if the property is in the hands of persons who themselves committed no wrong to get it. In the second case the defendant is perfectly entitled to obtain the property if the plaintiff has abandoned it by giving it away without restrictions.

It is easy to understand therefore why the law of trade secrets requires a plaintiff to show that he took reasonable precautions to keep the secret a secret. If analogies are needed, one that

springs to mind is the duty of the holder of a trademark to take reasonable efforts to police infringements of his mark, failing which the mark is likely to be deemed abandoned, or to become generic or descriptive (and in either event be unprotectable). 1 McCarthy, Trademarks and Unfair Competition § 17:50, at pp. 778–80 (2d ed. 1984). The trademark owner who fails to police his mark both shows that he doesn't really value it very much and creates a situation in which an infringer may have been unaware that he was using a proprietary mark because the mark had drifted into the public domain, much as DEV contends Rockwell's piece part drawings have done.

But only in an extreme case can what is a "reasonable" precaution be determined on a motion for summary judgment, because the answer depends on a balancing of costs and benefits that will vary from case to case and so require estimation and measurement by persons knowledgeable in the particular field of endeavor involved. On the one hand, the more the owner of the trade secret spends on preventing the secret from leaking out, the more he demonstrates that the secret has real value deserving of legal protection, that he really was hurt as a result of the misappropriation of it, and that there really *was* misappropriation. On the other hand, the more he spends, the higher his costs. The costs can be indirect as well as direct. The more Rockwell restricts access to its drawings, either by its engineers or by the vendors, the harder it will be for either group to do the work expected of it. Suppose Rockwell forbids *any* copying of its drawings. Then a team of engineers would have to share a single drawing, perhaps by passing it around or by working in the same room, huddled over the drawing. And how would a vendor be able to make a piece part—would Rockwell have to bring all that work in house? Such reconfigurations of patterns of work and production are far from costless; and therefore perfect security is not optimum security.

There are contested factual issues here, bearing in mind that what is reasonable is itself a fact for purposes of Rule 56 of the civil rules. *Cooter & Gell v. Hartmarx Corp.*, 496 U.S. 384 (1990); *Mucha v. King*, 792 F.2d 602, 605 (7th Cir. 1986); *Nunez v. Superior Oil Co.*, 572 F.2d

1119, 1126 (5th Cir. 1978). Obviously Rockwell took some precautions, both physical (the vault security, the security guards—one of whom apprehended Peloso *in flagrante delicto*) and contractual, to maintain the confidentiality of its piece part drawings. Obviously it could have taken more precautions. But at a cost, and the question is whether the additional benefit in security would have exceeded that cost. We do not suggest that the question can be answered with the same precision with which it can be posed, but neither can we say that no reasonable jury could find that Rockwell had done enough and could then go on to infer misappropriation from a combination of the precautions Rockwell took and DEV's inability to establish the existence of a lawful source of the Rockwell piece part drawings in its possession.

This is an important case because trade secret protection is an important part of intellectual property, a form of property that is of growing importance to the competitiveness of American industry. Patent protection is at once costly and temporary, and therefore cannot be regarded as a perfect substitute. If trade secrets are protected only if their owners take extravagant, productivity-impairing measures to maintain their secrecy, the incentive to invest resources in discovering more efficient methods of production will be reduced, and with it the amount of invention. And given the importance of the case we must record our concern at the brevity of the district court's opinion granting summary judgment (one and a half printed pages). Brevity is the soul of wit, and all that, and the district judge did have the benefit of a magistrate's opinion; but it is vital that commercial litigation not appear to be treated as a stepchild in the federal courts. The future of the nation depends in no small part on the efficiency of industry, and the efficiency of industry depends in no small part on the protection of intellectual property.

The judgment is reversed and the case remanded to the district court for further proceedings consistent with this opinion (including reinstatement of the pendent counts).
REVERSED AND REMANDED.

**Kewanee Oil Co. v. Bicron Corp.,
416 U.S. 470 (1974) (excerpt).**

Mr. Chief Justice BURGER delivered the opinion of the Court.

We granted certiorari to resolve a question on which there is a conflict in the courts of appeals: whether state trade secret protection is pre-empted by operation of the federal patent law. In the instant case the Court of Appeals for the Sixth Circuit held that there was pre-emption. The Courts of Appeals for the Second, Fourth, Fifth and Ninth Circuits have reached the opposite conclusion.

I

Harshaw Chemical Co., an unincorporated division of petitioner, is a leading manufacturer of a type of synthetic crystal which is useful in the detection of ionizing radiation. In 1949 Harshaw commenced research into the growth of this type crystal and was able to produce one less than two inches in diameter. By 1966, as the result of expenditures in excess of \$1 million, Harshaw was able to grow a 17-inch crystal, something no one else had done previously. Harshaw had developed many processes, procedures, and manufacturing techniques in the purification of raw materials and the growth and encapsulation of the crystals which enabled it to accomplish this feat. Some of these processes Harshaw considers to be trade secrets.

The individual respondents former employees of Harshaw who formed or later joined respondent Bicron. While at Harshaw the individual respondents executed, as a condition of employment, at least one agreement each, requiring them not to disclose confidential information or trade secrets obtained as employees of Harshaw. Bicron was formed in August 1969 to compete with Harshaw in the production of the crystals, and by April 1970, had grown a 17-inch crystal.

Petitioner brought this diversity action in United States District Court for the Northern District of Ohio seeking injunctive relief and damages for the misappropriation of trade secrets. The District Court, applying Ohio trade secret law, granted a permanent injunction against the disclosure or use by respondents of 20 of the 40 claimed trade secrets until such time as the trade secrets had been released to the public, had otherwise generally become available to the pub-

lic, or had been obtained by respondents from sources having the legal right to convey the information.

The Court of Appeals for the Sixth Circuit held that the findings of fact by the District Court were not clearly erroneous, and that it was evident from the record that the individual Respondents appropriated to the benefit of Bicron secret information on processes obtained while they were employees at Harshaw. Further, the Court of Appeals held that the District Court properly applied Ohio law relating to trade secrets. Nevertheless, the Court of Appeals reversed the District Court, finding Ohio's trade secret law to be in conflict with the patent laws of the United States. The Court of Appeals reasoned that Ohio could not grant monopoly protection to processes and manufacturing techniques that were appropriate subjects for consideration under 35 U.S.C. § 101 for a federal patent but which had been in commercial use for over one year and so were no longer eligible for patent protection under 35 U.S.C. § 102(b).

We hold that Ohio's law of trade secrets is not preempted by the patent laws of the United States, and, accordingly, we reverse.

* * * * *

IV

The question of whether the trade secret law of Ohio is void under the Supremacy Clause involves a consideration of whether that law "stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress." *Hines v. Davidowitz*, 312 U.S. 52, 67 (1941). See *Florida Lime & Avocado Growers, Inc. v. Paul*, 373 U.S. 132, 141 (1963). We stated in *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225, 229 (1964), that when state law touches upon the area of federal statutes enacted pursuant to constitutional authority, "it is 'familiar doctrine' that the federal policy 'may not be set at naught, or its benefits denied' by the state law. *Sola Elec. Co. v. Jefferson Elec. Co.*, 317 U.S. 172, 173 (1942). This is true, of course, even if the state law is enacted in the exercise of otherwise undoubted state power."

The laws which the Court of Appeals in this case held to be in conflict with the Ohio law of

trade secrets were the patent laws passed by the Congress in the unchallenged exercise of its clear power under Art. I, § 8, cl. 8, of the Constitution. The patent law does not explicitly endorse or forbid the operation of trade secret law. However, as we have noted, if the scheme of protection developed by Ohio respecting trade secrets “clashes with the objectives of the federal patent laws,” *Sears, Roebuck & Co. v. Stiffel Co.*, *supra*, 376 U.S., at 231, then the state law must fall. To determine whether the Ohio law “clashes” with the federal law it is helpful to examine the objectives of both the patent and trade secret laws.

The stated objective of the Constitution in granting the power to Congress to legislate in the area of intellectual property is to “promote the Progress of Science and useful Arts.” The patent laws promote this progress by offering a right of exclusion for a limited period as an incentive to inventors to risk the often enormous costs in terms of time, research, and development. The productive effort thereby fostered will have a positive effect on society through the introduction of new products and processes of manufacture into the economy, and the emanations by way of increased employment and better lives for our citizens. In return for the right of exclusion—this “reward for inventions,” *Universal Oil Co. v. Globe Co.*, 322 U.S. 471, 484 (1944)—the patent laws impose upon the inventor a requirement of disclosure. To insure adequate and full disclosure so that upon the expiration of the 17-year period “the knowledge of the invention enures to the people, who are thus enabled without restriction to practice it and profit by its use,” *United States v. Dubilier Condenser Corp.*, 289 U.S. 178, 187 (1933), the patent laws require that the patent application shall include a full and clear description of the invention and “of the manner and process of making and using it” so that any person skilled in the art may make and use the invention. When a patent is granted and the information contained in it is circulated to the general public and those especially skilled in the trade, such additions to the general store of knowledge are of such importance to the public weal that the Federal Government is willing to pay the high price of 17 years of exclusive use for its disclosure, which disclosure, it is assumed, will stimulate ideas and the eventual development of further significant advances in the

art. The Court has also articulated another policy of the patent law: that which is in the public domain cannot be removed therefrom by action of the States.

“(F)ederal laws requires that all ideas in general circulation be dedicated to the common good unless they are protected by a valid patent.” *Lear, Inc. v. Adkins*, 395 U.S., at 668.

See also Goldstein v. California, 412 U.S., at 570–571; *Sears, Roebuck & Co. v. Stiffel Co.*, *supra*; *Compco Corp. v. Day-Brite Lighting, Inc.*, 376 U.S. 234, 237–238 (1964); *International News Service v. Associated Press*, 248 U.S. 215, 250 (1918) (Brandeis, J., dissenting).

The maintenance of standards of commercial ethics and the encouragement of invention are the broadly stated policies behind trade secret law. “The necessity of good faith and honest, fair dealing, is the very life and spirit of the commercial world.” *National Tube Co. v. Eastern Tube Co.*, 3 Ohio C.C. (n.s.) 462. In *A.O. Smith Corp. v. Petroleum Iron Works Co.*, 73 F.2d, at 539, the Court emphasized that even though a discovery may not be patentable, that does not

“destroy the value of the discovery to one who makes it, or advantage the competitor who by unfair means, or as the beneficiary of a broken faith, obtains the desired knowledge without himself paying the price in labor, money, or machines expended by the discover.”

In *Wexler v. Greenberg*, 160 A.2d 430, 434–435 (Pa. 1960), the Pennsylvania Supreme Court noted the importance of trade secret protection to the subsidization of research and development and to increased economic efficiency within large companies through the dispersion of responsibilities for creative developments.

Having now in mind the objectives of both the patent and trade secret law, we turn to an examination of the interaction of these systems of protection of intellectual property—one established by the Congress and the other by a State—to determine whether and under what circumstances the latter might constitute “too great an encroachment on the federal patent system to be

tolerated.” *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S., at 232.

As we noted earlier, trade secret law protects items which would not be proper subjects for consideration for patent protection under 35 U.S.C. § 101. As in the case of the recordings in *Goldstein v. California*, Congress, with respect to non-patentable subject matter, “has drawn no balance; rather, it has left the area unattended, and no reason exists why the State should not be free to act.” *Goldstein v. California*, *supra*, 412 U.S., at 570 (footnote omitted).

Since no patent is available for a discovery, however useful, novel, and nonobvious, unless it falls within one of the express categories of patentable subject matter of 35 U.S.C. § 101, the holder of such a discovery would have no reason to apply for a patent whether trade secret protection existed or not. Abolition of trade secret protection would, therefore, not result in increased disclosure to the public of discoveries in the area of nonpatentable subject matter. Also, it is hard to see how the public would be benefited by disclosure of customer lists or advertising campaigns; in fact, keeping such items secret encourages businesses to initiate new and individualized plans of operation, and constructive competition results. This, in turn, leads to a greater variety of business methods than would otherwise be the case if privately developed marketing and other data were passed illicitly among firms involved in the same enterprise.

Congress has spoken in the area of those discoveries which fall within one of the categories of patentable subject matter of 35 U.S.C. § 101 and which are, therefore, of a nature that would be subject to consideration for a patent. Processes, machines, manufactures, compositions of matter and improvements thereof, which meet the tests of utility, novelty, and nonobviousness are entitled to be patented, but those which do not, are not. The question remains whether those items which are proper subjects for consideration for a patent may also have available the alternative protection accorded by trade secret law.

Certainly the patent policy of encouraging invention is not disturbed by the existence of another form of incentive to invention. In this re-

spect the two systems are not and never would be in conflict. Similarly, the policy that matter once in the public domain must remain in the public domain is not incompatible with the existence of trade secret protection. By definition a trade secret has not been placed in the public domain.¹³

The more difficult objective of the patent law to reconcile with trade secret law is that of disclosure, the *quid pro quo* of the right to exclude. *Universal Oil Co. v. Globe Co.*, 322 U.S., at 484. We are helped in this stage of the analysis by Judge Henry Friendly’s opinion in *Painton & Co. v. Bourns, Inc.*, 442 F.2d 216 (CA2 1971). There the Court of Appeals thought it useful, in determining whether inventors will refrain because of the existence of trade secret law from applying for patents, thereby depriving the public from learning of the invention, to distinguish between three categories of trade secrets:

“(1) the trade secret believed by its owner to constitute a validly patentable invention; (2) the trade secret known to its owner not to be so patentable; and (3) the trade secret whose valid patentability is considered dubious.” *Id.*, at 224.

Trade secret protection in each of these categories would run against breaches of confidence—the employee and licensee situations—and theft and other forms of industrial espionage.

As to the trade secret known not to meet the standards of patentability, very little in the way of disclosure would be accomplished by abolishing trade secret protection. With trade secrets of nonpatentable subject matter, the patent alternative would not reasonably be available to the inventor. “There can be no public interest in stimulating developers of such [unpatentable] knowhow to flood an overburdened Patent Office with applications [for] what they do not consider patentable.” *Ibid.* The mere filing of applications doomed to be turned down by the Patent Office will bring forth no new public knowledge or enlightenment, since under federal statute and regulation patent applications and abandoned patent applications are held by the Patent Office

¹³An invention may be placed “in public use or on sale” within the meaning of 35 U.S.C. § 102(b) without losing its secret character. *Painton & Co. v. Bourns, Inc.*, 442 F.2d, at 224 n.6; *Metallizing Engineering Co. v. Kenyon Bearing & Auto Parts Co.*, 153 F.2d 516, 520 (CA2), *cert. denied*, 328 U.S. 840 (1946).

in confidence and are not open to public inspection. 35 U.S.C. § 122; 37 CFR § 1.14(b).

Even as the extension of trade secret protection to patentable subject matter that the owner knows will not meet the standards of patentability will not conflict with the patent policy of disclosure, it will have a decidedly beneficial effect on society. Trade secret law will encourage invention in areas where patent law does not reach, and will prompt the independent innovator to proceed with the discovery and exploitation of his invention. Competition is fostered and the public is not deprived of the use of valuable, if not quite patentable, invention.

Even if trade secret protection against the faithless employee were abolished, inventive and exploitive effort in the area of patentable subject matter that did not meet the standards of patentability would continue, although at a reduced level. Alternatively with the effort that remained, however, would come an increase in the amount of self-help that innovative companies would employ. Knowledge would be widely dispersed among the employees of those still active in research. Security precautions necessarily would be increased, and salaries and fringe benefits of those few officers or employees who had to know the whole of the secret invention would be fixed in an amount thought sufficient to assure their loyalty. Smaller companies would be placed at a distinct economic disadvantage, since the costs of this kind of self-help could be great, and the cost to the public of the use of this invention would be increased. The innovative entrepreneur with limited resources would tend to confine his research efforts to himself and those few he felt he could trust without the ultimate assurance of legal protection against breaches of confidence. As a result, organized scientific and technological research could become fragmented, and society, as a whole, would suffer.

Another problem that would arise if state trade secret protection were precluded is in the area of licensing others to exploit secret processes. The holder of a trade secret would not likely share his secret with a manufacturer who cannot be placed under binding legal obligation to pay a license fee or to protect the secret. The result would be to hoard rather than disseminate knowledge. *Painton & Co. v. Bourns, Inc.*, 442 F.2d, at 223. Instead, then, of licensing others

to use his invention and making the most efficient use of existing manufacturing and marketing structures within the industry, the trade secret holder would tend either to limit his utilization of the invention, thereby depriving the public of the maximum benefit of its use, or engage in the time-consuming and economically wasteful enterprise of constructing duplicative manufacturing and marketing mechanisms for the exploitation of the invention. The detrimental misallocation of resources and economic waste that would thus take place if trade secret protection were abolished with respect to employees or licensees cannot be justified by reference to any policy that the federal patent law seeks to advance.

Nothing in the patent law requires that States refrain from action to prevent industrial espionage. In addition to the increased costs for protection from burglary, wire-tapping, bribery, and the other means used to misappropriate trade secrets, there is the inevitable cost to the basic decency of society when one firm steals from another. A most fundamental human right, that of privacy, is threatened when industrial espionage is condoned or is made profitable; the state interest in denying profit to such illegal ventures is unchallengeable.

The next category of patentable subject matter to deal with is the invention whose holder has a legitimate doubt as to its patentability. The risk of eventual patent invalidity by the courts and the costs associated with that risk may well impel some with a good-faith doubt as to patentability not to take the trouble to seek to obtain and defend patent protection for their discoveries, regardless of the existence of trade secret protection. Trade secret protection would assist those inventors in the more efficient exploitation of their discoveries and not conflict with the patent law. In most cases of genuine doubt as to patent validity the potential rewards of patent protection are so far superior to those accruing to holders of trade secrets, that the holders of such inventions will seek patent protection, ignoring the trade secret route. For those inventors "on the line" as to whether to seek patent protection, the abolition of trade secret protection might encourage some to apply for a patent who otherwise would not have done so. For some of those so encouraged, no patent will be granted and the

result

“will have been an unnecessary postponement in the divulging of the trade secret to persons willing to pay for it. If (the patent does issue), it may well be invalid, yet many will prefer to pay a modest royalty than to contest it, even though *Lear* allows them to accept a license and pursue the contest without paying royalties while the fight goes on. The result in such a case would be unjustified royalty payments from many who would prefer not to pay them rather than agreed fees from one or a few who are entirely willing to do so.” *Painton & Co. v. Bourns, Inc.*, 442 F.2d, at 225.

The point is that those who might be encouraged to file for patents by the absence of trade secret law will include inventors possessing the chaff as well as the wheat. Some of the chaff—the non-patentable discoveries—will be thrown out by the Patent Office, but in the meantime society will have been deprived of use of those discoveries through trade secret-protected licensing. Some of the chaff may not be thrown out. This Court has noted the difference between the standards used by the Patent Office and the courts to determine patentability. *Graham v. John Deere Co.*, 383 U.S. 1, 18 (1966). In *Lear, Inc. v. Adkins*, 395 U.S. 653 (1969), the Court thought that an invalid patent was so serious a threat to the free use of ideas already in the public domain that the Court permitted licensees of the patent holder to challenge the validity of the patent. Better had the invalid patent never issued. More of those patents would likely issue if trade secret law were abolished. Eliminating trade secret law for the doubtfully patentable invention is thus likely to have deleterious effects on society and patent policy which we cannot say are balanced out by the speculative gain which might result from the encouragement of some inventors with doubtfully patentable inventions which deserve patent protection to come forward and apply for patents. There is no conflict, then, between trade secret law and the patent law policy of disclosure, at least insofar as the first two categories of patentable subject matter are concerned.

The final category of patentable subject matter to deal with is the clearly patentable inven-

tion, *i.e.*, that invention which the owner believes to meet the standards of patentability. It is here that the federal interest in disclosure is at its peak; these inventions, novel, useful and nonobvious, are “the things which are worth to the public the embarrassment of an exclusive patent.” *Graham v. John Deere Co.*, *supra*, at 9 (quoting Thomas Jefferson). The interest of the public is that the bargain of 17 years of exclusive use in return for disclosure be accepted. If a State, through a system of protection, were to cause a substantial risk that holders of patentable inventions would not seek patents, but rather would rely on the state protection, we would be compelled to hold that such a system could not constitutionally continue to exist. In the case of trade secret law no reasonable risk of deterrence from patent application by those who can reasonably expect to be granted patents exists.

Trade secret law provides far weaker protection in many respects than the patent law. While trade secret law does not forbid the discovery of the trade secret by fair and honest means, *e.g.*, independent creation or reverse engineering, patent law operates “against the world,” forbidding any use of the invention for whatever purpose for a significant length of time. The holder of a trade secret also takes a substantial risk that the secret will be passed on to his competitors, by theft or by breach of a confidential relationship, in a manner not easily susceptible of discovery or proof. *Painton & Co. v. Bourns, Inc.*, 442 F.2d, at 224. Where patent law acts as a barrier, trade secret law functions relatively as a sieve. The possibility that an inventor who believes his invention meets the standards of patentability will sit back, rely on trade secret law, and after one year of use forfeit any right to patent protection, 35 U.S.C. § 102(b), is remote indeed.

Nor does society face much risk that scientific or technological progress will be impeded by the rare inventor with a patentable invention who chooses trade secret protection over patent protection. The ripeness-of-time concept of invention, developed from the study of the many independent multiple discoveries in history, predicts that if a particular individual had not made a particular discovery others would have, and in probably a relatively short period of time. If something is to be discovered at all very likely

it will be discovered by more than one person. *Singletons and Multiples in Science* (1961), in R. Merton, *The Sociology of Science* 343 (1973); J. Cole & S. Cole, *Social Stratification in Science* 12–13, 229–230 (1973); Ogburn & Thomas, *Are Inventions Inevitable?*, 37 *Pol. Sci. Q.* 83 (1922).¹⁹ Even were an inventor to keep his discovery completely to himself, something that neither the patent nor trade secret laws forbid, there is a high probability that it will be soon independently developed. If the invention, though still a trade secret, is put into public use, the competition is alerted to the existence of the inventor's solution to the problem and may be encouraged to make an extra effort to independently find the solution thus known to be possible. The inventor faces pressures not only from private industry, but from the skilled scientists who work in our universities and our other great publicly supported centers of learning and research.

We conclude that the extension of trade secret protection to clearly patentable inventions does not conflict with the patent policy of disclosure. Perhaps because trade secret law does not produce any positive effects in the area of clearly patentable inventions, as opposed to the beneficial effects resulting from trade secret protection in the areas of the doubtfully patentable and the clearly unpatentable inventions, it has been suggested that partial pre-emption may be appropriate, and that courts should refuse to apply trade secret protection to inventions which the holder should have patented, and which would have been, thereby, disclosed. However, since there is no real possibility that trade secret law will conflict with the federal policy favoring disclosure of clearly patentable inventions partial pre-emption is inappropriate. Partial pre-emption, furthermore, could well create serious problems for state courts in the administration of trade secret law. As a preliminary matter in trade secret actions, state courts would be obliged to distinguish between what a reasonable inventor would and would not correctly consider to be clearly patentable, with the holder of the trade secret arguing that the invention was not patentable and

the misappropriator of the trade secret arguing its undoubted novelty, utility, and nonobviousness. Federal courts have a difficult enough time trying to determine whether an invention, narrowed by the patent application procedure and fixed in the specifications which describe the invention for which the patent has been granted, is patentable. Although state courts in some circumstances must join federal courts in judging whether an issued patent is valid, *Lear, Inc. v. Adkins*, *supra*, it would be undesirable to impose the almost impossible burden on state courts to determine the patentability—in fact and in the mind of a reasonable inventor—of a discovery which has not been patented and remains entirely uncircumscribed by expert analysis in the administrative process. Neither complete nor partial pre-emption of state trade secret law is justified.

Our conclusion that patent law does not preempt trade secret law is in accord with prior cases of this Court. *Universal Oil Co. v. Globe Co.*, 322 U.S., at 484; *United States v. Dubilier Condenser Corp.*, 289 U.S., at 186–187; *Becher v. Contoure Laboratories*, 279 U.S. 388, 391 (1929); *E. I. DuPont de Nemours Powder Co. v. Masland*, 244 U.S. 100, 102 (1917); *Dr. Miles Medical Co. v. John D. Park & Sons Co.*, 220 U.S. 373, 402–403 (1911); *Board of Trade v. Christie Grain & Stock Co.*, 198 U.S. 236, 250–251 (1905).²³ Trade secret law and patent law have co-existed in this country for over one hundred years. Each has its particular role to play, and the operation of one does not take away from the need for the other. Trade secret law encourages the development and exploitation of those items of lesser or different invention than might be accorded protection under the patent laws, but which items still have an important part to play in the technological and scientific advancement of the Nation. Trade secret law promotes the sharing of knowledge, and the efficient operation of industry; it permits the individual inventor to reap the rewards of his labor by contracting with a company large enough to develop and exploit it. Congress, by its silence over these many years, has seen the wisdom of

¹⁹See J. Watson, *The Double Helix* (1968). If Watson and Crick had not discovered the structure of DNA it is likely that Linus Pauling would have made the discovery soon. Other examples of multiple discovery are listed at length in the Ogburn and Thomas article.

²³The Court of Appeals below relied, in part, on *Kendall v. Winsor*, 21 How. 322 (1859), a case decided nine years before trade secret law was imported into this country from England by means of the landmark case of *Peabody v. Norfolk*, 98 Mass. 452 (1868).

allowing the States to enforce trade secret protection. Until Congress takes affirmative action to the contrary, States should be free to grant protection to trade secrets.

Since we hold that Ohio trade secret law is not preempted by the federal patent law, the judgment of the Court of Appeals for the Sixth Circuit is reversed, and the case is remanded to the Court of Appeals with directions to reinstate the judgment of the District Court.

It is so ordered.

* * * * *

Mr. Justice DOUGLAS, with whom Mr. Justice BRENNAN concurs, dissenting.

Today's decision is at war with the philosophy of *Sears, Roebuck & Co. v. Stiffel Co.*, 376 U.S. 225 and *Compco Corp. v. Day-Brite Lighting, Inc.*, 376 U.S. 234. Those cases involved patents—one of a pole lamp and one of fluorescent lighting fixtures each of which was declared invalid. The lower courts held, however, that though the patents were invalid the sale of identical or confusingly similar products to the products of the patentees violated state unfair competition laws. We held that when an article is unprotected by a patent, state law may not forbid others to copy it, because every article not covered by a valid patent is in the public domain. Congress in the patent laws decided that where no patent existed, free competition should prevail; that where a patent is rightfully issued, the right to exclude others should obtain for no longer than 17 years, and that the States may not “under some other law, such as that forbidding unfair competition, give protection of a kind that clashes with the objectives of the federal patent laws,” 376 U.S., at 231.

The product involved in this suit, sodium iodide synthetic crystals, was a product that could be patented but was not. Harshaw the inventor apparently contributed greatly to the technology in that field by developing processes, procedures, and techniques that produced much larger crystals than any competitor. These processes, procedures, and techniques were also patentable; but no patent was sought. Rather Harshaw sought to protect its trade secrets by contracts with its employees. And the District Court found that, as a result of those secrecy precautions, “not sufficient disclosure occurred so as to place the claimed trade secrets in the public domain”; and those

findings were sustained by the Court of Appeals.

The District Court issued a permanent injunction against respondents, ex-employees, restraining them from using the processes used by Harshaw. By a patent which would require full disclosure Harshaw could have obtained a 17-year monopoly against the world. By the District Court's injunction, which the Court approves and reinstates, Harshaw gets a permanent injunction running into perpetuity against respondents. In *Sears*, as in the present case, an injunction against the unfair competitor issued. We said: “To allow a State by use of its law of unfair competition to prevent the copying of an article which represents too slight an advance to be patented would be to permit the State to block off from the public something which federal law has said belongs to the public. The result would be that while federal law grants only 14 or 17 years' protection to genuine inventions, see 35 U.S.C. §§ 154, 173, States could allow perpetual protection to articles too lacking in novelty to merit any patent at all under federal constitutional standards. This would be too great an encroachment on the federal patent system to be tolerated.” 376 U.S., at 231–232.

The conflict with the patent laws is obvious. The decision of Congress to adopt a patent system was based on the idea that there will be much more innovation if discoveries are disclosed and patented than there will be when everyone works in secret. Society thus fosters a free exchange of technological information at the cost of a limited 17-year monopoly.

A trade secret, unlike a patent, has no property dimension. That was the view of the Court of Appeals, 478 F.2d 1074, 1081; and its decision is supported by what Mr. Justice Holmes said in *DuPont de Nemours Powder Co. v. Masland*, 244 U.S. 100, 102:

“The word property as applied to trade-marks and trade secrets is an unanalyzed expression of certain secondary consequences of the primary fact that the law makes some rudimentary requirements of good faith. Whether the plaintiffs have any valuable secret or not the defendant knows the facts, whatever they are, through a special confidence that he accepted. The property may be denied but the

confidence cannot be. Therefore the starting point for the present matter is not property or due process of law, but that the defendant stood in confidential relations with the plaintiffs, or one of them. These have given place to hostility, and the first thing to be made sure of is that the defendant

shall not fraudulently abuse the trust reposed in him. It is the usual incident of confidential relations. If there is any disadvantage in the fact that he knew the plaintiffs' secrets he must take the burden with the good."

* * * * *

I would affirm the judgment below.

**International Order of Job's Daughters v. Lindeburg & Co.,
633 F.2d 912 (9th Cir. 1980) (excerpt).**

FLETCHER, Circuit Judge.

Appellee, the International Order of the Daughters of Job (Job's Daughters), sued appellant Lindeburg and Co. (Lindeburg), for trademark infringement arising out of Lindeburg's manufacture and sale of jewelry bearing the Job's Daughters insignia. The district judge granted judgment for Job's Daughters. Lindeburg appeals, invoking appellate jurisdiction under 28 U.S.C. § 1291. We reverse and remand.

Job's Daughters is a young women's fraternal organization. Since its establishment in 1921 it has used its name and emblem¹ as collective marks.² Since its inception Job's Daughters has licensed at least one jeweler to produce jewelry for it. Job's Daughters sells some of the licensed jewelry directly to its members. Jewelry bearing the name or emblem is also sold by approximately 31,000 retailers across the nation. Most of these retailers presumably have no connection with the Job's Daughters organization. Some sell jewelry manufactured by Job's Daughters' licensees; others sell jewelry manufactured by jewelers not licensed by the organization.

Lindeburg makes and sells fraternal jewelry. In 1954 it began selling jewelry and related items bearing the Job's Daughters insignia. In 1957 Lindeburg asked the Job's Daughters trademark committee to designate it an "official jeweler." The committee refused and in 1964 and 1966 asked Lindeburg to stop manufacturing and selling unlicensed jewelry. Lindeburg did not com-

ply with this request. In 1973 Lindeburg again sought permission to act as an official jeweler for Job's Daughters. Permission was granted for one year and then withdrawn.

In 1975 Job's Daughters brought this suit against Lindeburg, alleging that he had infringed their "common law trademark" rights. The district court granted judgment for Job's Daughters after an extensive trial and enjoined Lindeburg from further use of the name or emblem. The court held, however, that Job's Daughters' long acquiescence in Lindeburg's infringement barred the award of damages.

* * * * *

II. Infringement

This court held in *New West Corp. v. NYM Co. of California*, 595 F.2d 1194 (9th Cir. 1979), that section 43 of the Lanham Act, 15 U.S.C. § 1125(a), created a federal remedy against the deceptive use of unregistered trademarks to designate falsely the origin of goods ("passing off"). 595 F.2d at 1198, 1201. New West also held that the test for false designation of origin was similar to that for infringement of a registered trademark under 15 U.S.C. § 1114. Both statutes preclude the use of another's trademark in a manner likely to confuse the public about the origin of goods. 595 F.2d at 1201. Thus, we must decide whether Lindeburg is likely to confuse the public about the origin of its jewelry by inscribing the Job's Daughters name and emblem on it.

Resolution of this issue turns on a close anal-

¹The emblem consists of a representation of three girls within a double triangle. The girls carry a dove, an urn, and a cornucopia. Between the bases of the two triangles are the words "Iyob Filiae," the Latin translation of "Daughters of Job."

²A collective mark denotes membership in an organization. A trademark, in contrast, identifies goods produced, sponsored, or endorsed by a particular organization and distinguishes them from goods originating from others. Compare 15 U.S.C. § 1127, ¶ 13 with 15 U.S.C. § 1127, ¶ 10. See J. McCarthy, *Trademarks & Unfair Competition* § 4:4 (1973). The distinction has no import in this case and we have used the terms interchangeably.

ysis of the way in which Lindeburg is using the Job's Daughters insignia. In general, trademark law is concerned only with identification of the maker, sponsor, or endorser of the product so as to avoid confusing consumers. Trademark law does not prevent a person from copying so-called "functional" features of a product which constitute the actual benefit that the consumer wishes to purchase, as distinguished from an assurance that a particular entity made, sponsored, or endorsed a product.

The distinction between trademarks and functional features is illustrated in *Pagliero v. Wallace China Co.*, 198 F.2d 339 (9th Cir. 1952), where plaintiff, Wallace China, claimed trademark infringement on account of the use by others of the design it used on its china. The court found no trademark infringement because the design served primarily as a functional part of the product:

Imitation of the physical details and designs of a competitor's product may be actionable, if the particular features imitated are "non-functional" and have acquired a secondary meaning. But, where the features are "functional" there is normally no right to relief. "Functional" in this sense might be said to connote other than a trade-mark purpose. If the particular feature is an important ingredient in the commercial success of the product, the interest in free competition permits its imitation in the absence of a patent or copyright. On the other hand, where the feature or, more aptly, design, is a mere arbitrary embellishment, a form of dress for the goods primarily adopted for purposes of identification and individuality and, hence, unrelated to basic consumer demands in connection with the product, imitation may be forbidden. ... Under such circumstances, since effective competition may be undertaken without imitation, the law grants protection.

198 F.2d at 343 (citation omitted). See also *Famolare, Inc. v. Melville Corp.*, 472 F. Supp. 738, 742-45 (D. Hawaii 1979); *Boston Professional Hockey*

Ass'n, Inc. v. Dallas Cap & Emblem Mfg., Inc., 360 F. Supp. 459, 463-64 (N.D. Tex. 1973), *rev'd*, *Boston Professional Hockey Ass'n, Inc. v. Dallas Cap & Emblem Mfg., Inc.*, 510 F.2d 1004 (5th Cir.), *cert. denied*, 423 U.S. 868 (1975); Restatement of Torts § 742, comment (a) (1938).

Application of the *Pagliero* distinction to this case has a special twist because the name "Job's Daughters" and the Job's Daughters insignia are indisputably used to identify the organization, and members of Job's Daughters wear the jewelry to identify themselves as members. In that context, the insignia are trademarks of Job's Daughters. But in the context of this case, the name and emblem are functional aesthetic components of the jewelry, in that they are being merchandised on the basis of their intrinsic value, not as a designation of origin or sponsorship.

It is not uncommon for a name or emblem that serves in one context as a collective mark or trademark also to be merchandised for its own intrinsic utility to consumers. We commonly identify ourselves by displaying emblems expressing allegiances. Our jewelry, clothing, and cars are emblazoned with inscriptions showing the organizations we belong to, the schools we attend, the landmarks we have visited, the sports teams we support, the beverages we imbibe. Although these inscriptions frequently include names and emblems that are also used as collective marks or trademarks, it would be naive to conclude that the name or emblem is desired because consumers believe that the product somehow originated with or was sponsored by the organization the name or emblem signifies.

Job's Daughters relies on *Boston Professional Hockey Ass'n, Inc. v. Dallas Cap & Emblem Mfg., Inc.*, 510 F.2d 1004 (5th Cir.), *cert. denied*, 423 U.S. 868 (1975), in which the Boston Bruins and other National Hockey League clubs brought a trademark infringement suit against a company that sold replicas of the NHL team emblems. The Fifth Circuit, applying the Lanham Act infringement test and focusing on the "likelihood of confusion," found infringement:

The confusion or deceit requirement is met by the fact that the defendant duplicated the protected trademarks and sold them to the public knowing that the public would identify them as being the teams' trademarks. The cer-

tain knowledge of the buyer that the source and origin of the trademark symbols were the plaintiffs satisfies the requirement of the act. The argument that confusion must be as to the source of the manufacture of the emblem itself is unpersuasive, where the trademark, originated by the team, is the triggering mechanism for the sale of the emblem.

510 F.2d at 1012. Job's Daughters asserts that *Boston Hockey* supports its contention that even purely functional use of a trademark violates the Lanham Act. We reject the reasoning of *Boston Hockey*.

Interpreted expansively, *Boston Hockey* holds that a trademark's owner has a complete monopoly over its use, including its functional use, in commercial merchandising. But our reading of the Lanham Act and its legislative history reveals no congressional design to bestow such broad property rights on trademark owners. Its scope is much narrower: to protect consumers against deceptive designations of the origin of goods and, conversely, to enable producers to differentiate their products from those of others. See *Smith v. Chanel, Inc.*, 402 F.2d 562, 566–70 (9th Cir. 1968). See also *HMH Publishing Co., Inc. v. Brincat*, 504 F.2d 713, 716 (9th Cir. 1974); *Developments in the Law—Trademarks and Unfair Competition*, 68 Harv. L. Rev. 814, 816–17 (1955). The *Boston Hockey* decision transmogrifies this narrow protection into a broad monopoly. It does so by injecting its evaluation of the equities between the parties and of the desirability of bestowing broad property rights on trademark owners.¹¹ A trademark is, of course, a form of business property. See J. McCarthy, *Trademarks and Unfair Competition* §§ 2:6–2:7 (1973). But the “property right” or protection accorded a trademark owner can only be understood in the context of trademark law and its purposes. A trademark owner has a property right only insofar as is necessary to prevent consumer confusion as to who produced the goods and to facilitate differentiation of the trademark owner's goods. The *Boston Hockey* court decided that broader protection was desirable. In our view, this extends the protection beyond that intended by Congress and

beyond that accorded by any other court. Cf. *Kentucky Fried Chicken Corp. v. Diversified Packaging Corp.*, 549 F.2d 368, 389 (5th Cir. 1977) (rejecting the “notion that a trademark is an owner's ‘property’ to be protected irrespective of its role in the operation of our markets”).

Indeed, the court in *Boston Hockey* admitted that its decision “may slightly tilt the trademark laws from the purpose of protecting the public to the protection of the business interests of plaintiffs.” We think that this tilt was not slight but an extraordinary extension of the protection heretofore afforded trademark owners. It is an extension we cannot endorse. See *General Mills, Inc. v. Henry Regnery Co.*, 421 F.Supp. 359, 362 & n.2 (N.D. Ill. 1976). Instead, we agree with Judge Waterman of the Second Circuit, who recently said that under the Lanham Act “one can capitalize on a market or fad created by another provided that it is not accomplished by confusing the public into mistakenly purchasing the product in the belief that the product is the product of the competitor.” *American Footwear Corp. v. General Footwear Co. Ltd.*, 609 F.2d 655, 662 (2d Cir. 1979), *cert. denied*, 445 U.S. 951 (finding that the manufacturer of a “Bionic Boot” did not infringe the trademark of the producers of the “Bionic Woman” television program).

Our holding does not mean that a name or emblem could not serve simultaneously as a functional component of a product and a trademark. See *Dallas Cowboys Cheerleaders, Inc. v. Pussycat Cinema, Ltd.*, 604 F.2d 200, 204 (2d Cir. 1979). That is, even if the Job's Daughters' name and emblem, when inscribed on Lindeburg's jewelry, served primarily a functional purpose, it is possible that they could serve secondarily as trademarks if the typical customer not only purchased the jewelry for its intrinsic functional use and aesthetic appeal but also inferred from the insignia that the jewelry was produced, sponsored, or endorsed by Job's Daughters. See generally, Grimes & Battersby, *The Protection of Merchandising Properties*, 69 TMR 431, 441–45 (1980). We recognize that there is some danger that the consumer may be more likely to infer endorsement or sponsorship when the consumer is a member of the group whose collective mark or trademark is being marketed. Accord-

¹¹We express no opinion about whether Job's Daughters could prevent Lindeburg from using its name and emblem under federal patent law, federal copyright law, or state unfair competition law.

ingly, a court must closely examine the articles themselves, the defendant's merchandising practices, and any evidence that consumers have actually inferred a connection between the defendant's product and the trademark owner.

The trial court made comprehensive findings of fact that provide an adequate record for this court to review the trial court's conclusion of law that the names and emblems were trademarks.

We conclude from our examination of the trial judge's findings and of the underlying evidence that Lindeburg was not using the Job's Daughters name and emblem as trademarks. The insignia were a prominent feature of each item so as to be visible to others when worn, allowing the wearer to publicly express her allegiance to the organization. Lindeburg never designated the merchandise as "official" Job's Daughters' merchandise or otherwise affirmatively indicated sponsorship. Job's Daughters did not show a

single instance in which a customer was misled about the origin, sponsorship, or endorsement of Lindeburg's jewelry, nor that it received any complaints about Lindeburg's wares. Finally, there was evidence that many other jewelers sold unlicensed Job's Daughters jewelry, implying that consumers did not ordinarily purchase their fraternal jewelry from only "official" sources. We conclude that Job's Daughters did not meet its burden of proving that a typical buyer of Lindeburg's merchandise would think that the jewelry was produced, sponsored, or endorsed by the organization. The name and emblem were functional aesthetic components of the product, not trademarks. There could be, therefore, no infringement.

The judgment of the district court is reversed and the case is remanded for the entry of judgment in favor of appellant Lindeburg.

**Warner Bros., Inc. v. Gay Toys, Inc.,
724 F.2d 327 (2d Cir. 1983) (excerpt).**

OAKES, Circuit Judge.

This is the rather unusual case of an appeal from the grant of a final injunction after this court had directed the district court to enter a preliminary injunction. *Warner Bros. Inc. v. Gay Toys, Inc.*, 658 F.2d 76 (2d Cir. 1981). On remand, the United States District Court for the Southern District of New York, Whitman Knapp, Judge, granted summary judgment for Warner Bros. Inc. (Warner), on its claim under Section 43(a) of the Lanham Act, 15 U.S.C. § 1125(a) (1976), that the toy cars marketed by Gay Toys, Inc. (Gay Toys), and patterned after the "General Lee,"¹ an automobile featured in Warner's television series "The Dukes of Hazzard," tended to confuse purchasers as to their source or sponsorship. We affirm.

* * * * *

On remand the district court, after questioning the applicability of the Lanham Act in the first instance, said that our opinion "conclusively presumed" both the desire of Warner's audience

for officially sponsored toys and the deliberate creation by Gay Toys of sufficient confusion to invoke the Act. *Id.* at 1020. The court, then, assumed that the consumers' motivation in desiring to buy officially sponsored toys was somehow relevant in establishing the requisite secondary meaning to show identification with a source. It concluded that in our earlier opinion we "presumed" that consumers' desire for the "official" toy demonstrated this motivation. The court then rejected the defense that the design of the "General Lee" is "functional" insofar as the symbols are required to permit children to play "The Dukes of Hazzard" with the toy car. It also rejected defenses of abandonment and lack of clean hands.

On this appeal Gay Toys renews the argument of "functionality" made below. It further claims that because "consumer motivation" is a necessary element of secondary meaning required to show identification with a source, and proof of such was lacking here, the district court decision

¹Warner's "General Lee" is an imitation 1969 Dodge Charger of bright orange color with a Confederate flag emblem on the car roof and the numerals "01" placed on the door. Gay Toys' imitations, made after failure to obtain a license from Warner, while taking various forms and bearing a different name, usually had the same emblems except for a reversal of the numbers to "10." Upon complaint from Gay Toys' customers that the numerals were incorrect, Gay Toys would send them labels of a "1" and a "0," informing the customer to affix the numbers as he saw fit.

(and by implication, at least, our previous decision) was contrary to a long line of authority in this court.³ ...

Functionality

Functional symbols (those that are essential to a product's use as opposed to those which merely identify it) are not protected under § 43(a), *see, e.g., Vibrant Sales, Inc. v. New Body Boutique, Inc.*, 652 F.2d 299, 303 (2d Cir. 1981), *cert. denied*, 455 U.S. 909 (1982). Gay Toys claims the "General Lee" symbols in question are functional in the sense that they are essential to enable children to play "Dukes of Hazzard" with the cars. This is a paradoxical argument, since it is precisely the fact that the symbols provide identification that make them "functional" in the sense urged on us by Gay Toys, while Warner's exclusive right to use its own identifying symbols is exactly what it seeks to protect. Carried to a logical conclusion, Gay Toys' argument would enlarge the functionality defense so as to eliminate any protection for any object, since presumably each feature of any object is designed to serve a particular "function" in Gay Toys' sense of the term.

Warner's position is that functionality should be considered in terms of toy cars generally and not "Dukes of Hazzard" toy cars specifically, so that, for example, the use of wheels cannot be protected, but the Confederate flag marking coupled with the numerals, all on a bright orange background, can be. It cites *In re DC Comics*, 689 F.2d 1042, 1045 (C.C.P.A. 1982) (dolls generally and not Superman dolls are the class by which functionality is determined), and language of this court relying upon a law review note that identifies functional features as those "having value independent of identification." *Vibrant Sales, Inc.*, 652 F.2d at 303 (citing *Developments in the Law—Competitive Torts*, 77 Harv. L. Rev. 888, 918 (1964)).

Gay Toys relies primarily on a Ninth Circuit case which held that an identifying insignia of a fraternal organization is functional and nonprotectable as a trademark when used on jewelry,

at least as long as no one is confused that the jewelry was made or licensed by the fraternity. *International Order of Job's Daughters v. Lindeburg & Co.*, 633 F.2d 912, 919 (9th Cir. 1980), *cert. denied*, 452 U.S. 941 (1981). Though the decisions of various circuits are not uniform on this question, we agree with Warner both on grounds of logic and of policy.

While there has been some confusing language in the case law, particularly that linking what is functional to the commercially successful features of a product, *see In re DC Comics, Inc.*, 689 F.2d at 1045 (discussing cases), an examination of the roots and purposes of the functionality doctrine suggests coherent limits to its use. In *Singer Manufacturing Co. v. June Manufacturing Co.*, 163 U.S. 169, 184–85 (1896), the Supreme Court held that the form, size, shape, and appearance of sewing machines once protected by various patents fell into the public domain upon expiration of the underlying patents. The shape or form necessary to the once patented features, even though distinctive and identifying, could be copied without competing unfairly.

Applying the teaching of *Singer* to an attempt to copy design features of an early version of the vacuum cleaner in an unfair competition suit, the Seventh Circuit said in *Pope Automatic Merchandising Co. v. McCrum-Howell Co.*, 191 F. 979, 981–82 (7th Cir. 1911):

Development in a useful art is ordinarily toward effectiveness of operation and simplicity of form. Carriages, bicycles, automobiles, and many other things from diversity have approached uniformity through the utilitarian impulse. If one manufacturer should make an advance in effectiveness of operation, or in simplicity of form, or in utility of color; and if that advance did not entitle him to a monopoly by means of a machine or a process or a product or a design patent; and if by means of unfair trade suits he could shut out other manufacturers who plainly intended

³Our previous decision ordering the district court to issue a preliminary injunction referred without discussion to the "General Lee" symbols as "non-functional," 658 F.2d at 77, and addressed the question of likelihood of confusion as to source and sponsorship. That decision, however, does not foreclose consideration of the arguments Gay Toys makes on appeal from an order granting a final injunction. *See Hamilton Watch Co. v. Benrus Watch Co.*, 206 F.2d 738, 742 (2d Cir. 1953); 11 C. Wright & A. Miller, *Federal Practice and Procedure* § 2950, at 494–96 (1973). *See also Imperial Chemical Industries Ltd. v. National Distillers & Chemical Corp.*, 354 F.2d 459, 463 (2d Cir.1965).

to share in the benefits of the unpatented utilities and in the trade that had been built up thereon, but who used on their products conspicuous name-plates containing unmistakably distinct trade-names, trademarks, and names and addresses of makers, and in relation to whose products no instance of deception had occurred—he would be given gratuitously a monopoly more effective than that of the unobtainable patent in the ratio of eternity to 17 years.

See also *Flagg Manufacturing Co. v. Holway*, 59 N.E. 667 (Mass. 1901) (Holmes, C.J.) (holding design of zither not protectable: “In the absence of a patent the freedom of manufacture cannot be cut down under the name of preventing unfair competition.”).

More recently courts have continued to understand the functionality defense as a way to protect useful design features from being monopolized. The Supreme Court, in *Inwood Laboratories, Inc. v. Ives Laboratories, Inc.*, 456 U.S. 844, 850–51 n.10 (1982) (dictum), defined a functional feature as one that “is essential to the use or purpose of the article or [that] affects the cost or quality of the article.” A design feature of a particular article is “essential” only if the feature is dictated by the functions to be performed; a feature that merely accommodates a useful function is not enough. In *re Morton-Norwich Products, Inc.*, 671 F.2d 1332, 1342 (C.C.P.A. 1982) (shape of plastic container for spray products not essential to its purpose as a sprayer). And a design feature “affecting the cost or quality of an article” is one which permits the article to be manufactured at a lower cost, e.g., *Kellogg Co. v. National Biscuit Co.*, 305 U.S. 111, 122 (1938) (pillow shape of shredded wheat biscuit functional as cost would be increased and quality lessened by other form), or one which constitutes an improvement in the operation of the goods, e.g., *Fisher Stoves Inc. v. All Nighter Stove Works, Inc.*, 626 F.2d 193, 195 (1st Cir. 1980) (two-tier design of woodstove functional because improving the operation of the stove in three respects).

The functionality defense, then, was developed

to protect advances in functional design from being monopolized.⁴ It is designed to encourage competition and the broadest dissemination of useful design features. The question posed is whether by protecting the “General Lee” symbols we are creating an eternal monopoly on the shape or form of some useful object, thereby limiting the sharing of utilitarian refinements in useful objects.

With the functionality defense thus defined it is obvious that the “General Lee” symbols—flag emblem and numbers in tandem with the color orange—are not the kind of “useful objects” that the functionality defense was designed to protect. Rather than representing an advance in the useful arts, the symbols merely function to enable consumers, especially children, to identify a toy car with a particular television series.

...In *Dallas Cowboys Cheerleaders, Inc. v. Pussycat Cinema, Ltd.*, 604 F.2d 200 (2d Cir. 1979), the court held that the design of the Dallas Cowboys cheerleaders’ costume using “white boots, white shorts, blue blouse, and white star-studded vest and belt” “imparts a western flavor appropriate for a Texas cheerleading squad” but was “arbitrary” and worthy of trademark protection even though the uniform was otherwise functional. The court there held that “the fact that an item serves or performs a function does not mean that it may not at the same time be capable of indicating sponsorship or origin, particularly where the decorative aspects of the item are nonfunctional.” *Id.* at 204. So, too, with the “General Lee.” Its distinctive markings indicate origin and go to appearance and dress; they are arbitrary and nonfunctional.

Consumer Motivation

Gay Toys’ second principal argument concerns the issue of secondary meaning. To prove a violation of the false designation of origin prohibition in § 43(a) of the Lanham Act protecting unregistered trademarks, it is first necessary to prove that the mark in question has acquired a second meaning to the consumer primarily as a mark identifying the product with a particular source. E.g., *Vibrant Sales*, 652 F.2d at 303. Gay Toys claims that to show secondary meaning a trademark holder must show that consumers are

⁴The doctrine is analogous to the exception in the Copyright Act denying copyrightability as to the “mechanical or utilitarian aspects” of works of artistic craftsmanship. 17 U.S.C. § 101 (1976); 37 C.F.R. § 202.10 (1983); see *Kieselstein-Cord v. Accessories by Pearl, Inc.*, 632 F.2d 989 (2d Cir. 1980); 1 M. Nimmer, Copyright § 2.08[B] at 2-87–2-96.4 (1983).

motivated to buy the allegedly infringing goods in question because they believe the goods are sponsored or manufactured by a particular source identified by the trademark symbol in question. It was not proved that consumers of “General Lee” models care whether the goods are manufactured or sponsored by any single source, the district court found. Since Warner has not proved “consumer motivation,” the argument runs, it has not shown “secondary meaning,” and its infringement claim must fail.

We are referred to what is said to be “consumer motivation” language in a line of cases including *Crescent Tool Co. v. Kilborn & Bishop Co.*, 247 F. 299, 300 (2d Cir. 1917) (“whether the public is moved in any degree to buy the article because of its source”); *Blisscraft of Hollywood v. United Plastics Co.*, 294 F.2d 694, 697 (2d Cir. 1961) (“To establish a secondary meaning . . . it must be shown that . . . purchasers are moved to buy it because of its source.”); *Hygienic Specialties Co. v. H.G. Salzman, Inc.*, 302 F.2d 614, 620 (2d Cir. 1962); *American Footwear Corp. v. General Footwear Co.*, 609 F.2d 655, 663 (2d Cir. 1979) (“The crucial question . . . always is whether the public is moved in any degree to buy an article because of its source.”), *cert. denied*, 445 U.S. 951 (1980).

In each of these cases, however, the plaintiff failed to establish source association in the general sense of associating the term or symbol used by the defendant with the plaintiff. Here there was proof of association of the “General Lee” toy car with the “Dukes of Hazzard” television series. Nor is there any doubt that consumers wanted the toy in part because they (or their children) identified the toy with the television series. This is sufficient even though Warner is not a manufacturer of toy cars; it is sufficient though there was no showing that consumers believed that the toy cars marketed by Gay Toys were sponsored or authorized by Warner.

* * * * *

The “consumer motivation” language, moreover, may have some more specific application where there is a concern over the assertion of exclusive rights in the shape of useful objects, *see Hygienic Specialties*, 302 F.2d at 620 (dicta), or

when the symbol in question generates a “generalized linkage” to a particular source, but the symbol’s primary significance remains its independent aesthetic or utilitarian appeal. *See, e.g., American Footwear*, 609 F.2d at 663.

The ultimate test for secondary meaning, however, as Judge Nies of the Court of Customs and Patent Appeals has pointed out, is simply whether the term, symbol or device identifies goods of “a particular source,” in which case it is protectable. If it does not identify goods with a particular source, it is not protectable. *In re DC Comics, Inc.*, 689 F.2d at 1054 (concurring opinion). “[T]he reality,” she adds, is that “the primary objective of purchasers is to obtain particular goods, not to seek out particular sources or producers, as such.” This is what “secondary meaning” means; the true inquiry is whether the primary function of a particular design is other than referential, leading to association in the public mind with no one or nothing, or, by virtue of its distinctiveness, it is designed to create an association with a single source. In making that inquiry, the actual motivation of purchasing consumers—whether they were motivated because of quality, source, feature, design, price, durability, prestige, or otherwise—is essentially irrelevant. Different people, for example, buy Rolls Royce automobiles for different reasons including combinations of the above factors, but the distinctive overlapping “R’s” symbol is nevertheless surely protectable. Irrespective of customers’ motivations in making a purchase, they recognize and associate the symbol with the auto manufacturer.

The symbols on the “General Lee” just as clearly have a secondary meaning in the eyes of the consumer of the toy car. There was ample evidence—indeed Gay Toys’ sales of its imitations are themselves proof—that the public did associate the “General Lee” with the “Dukes of Hazzard” television series. Its distinctive markings and color made it a “Dukes of Hazzard” car, or a toy depicting that car. It is because of that association, the identification of the toy car with its source, Warner’s television series, that the toy car is bought by the public. That is enough.

* * * * *

Louis Vuitton Malletier S.A. v. Haute Diggity Dog, LLC,
507 F.3d 252 (4th Cir. 2007) (excerpt).

NIEMEYER, Circuit Judge.

Louis Vuitton Malletier S.A., a French corporation located in Paris, that manufactures luxury luggage, handbags, and accessories, commenced this action against Haute Diggity Dog, LLC, a Nevada corporation that manufactures and sells pet products nationally, alleging trademark infringement under 15 U.S.C. § 1114(1)(a), trademark dilution under 15 U.S.C. § 1125(c), copyright infringement under 17 U.S.C. § 501, and related statutory and common law violations. Haute Diggity Dog manufactures, among other things, plush toys on which dogs can chew, which, it claims, parody famous trademarks on luxury products, including those of Louis Vuitton Malletier. The particular Haute Diggity Dog chew toys in question here are small imitations of handbags that are labeled “Chewy Vuiton” and that mimic Louis Vuitton Malletier’s LOUIS VUITTON handbags.

On cross-motions for summary judgment, the district court concluded that Haute Diggity Dog’s “Chewy Vuiton” dog toys were successful parodies of Louis Vuitton Malletier’s trademarks, designs, and products, and on that basis, entered judgment in favor of Haute Diggity Dog on all of Louis Vuitton Malletier’s claims.

On appeal, we agree with the district court that Haute Diggity Dog’s products are not likely to cause confusion with those of Louis Vuitton Malletier and that Louis Vuitton Malletier’s copyright was not infringed. On the trademark dilution claim, however, we reject the district court’s reasoning but reach the same conclusion through a different analysis. Accordingly, we affirm.

I

Louis Vuitton Malletier S.A. (“LVM”) is a well known manufacturer of luxury luggage, leather goods, handbags, and accessories, which it markets and sells worldwide. In connection with the sale of its products, LVM has adopted trademarks and trade dress that are well recognized and have become famous and distinct. Indeed, in 2006, *BusinessWeek* ranked LOUIS VUITTON as the 17th “best brand” of all corporations in the world and the first “best brand” for any fashion business.

LVM has registered trademarks for “LOUIS VUITTON,” in connection with luggage and ladies’ handbags (the “LOUIS VUITTON mark”); for a stylized monogram of “LV,” in connection with traveling bags and other goods (the “LV mark”); and for a monogram canvas design consisting of a canvas with repetitions of the LV mark along with four-pointed stars, four-pointed stars inset in curved diamonds, and four-pointed flowers inset in circles, in connection with traveling bags and other products (the “Monogram Canvas mark”). . . .

* * * * *

The original LOUIS VUITTON, LV, and Monogram Canvas marks, however, have been used as identifiers of LVM products continuously since 1896.

During the period 2003–2005, LVM spent more than \$48 million advertising products using its marks and designs It sells its products exclusively in LVM stores and in its own in-store boutiques that are contained within department stores such as Saks Fifth Avenue, Bloomingdale’s, Neiman Marcus, and Macy’s. . . .

Although better known for its handbags and luggage, LVM also markets a limited selection of luxury pet accessories—collars, leashes, and dog carriers—which bear the Monogram Canvas mark and the Multicolor design. These items range in price from approximately \$200 to \$1600. LVM does not make dog toys.

Haute Diggity Dog, LLC, which is a relatively small and relatively new business located in Nevada, manufactures and sells nationally—primarily through pet stores—a line of pet chew toys and beds whose names parody elegant high-end brands of products such as perfume, cars, shoes, sparkling wine, and handbags. These include—in addition to Chewy Vuiton (LOUIS VUITTON)—Chewnel No. 5 (Chanel No. 5), Furcedes (Mercedes), Jimmy Chew (Jimmy Choo), Dog Perignonn (Dom Perignon), Snifany & Co. (Tiffany & Co.), and Dogior (Dior). The chew toys and pet beds are plush, made of polyester, and have a shape and design that loosely imitate the signature product of the targeted brand. They are mostly distributed and sold through pet stores, although one or two

Macy's stores carries Haute Diggity Dog's products. The dog toys are generally sold for less than \$20, although larger versions of some of Haute Diggity Dog's plush dog beds sell for more than \$100.

Haute Diggity Dog's "Chewy Vuiton" dog toys, in particular, loosely resemble miniature handbags and undisputedly evoke LVM handbags of similar shape, design, and color. In lieu of the LOUIS VUITTON mark, the dog toy uses "Chewy Vuiton"; in lieu of the LV mark, it uses "CV"; and the other symbols and colors employed are imitations, but not exact ones, of those used in the LVM Multicolor and Cherry designs.

In 2002, LVM commenced this action, naming as defendants Haute Diggity Dog; Victoria D.N. Dauernheim, the principal owner of Haute Diggity Dog; and Woofies, LLC, a retailer of Haute Diggity Dog's products, located in Asburn, Virginia, for trademark, trade dress, and copyright infringement. Its complaint includes counts for trademark counterfeiting, under 15 U.S.C. § 1114(1)(a); trademark infringement, under 15 U.S.C. § 1114(1)(a); trade dress infringement, under 15 U.S.C. § 1125(a)(1); unfair competition, under 15 U.S.C. § 1125(a)(1); trademark dilution, under 15 U.S.C. § 1125(c); trademark infringement, under Virginia common law; trade dress infringement, under Virginia common law; unfair competition, under Virginia common law; copyright infringement of the Multicolor design, under 17 U.S.C. § 501; and violation of the Virginia Consumer Protection Act, under Virginia Code § 59.1-200. On cross-motions for summary judgment, the district court granted Haute Diggity Dog's motion and denied LVM's motion, entering judgment in favor of Haute Diggity Dog on all of the claims. It rested its analysis on each count principally on the conclusion that Haute Diggity Dog's products amounted to a successful parody of LVM's marks, trade dress, and copyright. See *Louis Vuitton Malletier S.A. v. Haute Diggity Dog, LLC*, 464 F. Supp. 2d 495 (E.D. Va. 2006).

LVM appealed and now challenges, as a matter of law, virtually every ruling made by the district

court.

* * * * *

II

[The court rejected LVM's trademark infringement claim chiefly because consumers were unlikely to be confused by defendants' parodic use of "Chewy Vuiton" and other similar marks.]

* * * * *

III

LVM also contends that Haute Diggity Dog's advertising, sale, and distribution of the "Chewy Vuiton" dog toys dilutes its LOUIS VUITTON, LV, and Monogram Canvas marks, which are famous and distinctive, in violation of the Trademark Dilution Revision Act of 2006 ("TDRA"), 15 U.S.C.A. § 1125(c) (West Supp. 2007). . . .

* * * * *

Claims for trademark dilution are authorized by the TDRA, a relatively recent enactment,² which provides in relevant part:

Subject to the principles of equity, the owner of a *famous* mark . . . shall be entitled to an injunction against another person who . . . commences use of a mark or trade name in commerce that is likely to cause *dilution by blurring or dilution by tarnishment* of the famous mark, regardless of the presence or absence of actual or likely confusion, of competition, or of actual economic injury.

15 U.S.C.A. § 1125(c)(1) (emphasis added). A mark is "famous" when it is "widely recognized by the general consuming public of the United States as a designation of source of the goods or services of the mark's owner." *Id.* § 1125(c)(2)(A). Creating causes of action for only *dilution by blurring* and *dilution by tarnishment*, the TDRA defines "dilution by blurring" as the "association arising from the similarity between a mark or trade name and a famous mark that impairs the distinctiveness of the famous mark." *Id.*

²The TDRA, Pub. L. No. 109-312, 120 Stat. 1730 (2006), amended the Federal Trademark Dilution Act of 1995, Pub. L. No. 104-98, 109 Stat. 985 (1996), which added a "dilution" cause of action to § 43 of the Lanham Act. When the Supreme Court held that the Federal Trademark Dilution Act required proof of actual dilution and actual economic harm, see *Moseley v. V Secret Catalogue, Inc.*, 537 U.S. 418, 432-33 (2003); see also *Ringling Bros.-Barnum & Bailey Combined Shows, Inc. v. Utah Div. of Travel Dev.*, 170 F.3d 449, 461 (4th Cir. 1999), Congress amended the Act principally to overrule *Moseley* and to require that only a *likelihood* of dilution need be proved. See 15 U.S.C.A. § 1125(c)(1) (West Supp. 2007).

§ 1125(c)(2)(B). It defines “dilution by tarnishment” as the “association arising from the similarity between a mark or trade name and a famous mark that harms the reputation of the famous mark.” *Id.* § 1125(c)(2)(C).

Thus, to state a dilution claim under the TDRA, a plaintiff must show:

- (1) that the plaintiff owns a famous mark that is distinctive;
- (2) that the defendant has commenced using a mark in commerce that allegedly is diluting the famous mark;
- (3) that a similarity between the defendant’s mark and the famous mark gives rise to an association between the marks; and
- (4) that the association is likely to impair the distinctiveness of the famous mark or likely to harm the reputation of the famous mark.

... In proving a dilution claim under the TDRA, the plaintiff need not show actual or likely confusion, the presence of competition, or actual economic injury. *See* 15 U.S.C.A. § 1125(c)(1).

The TDRA creates three defenses based on the defendant’s (1) “fair use” (with exceptions); (2) “news reporting and news commentary”; and (3) “noncommercial use.” *Id.* § 1125(c)(3).

A

We first address LVM’s claim for dilution by blurring.

* * * * *

The TDRA prohibits a person from using a junior mark that is likely to dilute (by blurring) the famous mark, and blurring is defined to be an impairment to the famous mark’s distinctiveness. “Distinctiveness” in turn refers to the public’s recognition that the famous mark identifies a single source of the product using the famous mark.

To determine whether a junior mark is likely to dilute a famous mark through blurring, the TDRA directs the court to consider all factors relevant to the issue, including six factors that are enumerated in the statute:

- (i) The degree of similarity between the mark or trade name and the famous mark.
- (ii) The degree of inherent or acquired distinctiveness of the famous mark.

(iii) The extent to which the owner of the famous mark is engaging in substantially exclusive use of the mark.

(iv) The degree of recognition of the famous mark.

(v) Whether the user of the mark or trade name intended to create an association with the famous mark.

(vi) Any actual association between the mark or trade name and the famous mark.

15 U.S.C.A. § 1125(c)(2)(B). Not every factor will be relevant in every case, and not every blurring claim will require extensive discussion of the factors. But a trial court must offer a sufficient indication of which factors it has found persuasive and explain why they are persuasive so that the court’s decision can be reviewed. The district court did not do this adequately in this case. Nonetheless, after we apply the factors as a matter of law, we reach the same conclusion reached by the district court.

We begin by noting that parody is not automatically a complete *defense* to a claim of dilution by blurring where the defendant uses the parody as its own designation of source, i.e., *as a trademark*. ...

* * * * *

The TDRA, however, does not require a court to ignore the existence of a parody that is used as a trademark, and it does not preclude a court from considering parody as part of the circumstances to be considered for determining whether the plaintiff has made out a claim for dilution by blurring. ...

Thus, it would appear that a defendant’s use of a mark as a parody is relevant to the overall question of whether the defendant’s use is likely to impair the famous mark’s distinctiveness. Moreover, the fact that the defendant uses its marks as a parody is specifically relevant to several of the listed factors. For example, factor (v) (whether the defendant intended to create an association with the famous mark) and factor (vi) (whether there exists an actual association between the defendant’s mark and the famous mark) directly invite inquiries into the defendant’s intent in using the parody, the defendant’s actual use of the parody, and the effect that its use has on the famous mark. While a parody intentionally creates an

association with the famous mark in order to be a parody, it also intentionally communicates, if it is successful, that it is *not* the famous mark, but rather a satire of the famous mark. *See PETA*, 263 F.3d at 366. That the defendant is using its mark as a parody is therefore relevant in the consideration of these statutory factors.

Similarly, factors (i), (ii), and (iv)—the degree of similarity between the two marks, the degree of distinctiveness of the famous mark, and its recognizability—are directly implicated by consideration of the fact that the defendant’s mark is a successful parody. . . .

* * * * *

. . . Even as Haute Diggity Dog’s parody mimics the famous mark, it communicates simultaneously that it is not the famous mark, but is only satirizing it. And because the famous mark is particularly strong and distinctive, it becomes more likely that a parody will not impair the distinctiveness of the mark. In short, as Haute Diggity Dog’s “Chewy Vuiton” marks are a successful parody, we conclude that they will not blur the distinctiveness of the famous mark as a unique identifier of its source.

* * * * *

In sum, when considering the relevant factors to determine whether blurring is likely to occur in this case, we readily come to the conclusion, as did the district court, that LVM has failed to make out a case of trademark dilution by blurring by failing to establish that the distinctiveness of its marks was likely to be impaired by Haute Diggity Dog’s marketing and sale of its “Chewy Vuiton” products.

B

LVM’s claim for dilution by tarnishment does not require an extended discussion. To establish its claim for dilution by tarnishment, LVM must show, in lieu of blurring, that Haute Diggity Dog’s use of the “Chewy Vuiton” mark on dog toys harms the reputation of the LOUIS VUITTON mark and LVM’s other marks. LVM argues that the possibility that a dog could choke on a “Chewy Vuiton” toy causes this harm. LVM has, however, provided no record support for its assertion. . . .

* * * * *

We agree with the district court that LVM failed to demonstrate a claim for dilution by tarnishment.

* * * * *

Brookfield Communications, Inc. v. West Coast Entertainment Corp., 174 F.3d 1036 (9th Cir. 1999) (excerpt).

O’SANNLAIN, Circuit Judge.

We must venture into cyberspace to determine whether federal trademark and unfair competition laws prohibit a video rental store chain from using an entertainment-industry information provider’s trademark in the domain name of its web site and in its web site’s metatags.

I

Brookfield Communications, Inc. (“Brookfield”) appeals the district court’s denial of its motion for a preliminary injunction prohibiting West Coast Entertainment Corporation (“West Coast”) from using in commerce terms confusingly similar to Brookfield’s trademark, “MovieBuff.” Brookfield gathers and sells information about the entertainment industry. Founded in 1987 for the purpose of creating and marketing software and services for professionals in the entertainment industry, Brookfield initially offered software ap-

plications featuring information such as recent film submissions, industry credits, professional contacts, and future projects. These offerings targeted major Hollywood film studios, independent production companies, agents, actors, directors, and producers.

Brookfield expanded into the broader consumer market with computer software featuring a searchable database containing entertainment-industry related information marketed under the “MovieBuff” mark around December 1993. Brookfield’s “MovieBuff” software now targets smaller companies and individual consumers who are not interested in purchasing Brookfield’s professional level alternative, The Studio System, and includes comprehensive, searchable, entertainment-industry databases and related software applications containing information such as movie credits, box office receipts, films in development, film release sched-

ules, entertainment news, and listings of executives, agents, actors, and directors. This "MovieBuff" software comes in three versions—(1) the MovieBuff Pro Bundle, (2) the MovieBuff Pro, and (3) MovieBuff—and is sold through various retail stores....

Sometime in 1996, Brookfield attempted to register the World Wide Web ("the Web") domain name "moviebuff.com" with Network Solutions, Inc. ("Network Solutions"), but was informed that the requested domain name had already been registered by West Coast. Brookfield subsequently registered "brookfieldcomm.com" in May 1996 and "moviebuffonline.com" in September 1996. Sometime in 1996 or 1997, Brookfield began using its web sites to sell its "MovieBuff" computer software and to offer an Internet-based searchable database marketed under the "MovieBuff" mark. Brookfield sells its "MovieBuff" computer software through its "brookfieldcomm.com" and "moviebuffonline.com" web sites and offers subscribers online access to the MovieBuff database itself at its "inhollywood.com" web site.

On August 19, 1997, Brookfield applied to the Patent and Trademark Office (PTO) for federal registration of "MovieBuff" as a mark to designate both goods and services. Its trademark application describes its product as "computer software providing data and information in the field of the motion picture and television industries." Its service mark application describes its service as "providing multiple-user access to an online network database offering data and information in the field of the motion picture and television industries." Both federal trademark registrations issued on September 29, 1998. Brookfield had previously obtained a California state trademark registration for the mark "MovieBuff" covering "computer software" in 1994.

In October 1998, Brookfield learned that West Coast—one of the nation's largest video rental store chains with over 500 stores—intended to launch a web site at "moviebuff.com" containing, *inter alia*, a searchable entertainment database similar to "MovieBuff." West Coast had registered "moviebuff.com" with Network Solutions on February 6, 1996 and claims that it chose the domain name because the term "Movie Buff" is part of its service mark, "The Movie Buff's Movie Store," on which a federal registration issued

in 1991 covering "retail store services featuring video cassettes and video game cartridges" and "rental of video cassettes and video game cartridges." West Coast notes further that, since at least 1988, it has also used various phrases including the term "Movie Buff" to promote goods and services available at its video stores in Massachusetts, including "The Movie Buff's Gift Guide"; "The Movie Buff's Gift Store"; "Calling All Movie Buffs!"; "Good News Movie Buffs!"; "Movie Buffs, Show Your Stuff!"; "the Perfect Stocking Stuffer for the Movie Buff!"; "A Movie Buff's Top Ten"; "The Movie Buff Discovery Program"; "Movie Buff Picks"; "Movie Buff Series"; "Movie Buff Selection Program"; and "Movie Buff Film Series."

On November 10, Brookfield delivered to West Coast a cease-and-desist letter alleging that West Coast's planned use of the "moviebuff.com" would violate Brookfield's trademark rights; as a "courtesy" Brookfield attached a copy of a complaint that it threatened to file if West Coast did not desist.

The next day, West Coast issued a press release announcing the imminent launch of its web site full of "movie reviews, Hollywood news and gossip, provocative commentary, and coverage of the independent film scene and films in production." The press release declared that the site would feature "an extensive database, which aids consumers in making educated decisions about the rental and purchase of" movies and would also allow customers to purchase movies, accessories, and other entertainment-related merchandise on the web site.

Brookfield fired back immediately with a visit to the United States District Court for the Central District of California, and this lawsuit was born. In its first amended complaint filed on November 18, 1998, Brookfield alleged principally that West Coast's proposed offering of online services at "moviebuff.com" would constitute trademark infringement and unfair competition in violation of sections 32 and 43(a) of the Lanham Act, 15 U.S.C. §§ 1114, 1125(a). Soon thereafter, Brookfield applied *ex parte* for a temporary restraining order ("TRO") enjoining West Coast "[f]rom using ... in any manner ... the mark MOVIEBUFF, or any other term or terms likely to cause confusion therewith, including moviebuff.com, as West Coast's domain name, ...

as the name of West Coast's website service, in buried code or metatags on their home page or web pages, or in connection with the retrieval of data or information on other goods or services."

On November 27, West Coast filed an opposition brief in which it argued first that Brookfield could not prevent West Coast from using "moviebuff.com" in commerce because West Coast was the senior user. West Coast claimed that it was the first user of "MovieBuff" because it had used its federally registered trademark, "The Movie Buff's Movie Store," since 1986 in advertisements, promotions, and letterhead in connection with retail services featuring videocassettes and video game cartridges. Alternatively, West Coast claimed seniority on the basis that it had garnered common-law rights in the domain name by using "moviebuff.com" before Brookfield began offering its "MovieBuff" Internet-based searchable database on the Web. In addition to asserting seniority, West Coast contended that its planned use of "moviebuff.com" would not cause a likelihood of confusion with Brookfield's trademark "MovieBuff" and thus would not violate the Lanham Act.

The district court heard arguments on the TRO motion on November 30. Later that day, the district court issued an order construing Brookfield's TRO motion as a motion for a preliminary injunction and denying it. The district court concluded that West Coast was the senior user of the mark "MovieBuff" for both of the reasons asserted by West Coast. The court also determined that Brookfield had not established a likelihood of confusion.

Brookfield responded by filing a notice of appeal from the denial of preliminary injunction followed by a motion in the district court for injunction pending appeal, which motion the district court denied. On January 16, 1999, West Coast launched its web site at "moviebuff.com." Fearing that West Coast's fully operational web site would cause it irreparable injury, Brookfield filed an emergency motion for injunction pending appeal with this court a few days later. On February 24, we granted Brookfield's motion and entered an order enjoining West Coast "from using, or facilitating the use of, in any manner, including advertising and promotion, the mark MOVIEBUFF, or any other term or terms likely to cause confusion therewith, including

@moviebuff.com or moviebuff.com, as the name of West Coast's web site service, in buried code or metatags on its home page or web pages, or in connection with the retrieval of data or information on other goods or services." The injunction was to take effect upon the posting of a \$25,000 bond in the district court by Brookfield. ...

* * * * *

II

To resolve the legal issues before us, we must first understand the basics of the Internet and the World Wide Web. Because we will be delving into technical corners of the Internet—dealing with features such as domain names and metatags—we explain in some detail what all these things are and provide a general overview of the relevant technology.

The Internet is a global network of interconnected computers which allows individuals and organizations around the world to communicate and to share information with one another. The Web, a collection of information resources contained in documents located on individual computers around the world, is the most widely used and fastest-growing part of the Internet except perhaps for electronic mail ("e-mail"). ... With the Web becoming an important mechanism for commerce, ... companies are racing to stake out their place in cyberspace. Prevalent on the Web are multimedia "web pages"—computer data files written in Hypertext Markup Language ("HTML")—which contain information such as text, pictures, sounds, audio and video recordings, and links to other web pages. ...

Each web page has a corresponding domain address, which is an identifier somewhat analogous to a telephone number or street address. Domain names consist of a second-level domain—simply a term or series of terms (e.g., westcoastvideo)—followed by a top-level domain, many of which describe the nature of the enterprise. Top-level domains include ".com" (commercial), ".edu" (educational), ".org" (non-profit and miscellaneous organizations), ".gov" (government), ".net" (networking provider), and ".mil" (military). ... Commercial entities generally use the ".com" top-level domain, which also serves as a catchall top-level domain. To obtain a domain name, an individual or entity files an application with Network Solutions listing the domain name the applicant wants. Because each web page must have an

unique domain name, Network Solution checks to see whether the requested domain name has already been assigned to someone else. If so, the applicant must choose a different domain name. Other than requiring an applicant to make certain representations, Network Solutions does not make an independent determination about a registrant's right to use a particular domain name. ...

Using a Web browser, such as Netscape's Navigator or Microsoft's Internet Explorer, a cyber "surfer" may navigate the Web—searching for, communicating with, and retrieving information from various web sites. ... A specific web site is most easily located by using its domain name. ... Upon entering a domain name into the web browser, the corresponding web site will quickly appear on the computer screen. Sometimes, however, a Web surfer will not know the domain name of the site he is looking for, whereupon he has two principal options: trying to guess the domain name or seeking the assistance of an Internet "search engine."

Oftentimes, an Internet user will begin by hazarding a guess at the domain name, especially if there is an obvious domain name to try. Web users often assume, as a rule of thumb, that the domain name of a particular company will be the company name followed by ".com." ... For example, one looking for Kraft Foods, Inc. might try "kraftfoods.com," and indeed this web site contains information on Kraft's many food products. Sometimes, a trademark is better known than the company itself, in which case a Web surfer may assume that the domain address will be "trademark.com." ... One interested in today's news would do well visiting "usatoday.com," which features, as one would expect, breaking stories from Gannett's USA Today. Guessing domain names, however, is not a risk-free activity. The Web surfer who assumes that "X.com" will always correspond to the web site of company X or trademark X will, however, sometimes be misled. One looking for the latest information on Panavision, International, L.P., would sensibly try "panavision.com." Until recently, that Web surfer would have instead found a web site owned by Dennis Toeppen featuring photographs of the City of Pana, Illinois. ... Having registered several domain names that logically would have corresponded to the web sites of major companies

such as Panavision, Delta Airlines, Neiman Marcus, Lufthansa, Toeppen sought to sell "panavision.com" to Panavision, which gives one a taste of some of the trademark issues that have arisen in cyberspace. ...

A Web surfer's second option when he does not know the domain name is to utilize an Internet search engine, such as Yahoo, Altavista, or Lycos. ... When a keyword is entered, the search engine processes it through a self-created index of web sites to generate a (sometimes long) list relating to the entered keyword. Each search engine uses its own algorithm to arrange indexed materials in sequence, so the list of web sites that any particular set of keywords will bring up may differ depending on the search engine used. ... Search engines look for keywords in places such as domain names, actual text on the web page, and metatags. Metatags are HTML code intended to describe the contents of the web site. There are different types of metatags, but those of principal concern to us are the "description" and "keyword" metatags. The description metatags are intended to describe the web site; the keyword metatags, at least in theory, contain keywords relating to the contents of the web site. The more often a term appears in the metatags and in the text of the web page, the more likely it is that the web page will be "hit" in a search for that keyword and the higher on the list of "hits" the web page will appear. ...

With this basic understanding of the Internet and the Web, we may now analyze the legal issues before us.

* * * * *

... To establish a trademark infringement claim under section 32 of the Lanham Act or an unfair competition claim under section 43(a) of the Lanham Act, Brookfield must establish that West Coast is using a mark confusingly similar to a valid, protectable trademark of Brookfield's. ... The district court denied Brookfield's motion for preliminary injunctive relief because it concluded that Brookfield had failed to establish that it was the senior user of the "MovieBuff" mark or that West Coast's use of the "moviebuff.com" domain name created a likelihood of confusion.

We review each of the district court's conclusions in turn.

* * * * *

... [W]e conclude that the district court erred

in concluding that Brookfield failed to establish a likelihood of success on its claim of being the senior user.

V

Establishing seniority, however, is only half the battle. Brookfield must also show that the public is likely to be somehow confused about the source or sponsorship of West Coast's "moviebuff.com" web site—and somehow to associate that site with Brookfield. ...

* * * * *

Given the virtual identity of "moviebuff.com" and "MovieBuff," the relatedness of the products and services accompanied by those marks, and the companies' simultaneous use of the Web as a marketing and advertising tool, many forms of consumer confusion are likely to result. People surfing the Web for information on "MovieBuff" may confuse "MovieBuff" with the searchable entertainment database at "moviebuff.com" and simply assume that they have reached Brookfield's web site. ... In the Internet context, in particular, entering a web site takes little effort—usually one click from a linked site or a search engine's list; thus, Web surfers are more likely to be confused as to the ownership of a web site than traditional patrons of a brick-and-mortar store would be of a store's ownership. Alternatively, they may incorrectly believe that West Coast licensed "MovieBuff" from Brookfield, ... or that Brookfield otherwise sponsored West Coast's database.... Other consumers may simply believe that West Coast bought out Brookfield or that they are related companies.

Yet other forms of confusion are likely to ensue. Consumers may wrongly assume that the "MovieBuff" database they were searching for is no longer offered, having been replaced by West Coast's entertainment database, and thus simply use the services at West Coast's web site. ... And even where people realize, immediately upon accessing "moviebuff.com," that they have reached a site operated by West Coast and wholly unrelated to Brookfield, West Coast will still have gained a customer by appropriating the goodwill that Brookfield has developed in its "MovieBuff" mark. A consumer who was originally looking for

Brookfield's products or services may be perfectly content with West Coast's database (especially as it is offered free of charge); but he reached West Coast's site because of its use of Brookfield's mark as its second-level domain name, which is a misappropriation of Brookfield's goodwill by West Coast. ...

The district court apparently assumed that likelihood of confusion exists only when consumers are confused as to the source of a product they actually purchase. It is, however, well established that the Lanham Act protects against the many other forms of confusion that we have outlined. ...

* * * * *

In light of the foregoing analysis, we conclude that Brookfield has demonstrated a likelihood of success on its claim that West Coast's use of "moviebuff.com" violates the Lanham Act. ...

B

So far we have considered only West Coast's use of the domain name "moviebuff.com." Because Brookfield requested that we also preliminarily enjoin West Coast from using marks confusingly similar to "MovieBuff" in metatags and buried code, we must also decide whether West Coast can, consistently with the trademark and unfair competition laws, use "MovieBuff" or "moviebuff.com" in its HTML code.²³

At first glance, our resolution of the infringement issues in the domain name *1062 context would appear to dictate a similar conclusion of likelihood of confusion with respect to West Coast's use of "moviebuff.com" in its metatags. ... Disposing of the issue so readily, however, would ignore the fact that the likelihood of confusion in the domain name context resulted largely from the associational confusion between West Coast's domain name "moviebuff.com" and Brookfield's trademark "MovieBuff." The question in the metatags context is quite different. Here, we must determine whether West Coast can use "MovieBuff" or "moviebuff.com" in the metatags of its web site at "westcoastvideo.com" or at any other domain address *other than* "moviebuff.com" (which we have determined that West Coast may not use).

²³As we explained in Part II, metatags are HTML code not visible to Web users but used by search engines in determining which sites correspond to the keywords entered by a Web user. Although Brookfield never explained what it meant by "buried code," the leading trademark treatise explains that "buried code" is another term for the HTML code that is used by search engines but that is not visible to users. ... We will use the term metatags as encompassing HTML code generally.

Although entering “MovieBuff” into a search engine is likely to bring up a list including “westcoastvideo.com” if West Coast has included that term in its metatags, the resulting confusion is not as great as where West Coast uses the “moviebuff.com” domain name. First, when the user inputs “MovieBuff” into an Internet search engine, the list produced by the search engine is likely to include both West Coast’s and Brookfield’s web sites. Thus, in scanning such list, the Web user will often be able to find the particular web site he is seeking. Moreover, even if the Web user chooses the web site belonging to West Coast, he will see that the domain name of the web site he selected is “westcoastvideo.com.” Since there is no confusion resulting from the domain address, and since West Coast’s initial web page prominently displays its own name, it is difficult to say that a consumer is likely to be confused about whose site he has reached or to think that Brookfield somehow sponsors West Coast’s web site.

Nevertheless, West Coast’s use of “moviebuff.com” in metatags will still result in what is known as initial interest confusion. Web surfers looking for Brookfield’s “MovieBuff” products who are taken by a search engine to “westcoastvideo.com” will find a database similar enough to “MovieBuff” such that a sizeable number of consumers who were originally looking for Brookfield’s product will simply decide to utilize West Coast’s offerings instead. Although there is no source confusion in the sense that consumers know they are patronizing West Coast rather than Brookfield, there is nevertheless initial interest confusion in the sense that, by using “moviebuff.com” or “MovieBuff” to divert people looking for “MovieBuff” to its web site, West Coast improperly benefits from the goodwill that Brookfield developed in its mark. Recently in *Dr. Seuss [Enters. v. Penguin Books USA, Inc.]*, 109 F.3d 1394 (9th Cir. 1997), we explicitly recognized that the use of another’s trademark in a manner calculated “to capture initial consumer attention, even though no actual sale is finally completed as a result of the confusion, may be still an infringement.” ...

* * * * *

Both *Dr. Seuss* and the Second Circuit hold that initial interest confusion is actionable under the Lanham Act, which holdings are bolstered by

the decisions of many other courts which have similarly recognized that the federal trademark and unfair competition laws do protect against this form of consumer confusion. ...

Using another’s trademark in one’s metatags is much like posting a sign with another’s trademark in front of one’s store. Suppose West Coast’s competitor (let’s call it “Blockbuster”) puts up a billboard on a highway reading—“West Coast Video: 2 miles ahead at Exit 7”—where West Coast is really located at Exit 8 but Blockbuster is located at Exit 7. Customers looking for West Coast’s store will pull off at Exit 7 and drive around looking for it. Unable to locate West Coast, but seeing the Blockbuster store right by the highway entrance, they may simply rent there. Even consumers who prefer West Coast may find it not worth the trouble to continue searching for West Coast since there is a Blockbuster right there. Customers are not confused in the narrow sense: they are fully aware that they are purchasing from Blockbuster and they have no reason to believe that Blockbuster is related to, or in any way sponsored by, West Coast. Nevertheless, the fact that there is only initial consumer confusion does not alter the fact that Blockbuster would be misappropriating West Coast’s acquired goodwill. ...

The few courts to consider whether the use of another’s trademark in one’s metatags constitutes trademark infringement have ruled in the affirmative. ...

* * * * *

In a metatags case with an interesting twist, a district court in Massachusetts also enjoined the use of metatags in a manner that resulted in initial interest confusion. *See Niton [Corp. v. Radiation Monitoring Devices, Inc.]*, 27 F. Supp. 2d [102,] at 102–05 [(D. Mass. 1998)]. In that case, the defendant Radiation Monitoring Devices (“RMD”) did not simply use Niton Corporation’s (“Niton”) trademark in its metatags. Instead, RMD’s web site directly copied Niton’s web site’s metatags and HTML code. As a result, whenever a search performed on an Internet search engine listed Niton’s web site, it also listed RMD’s site. Although the opinion did not speak in terms of initial consumer confusion, the court made clear that its issuance of preliminary injunctive relief was based on the fact that RMD was purposefully diverting people looking for Ni-

ton to its web site. ...

Consistently with *Dr. Seuss*, the Second Circuit, and the cases which have addressed trademark infringement through metatags use, we conclude that the Lanham Act bars West Coast from including in its metatags any term confusingly similar with Brookfield's mark. ...

C

Contrary to West Coast's contentions, we are not in any way restricting West Coast's right to use terms in a manner which would constitute fair use under the Lanham Act. ... It is well established that the Lanham Act does not prevent one from using a competitor's mark truthfully to identify the competitor's goods This fair use doctrine applies in cyberspace as it does in the real world. ...

In [*Playboy Enters. v. Welles*, [7 F. Supp. 2d 1098 (S.D. Cal. 1998)], the case most on point, Playboy sought to enjoin former Playmate of the Year Terri Welles ("Welles") from using "Playmate" or "Playboy" on her web site featuring photographs of herself. ... Welles's web site advertised the fact that she was a former Playmate of the Year, but minimized the use of Playboy's marks; it also contained numerous disclaimers stating that her site was neither endorsed by nor affiliated with Playboy. The district court found that Welles was using "Playboy" and "Playmate" not as trademarks, but rather as descriptive terms fairly and accurately describing her web page, and that her use of "Playboy" and "Playmate" in her web site's metatags was a permissible, good faith attempt to index the content of her web site. It accordingly concluded that her use was permissible under the trademark laws. ...

We agree that West Coast can legitimately use an appropriate descriptive term in its metatags. But "MovieBuff" is not such a descriptive term. Even though it differs from "Movie Buff" by only a single space, that difference is pivotal. The term "Movie Buff" is a descriptive term, which is rou-

tinely used in the English language to describe a movie devotee. "MovieBuff" is not. The term "MovieBuff" is not in the dictionary. ... Nor has that term been used in any published federal or state court opinion. In light of the fact that it is not a word in the English language, when the term "MovieBuff" is employed, it is used to refer to Brookfield's products and services, rather than to mean "motion picture enthusiast." The proper term for the "motion picture enthusiast" is "Movie Buff," which West Coast certainly *can* use. It cannot, however, omit the space.

Moreover, West Coast is not absolutely barred from using the term "MovieBuff." As we explained above, that term can be legitimately used to describe Brookfield's product. For example, its web page might well include an advertisement banner such as "Why pay for MovieBuff when you can get the same thing here for FREE?" which clearly employs "MovieBuff" to refer to Brookfield's products. West Coast, however, presently uses Brookfield's trademark not to reference Brookfield's products, but instead to describe its own product (in the case of the domain name) and to attract people to its web site in the case of the metatags. That is not fair use.

* * * *

VII

As we have seen, registration of a domain name for a Web site does not trump long-established principles of trademark law. When a firm uses a competitor's trademark in the domain name of its web site, users are likely to be confused as to its source or sponsorship. Similarly, using a competitor's trademark in the metatags of such web site is likely to cause what we have described as initial interest confusion. These forms of confusion are exactly what the trademark laws are designed to prevent.

Accordingly, we reverse and remand this case to the district court with instructions to enter a preliminary injunction in favor of Brookfield in accordance with this opinion.

**Playboy Enterprises, Inc. v. Netscape Communications Corp.,
354 F.3d 1020 (9th Cir. 2004) (excerpt).**

NELSON, Circuit Judge.

Playboy Enterprises International, Inc. (PEI) appeals from the district court's grant of summary judgment in favor of Netscape Communications Corporation and Excite, Inc. PEI sued defendants for trademark infringement and dilution. We reverse and remand.

I. Facts

This case involves a practice called "keying" that defendants use on their Internet search engines. Keying allows advertisers to target individuals with certain interests by linking advertisements to pre-identified terms. To take an innocuous example, a person who searches for a term related to gardening may be a likely customer for a company selling seeds. Thus, a seed company might pay to have its advertisement displayed when searchers enter terms related to gardening. After paying a fee to defendants, that company could have its advertisements appear on the page listing the search results for gardening-related terms: the ad would be "keyed" to gardening-related terms. Advertisements appearing on search result pages are called "banner ads" because they run along the top or side of a page much like a banner.

Defendants have various lists of terms to which they key advertisers' banner ads. Those lists include the one at issue in this case, a list containing terms related to sex and adult-oriented entertainment. Among the over-400 terms in this list are two for which PEI holds trademarks: "playboy" and "playmate." Defendants *require* adult-oriented companies to link their ads to this set of words. Thus, when a user types in "playboy," "playmate," or one of the other listed terms, those companies' banner ads appear on the search results page.

PEI introduced evidence that the adult-oriented banner ads displayed on defendants' search results pages are often graphic in nature and are confusingly labeled or not labeled at all. In addition, the parties do not dispute that buttons on the banner ads say "click here." When a searcher complies, the search results page disappears, and the searcher finds him or herself at the advertiser's website. PEI presented uncontroverted evidence that defendants monitor "click

rates," the ratio between the number of times searchers click on banner ads and the number of times the ads are shown. Defendants use click rate statistics to convince advertisers to renew their keyword contracts. The higher the click rate, the more successful they deem a banner ad.

PEI sued defendants, asserting that they were using PEI's marks in a manner that infringed upon and diluted them. . . . The district court granted summary judgment in favor of defendants. We reverse.

* * * * *

III. Discussion

A. Trademark Infringement

* * * * *

2. PEI's case for trademark infringement.

The "core element of trademark infringement," the likelihood of confusion, lies at the center of this case. No dispute exists regarding the other requirements set forth by the statute: PEI clearly holds the marks in question and defendants used the marks in commerce without PEI's permission.

PEI's strongest argument for a likelihood of confusion is for a certain kind of confusion: initial interest confusion. Initial interest confusion is customer confusion that creates initial interest in a competitor's product. Although dispelled before an actual sale occurs, initial interest confusion impermissibly capitalizes on the goodwill associated with a mark and is therefore actionable trademark infringement.

PEI asserts that, by keying adult-oriented advertisements to PEI's trademarks, defendants actively create initial interest confusion in the following manner. Because banner advertisements appear immediately after users type in PEI's marks, PEI asserts that users are likely to be confused regarding the sponsorship of un-labeled banner advertisements. In addition, many of the advertisements instruct users to "click here." Because of their confusion, users may follow the instruction, believing they will be connected to a PEI cite. Even if they realize "immediately upon accessing" the competitor's site that they have reached a site "wholly unrelated to" PEI's,

the damage has been done: Through initial consumer confusion, the competitor “will still have gained a customer by appropriating the goodwill that [PEI] has developed in its [] mark.”

PEI’s theory strongly resembles the theory adopted by this court in *Brookfield Communications, Inc. v. West Coast Entertainment Corporation*. . . .

In this case, PEI claims that defendants, in conjunction with advertisers, have misappropriated the goodwill of PEI’s marks by leading Internet users to competitors’ websites just as West Coast video misappropriated the goodwill of Brookfield’s mark. Some consumers, initially seeking PEI’s sites, may initially believe that unlabeled banner advertisements are links to PEI’s sites or to sites affiliated with PEI. Once they follow the instructions to “click here,” and they access the site, they may well realize that they are not at a PEI-sponsored site. However, they may be perfectly happy to remain on the competitor’s site, just as the *Brookfield* court surmised that some searchers initially seeking Brookfield’s site would happily remain on West Coast’s site. The Internet user will have reached the site because of defendants’ use of PEI’s mark. Such use is actionable.

* * * * *

... We note that defendants’ use of PEI’s marks to trigger the listing of PEI sites, and other sites that legitimately use PEI’s marks, is not at issue here. In addition, we note that we are not addressing a situation in which a banner advertisement clearly identifies its source with its sponsor’s name, or in which a search engine clearly identifies a banner advertisement’s source. We are also not addressing a situation in which advertisers or defendants overtly compare PEI’s products to a competitor’s—saying, for example “if you are interested in Playboy, you may also be interested in the following message from[a different, named company].” Rather, we are evaluating a situation in which defendants display competitors’ unlabeled banner advertisements, with no label or overt comparison to PEI, after Internet users type in PEI’s trademarks.

The situation with which we are dealing runs afoul of the first requirement for nominative use. Accordingly, we do not consider the other prongs.

* * * * *

B. Trademark Dilution

* * * * *

Defendants argue that dilution cannot be found because they do not label their own goods with PEI’s marks. However, when one considers things from the consumers’ perspective, defendants’ argument fails. According to PEI’s evidence, in the minds of consumers, defendants implicitly label the goods of PEI’s competitors with its marks.

* * * * *

... Accordingly, we reverse the district court’s grant of summary judgment in favor of defendants and remand for further proceedings.

BERZON, Circuit Judge, concurring.

I concur in Judge Nelson’s careful opinion in this case, as it is fully consistent with the applicable precedents. I write separately, however, to express concern that one of those precedents was wrongly decided and may one day, if not now, need to be reconsidered *en banc*.

I am struck by how analytically similar keyed advertisements are to the metatags found infringing in *Brookfield Communications v. West Coast Entertainment Corp.*, 174 F.3d 1036 (9th Cir. 1999). In *Brookfield*, the court held that the defendant could not use the trademarked term “moviebuff” as one of its metatags. Metatags are part of the HTML code of a web page, and therefore are invisible to internet users. Search engines use these metatags to pull out websites applicable to search terms. . . .

Specifically, *Brookfield* held that the use of the trademarked terms in metatags violated the Lanham Act because it caused “initial interest confusion.” . . . The court explained that even though “there is no source confusion in the sense that consumers know[who] they are patronizing, . . . there is nevertheless initial interest confusion in the sense that, by using ‘moviebuff.com’ or ‘MovieBuff’ to divert people looking for ‘MovieBuff’ to its website, [the defendant] improperly benefits from the goodwill that [the plaintiff] developed in its mark.” *Id.* at 1062.

As applied to this case, *Brookfield* might suggest that there could be a Lanham Act violation *even if* the banner advertisements were clearly labeled, either by the advertiser or by the search engine. I do not believe that to be so. So read, the metatag holding in *Brookfield* would expand

the reach of initial interest confusion from situations in which a party is initially confused to situations in which a party is never confused. I do not think it is reasonable to find initial interest confusion when a consumer is never confused as to source or affiliation, but instead knows, or should know, from the outset that a product or web link is not related to that of the trademark holder because the list produced by the search engine so informs him.

There is a big difference between hijacking a customer to another website by making the customer think he or she is visiting the trademark holder's website (even if only briefly), which is what may be happening in this case when the banner advertisements are not labeled, and just distracting a potential customer with another *choice*, when it is clear that it is a choice. True, when the search engine list generated by the search for the trademark ensconced in a metatag comes up, an internet user might *choose* to visit westcoastvideo.com, the defendant's website in *Brookfield*, instead of the plaintiff's moviebuff.com website, but such choices do not constitute trademark infringement off the internet, and I cannot understand why they should on the internet.

For example, consider the following scenario: I walk into Macy's and ask for the Calvin Klein section and am directed upstairs to the second floor. Once I get to the second floor, on my way to the Calvin Klein section, I notice a more prominently displayed line of Charter Club clothes, Macy's own brand, designed to appeal to the same people attracted by the style of Calvin Klein's latest line of clothes. Let's say I get diverted from my goal of reaching the Calvin Klein section, the Charter Club stuff looks good enough to me, and I purchase some Charter Club shirts instead. Has Charter Club or Macy's infringed Calvin Klein's trademark, simply by having another product more prominently displayed before one reaches the Klein line? Certainly not. ...

Similarly, suppose a customer walks into a bookstore and asks for Playboy magazine and is then directed to the adult magazine section, where he or she sees Penthouse or Hustler up front on the rack while Playboy is buried in back. One would not say that Penthouse or Hustler had violated Playboy's trademark. This conclusion

holds true even if Hustler paid the store owner to put its magazines in front of Playboy's.

One can test these analogies with an on-line example: If I went to Macy's website and did a search for a Calvin Klein shirt, would Macy's violate Calvin Klein's trademark if it responded (as does Amazon.com, for example) with the requested shirt and pictures of other shirts I might like to consider as well? I very much doubt it.

Accordingly, I simply cannot understand the broad principle set forth in *Brookfield*. Even the main analogy given in *Brookfield* belies its conclusion. The Court gives an example of Blockbuster misdirecting customers from a competing video store, West Coast Video, by putting up a highway billboard sign giving directions to Blockbuster but telling customers that a West Coast Video store is located there. ... Even though customers who arrive at the Blockbuster realize that it is not West Coast Video, they were initially misled and confused.

But there was no similar misdirection in *Brookfield*, nor would there be similar misdirection in this case were the banner ads labeled or otherwise identified. The *Brookfield* defendant's website was described by the court as being accurately listed as westcoastvideo.com in the applicable search results. Consumers were free to choose the official moviebuff.com website and were not hijacked or misdirected elsewhere. I note that the billboard analogy has been widely criticized as inapplicable to the internet situation, given both the fact that customers were not misdirected and the minimal inconvenience in directing one's web browser back to the original list of search results. ...

The degree to which this questionable aspect of *Brookfield* affects this case is not clear to me. Our opinion limits the present holding to situations in which the banner advertisements are not labeled or identified. ... Whether, on remand, the case will remain so limited is questionable. PEI may seek to reach labeled advertisements as well.

There will be time enough to address the continuing vitality of *Brookfield* should the labeled advertisement issue arise later. ... Should the question arise again, in this case or some other, this court needs to consider whether we want to continue to apply an insupportable rule.

Lamparello v. Falwell,
420 F.3d 309 (4th Cir. 2005), cert. denied, 547 U.S. 1069 (2006) (excerpt).

MOTZ, Circuit Judge.

Christopher Lamparello appeals the district court's order enjoining him from maintaining a gripe website critical of Reverend Jerry Falwell. For the reasons stated below, we reverse.

I.

Reverend Falwell is "a nationally known minister who has been active as a commentator on politics and public affairs." *Hustler Magazine v. Falwell*, 485 U.S. 46, 47 (1988). He holds the common law trademarks "Jerry Falwell" and "Falwell," and the registered trademark "Listen America with Jerry Falwell." Jerry Falwell Ministries can be found online at "www.falwell.com," a website which receives 9,000 hits (or visits) per day.

Lamparello registered the domain name "www.fallwell.com" on February 11, 1999, after hearing Reverend Falwell give an interview "in which he expressed opinions about gay people and homosexuality that [Lamparello] considered ... offensive." Lamparello created a website at that domain name to respond to what he believed were "untruths about gay people." Lamparello's website included headlines such as "Bible verses that Dr. Falwell chooses to ignore" and "Jerry Falwell has been bearing false witness (Exodus 20:16) against his gay and lesbian neighbors for a long time." The site also contained in-depth criticism of Reverend Falwell's views. For example, the website stated:

Dr. Falwell says that he is on the side of truth. He says that he will preach that homosexuality is a sin until the day he dies. But we believe that if the reverend were to take another thoughtful look at the scriptures, he would discover that they have been twisted around to support an anti-gay

political agenda ... at the expense of the gospel.

Although the interior pages of Lamparello's website did not contain a disclaimer, the homepage prominently stated, "This website is NOT affiliated with Jerry Falwell or his ministry"; advised, "If you would like to visit Rev. Falwell's website, you may click here"; and provided a hyperlink to Reverend Falwell's website.

At one point, Lamparello's website included a link to the Amazon.com webpage for a book that offered interpretations of the Bible that Lamparello favored, but the parties agree that Lamparello has never sold goods or services on his website. The parties also agree that "Lamparello's domain name and web site at www.fallwell.com," which received only 200 hits per day, "had no measurable impact on the quantity of visits to [Reverend Falwell's] web site at www.falwell.com."

Nonetheless, Reverend Falwell sent Lamparello letters in October 2001 and June 2003 demanding that he cease and desist from using www.fallwell.com or any variation of Reverend Falwell's name as a domain name. Ultimately, Lamparello filed this action against Reverend Falwell and his ministries (collectively referred to hereinafter as "Reverend Falwell"), seeking a declaratory judgment of noninfringement. Reverend Falwell counter-claimed, alleging trademark infringement under 15 U.S.C. § 1114 (2000), false designation of origin under 15 U.S.C. § 1125(a), unfair competition under 15 U.S.C. § 1126 and the common law of Virginia,¹ and cybersquatting under 15 U.S.C. § 1125(d).

The parties stipulated to all relevant facts and filed cross-motions for summary judgment. The district court granted summary judgment to Reverend Falwell, enjoined Lamparello from using Reverend Falwell's mark at www.fallwell.com,

¹As the district court noted, although Reverend Falwell "assert [s] a claim under 15 U.S.C. [§] 1126 for a violation of federal unfair competition law, no such cause of action exists. False Designation of Origin is commonly referred to as unfair competition law..." *Lamparello v. Falwell*, 360 F. Supp. 2d 768, 773 n.2 (E.D. Va. 2004). Accordingly, the district court "construed any claim by [Falwell] for violation of federal unfair competition law as a claim for violation of 15 U.S.C. [§] 1125." *Id.* We will do the same. Furthermore, because "[t]he test for trademark infringement and unfair competition under the Lanham Act is essentially the same as that for common law unfair competition under Virginia law because both address the likelihood of confusion as to the source of the goods or services involved," *Lone Star Steakhouse & Saloon, Inc. v. Alpha of Va., Inc.*, 43 F.3d 922, 930 n.10 (4th Cir. 1995), Reverend Falwell's state-law unfair competition claim rises or falls with his federal claims of infringement and false designation of origin. Therefore, we will not analyze his state-law claim separately.

and required Lamparello to transfer the domain name to Reverend Falwell. *Lamparello*, 360 F. Supp. 2d at 773, 775. However, the court denied Reverend Falwell’s request for statutory damages or attorney fees, reasoning that the “primary motive” of Lamparello’s website was “to put forth opinions on issues that were contrary to those of [Reverend Falwell]” and “not to take away monies or to profit.” *Id.* at 775.

Lamparello appeals the district court’s order; Reverend Falwell cross-appeals the denial of statutory damages and attorney fees. We review *de novo* a district court’s ruling on cross-motions for summary judgment. *See People for the Ethical Treatment of Animals v. Doughney*, 263 F.3d 359, 364 (4th Cir. 2001) [hereinafter “*PETA*”].

II.

We first consider Reverend Falwell’s claims of trademark infringement and false designation of origin.

A.

* * * * *

Both infringement and false designation of origin have five elements. To prevail under either cause of action, the trademark holder must prove:

- (1) that it possesses a mark; (2) that the [opposing party] used the mark; (3) that the [opposing party’s] use of the mark occurred “in commerce”; (4) that the [opposing party] used the mark “in connection with the sale, offering for sale, distribution, or advertising” of goods or services; and (5) that the [opposing party] used the mark in a manner likely to confuse consumers.

PETA, 263 F.3d at 364 (citing 15 U.S.C. §§ 1114, 1125, and *Lone Star Steakhouse & Saloon*, 43 F.3d at 930).

Trademark law serves the important functions of protecting product identification, providing consumer information, and encouraging the production of quality goods and services. *See Qualitex Co. v. Jacobson Prods. Co.*, 514 U.S. 159, 164 (1995). But protections “‘against unfair competition’” cannot be transformed into “‘rights to control language.’” *CPC Int’l, Inc. v. Skippy Inc.*, 214 F.3d 456, 462 (4th Cir. 2000) (quoting

Mark A. Lemley, *The Modern Lanham Act and the Death of Common Sense*, 108 Yale L.J. 1687, 1710–11 (1999)). “Such a transformation” would raise serious First Amendment concerns because it would limit the

ability to discuss the products or criticize the conduct of companies that may be of widespread public concern and importance. Much useful social and commercial discourse would be all but impossible if speakers were under threat of an infringement lawsuit every time they made reference to a person, company or product by using its trademark.

Id. (internal quotation marks and citations omitted).

Lamparello and his amici argue at length that application of the Lanham Act must be restricted to “commercial speech” to assure that trademark law does not become a tool for unconstitutional censorship. The Sixth Circuit has endorsed this view, *see Taubman Co. v. Webfeats*, 319 F.3d 770, 774 (6th Cir. 2003), and the Ninth Circuit recently has done so as well, *see Bosley Med. Inst., Inc. v. Kremer*, 403 F.3d 672, 674 (9th Cir. 2005).

In its two most significant recent amendments to the Lanham Act, the Federal Trademark Dilution Act of 1995 (“FTDA”) and the Anticybersquatting Consumer Protection Act of 1999 (“ACPA”), Congress left little doubt that it did not intend for trademark laws to impinge the First Amendment rights of critics and commentators. The dilution statute applies to only a “commercial use in commerce of a mark,” 15 U.S.C. § 1125(c)(1), and explicitly states that the “[n]oncommercial use of a mark” is not actionable. *Id.* § 1125(c)(4). Congress explained that this language was added to “adequately address[] legitimate First Amendment concerns,” H.R. Rep. No. 104-374, at 4 (1995), *reprinted in* 1995 U.S.C.C.A.N. 1029, 1031, and “incorporate[d] the concept of ‘commercial’ speech from the ‘commercial speech’ doctrine.” *Id.* at 8, *reprinted in* 1995 U.S.C.C.A.N. at 1035; *cf. Lorillard Tobacco Co. v. Reilly*, 533 U.S. 525, 554 (2001) (defining commercial speech as “speech proposing a commercial transaction”) (internal quotation marks and citation omitted). Similarly, Congress directed that in determining whether

an individual has engaged in cybersquatting, the courts may consider whether the person's use of the mark is a "bona fide noncommercial or fair use." 15 U.S.C. § 1125(d)(1)(B)(i)(IV). The legislature believed this provision necessary to "protect[] the rights of Internet users and the interests of all Americans in free speech and protected uses of trademarked names for such things as parody, comment, criticism, comparative advertising, news reporting, etc." S. Rep. No. 106-140 (1999), 1999 WL 594571, at *8.

In contrast, the trademark infringement and false designation of origin provisions of the Lanham Act (Sections 32 and 43(a), respectively) do not employ the term "noncommercial." They do state, however, that they pertain only to the use of a mark "in connection with the sale, offering for sale, distribution, or advertising of any goods or services," 15 U.S.C. § 1114(1)(a), or "in connection with any goods or services," *id.* § 1125(a)(1). But courts have been reluctant to define those terms narrowly.² Rather, as the Second Circuit has explained, "[t]he term 'services' has been interpreted broadly" and so "[t]he Lanham Act has ... been applied to defendants furnishing a wide variety of non-commercial public and civic benefits." *United We Stand Am., Inc. v. United We Stand, Am. N.Y., Inc.*, 128 F.3d 86, 89–90 (2d Cir. 1997). Similarly, in *PETA* we noted that a website need not actually sell goods or services for the use of a mark in that site's domain name to constitute a use "in connection with" goods or services." *PETA*, 263 F.3d at 365; *see also Taubman Co.*, 319 F.3d at 775 (concluding that website with two links to websites of for-profit entities violated the Lanham Act).

Thus, even if we accepted Lamparello's contention that Sections 32 and 43(a) of the Lanham Act apply only to commercial speech, we would still face the difficult question of what constitutes such speech under those provisions. In the case at hand, we need not resolve that question or determine whether Sections 32 and 43(a) apply exclusively to commercial speech because Reverend Falwell's claims of trademark infringement and false designation fail for a more obvious reason. The hallmark of such claims is a likelihood of confusion—and there is no likelihood of confusion here.

²Indeed, Lamparello agreed at oral argument that the Lanham Act's prohibitions on infringement and false designation apply to more than just commercial speech as defined by the Supreme Court.

B.

1.

"[T]he use of a competitor's mark that does not cause confusion as to source is permissible." *Dorr-Oliver, Inc. v. Fluid-Quip, Inc.*, 94 F.3d 376, 380 (7th Cir. 1996). Accordingly, Lamparello can only be liable for infringement and false designation if his use of Reverend Falwell's mark would be likely to cause confusion as to the source of the website found at www.fallwell.com. This likelihood-of-confusion test "generally strikes a comfortable balance" between the First Amendment and the rights of markholders. *Mattel, Inc. v. MCA Records, Inc.*, 296 F.3d 894, 900 (9th Cir. 2002).

We have identified seven factors helpful in determining whether a likelihood of confusion exists as to the source of a work, but "not all these factors are always relevant or equally emphasized in each case." *Pizzeria Uno Corp. v. Temple*, 747 F.2d 1522, 1527 (4th Cir. 1984) (internal quotation marks, citations, and brackets omitted). The factors are: "(a) the strength or distinctiveness of the mark; (b) the similarity of the two marks; (c) the similarity of the goods/services the marks identify; (d) the similarity of the facilities the two parties use in their businesses; (e) the similarity of the advertising used by the two parties; (f) the defendant's intent; (g) actual confusion." *Id.* (citation omitted).

Reverend Falwell's mark is distinctive, and the domain name of Lamparello's website, www.fallwell.com, closely resembles it. But, although Lamparello and Reverend Falwell employ similar marks online, Lamparello's website looks nothing like Reverend Falwell's; indeed, Lamparello has made no attempt to imitate Reverend Falwell's website. Moreover, Reverend Falwell does not even argue that Lamparello's website constitutes advertising or a facility for business, let alone a facility or advertising similar to that of Reverend Falwell. Furthermore, Lamparello clearly created his website intending only to provide a forum to criticize ideas, not to steal customers.

Most importantly, Reverend Falwell and Lamparello do not offer similar goods or services. Rather they offer opposing ideas and commentary. Reverend Falwell's mark identifies his

spiritual and political views; the website at www.fallwell.com criticizes those very views. After even a quick glance at the content of the website at www.fallwell.com, no one seeking Reverend Falwell's guidance would be misled by the domain name—www.fallwell.com—into believing Reverend Falwell authorized the content of that website. No one would believe that Reverend Falwell sponsored a site criticizing himself, his positions, and his interpretations of the Bible. See *New Kids on the Block v. News Am. Publ'g, Inc.*, 971 F.2d 302, 308–09 (9th Cir. 1992) (stating that use of a mark to solicit criticism of the markholder implies the markholder is not the sponsor of the use).³

Finally, the fact that people contacted Reverend Falwell's ministry to report that they found the content at www.fallwell.com antithetical to Reverend Falwell's views does not illustrate, as Reverend Falwell claims, that the website engendered actual confusion. To the contrary, the anecdotal evidence Reverend Falwell submitted shows that those searching for Reverend Falwell's site and arriving instead at Lamparello's site quickly realized that Reverend Falwell was *not* the source of the content therein.

For all of these reasons, it is clear that the undisputed record evidences no likelihood of confusion. In fact, Reverend Falwell even conceded at oral argument that those viewing the content of Lamparello's website probably were unlikely to confuse Reverend Falwell with the source of that material.

2.

Nevertheless, Reverend Falwell argues that he is entitled to prevail under the “initial interest confusion” doctrine. This relatively new and sporadically applied doctrine holds that “the Lanham Act forbids a competitor from luring potential customers away from a producer by initially passing off its goods as those of the producer's, even if confusion as to the source of the goods is dispelled by the time any sales are consummated.” *Dorr-Oliver*, 94 F.3d at 382. According to Reverend Falwell, this doctrine requires us to compare his mark with Lamparello's website

domain name, www.fallwell.com, without considering the content of Lamparello's website. Reverend Falwell argues that some people who misspell his name may go to www.fallwell.com assuming it is his site, thus giving Lamparello an unearned audience—albeit one that quickly disappears when it realizes it has not reached Reverend Falwell's site. This argument fails for two reasons.

First, we have never adopted the initial interest confusion theory; rather, we have followed a very different mode of analysis, requiring courts to determine whether a likelihood of confusion exists by “examin[ing] the allegedly infringing use in the context in which it is seen by the ordinary consumer.” *Anheuser-Busch, Inc. v. L & L Wings, Inc.*, 962 F.2d 316, 319 (4th Cir. 1992) (emphasis added) (citing cases); see also *What-A-Burger of Va., Inc. v. Whataburger, Inc.*, 357 F.3d 441, 450 (4th Cir. 2004).

Contrary to Reverend Falwell's arguments, we did not abandon this approach in *PETA*. Our inquiry in *PETA* was limited to whether Doughney's use of the domain name “www.peta.org” constituted a successful enough parody of People for the Ethical Treatment of Animals that no one was likely to believe www.peta.org was sponsored or endorsed by that organization. For a parody to be successful, it “must convey two simultaneous—and contradictory—messages: that it is the original, but also that it is not the original and is instead a parody.” *PETA*, 263 F.3d at 366 (internal quotation marks and citation omitted). Doughney argued that his domain name conveyed the first message (that it was PETA's website) and that the content of his website conveyed the requisite second message (that it was not PETA's site). *Id.* Although “[t]he website's content ma[de] it clear that it [wa]s not related to PETA,” *id.*, we concluded that the website's content could not convey the requisite second message because the site's content “[wa]s not conveyed *simultaneously* with the first message, [i.e., the domain name itself,] as required to be considered a parody.” *Id.* at 366. Accordingly, we found the “district court properly rejected Doughney's parody defense.” *Id.* at 367.

³If Lamparello had neither criticized Reverend Falwell by name nor expressly rejected Reverend Falwell's teachings, but instead simply had quoted Bible passages and offered interpretations of them subtly different from those of Reverend Falwell, this would be a different case. For, while a gripe site, or a website dedicated to criticism of the markholder, will seldom create a likelihood of confusion, a website purporting to be the official site of the markholder and, for example, articulating positions that could plausibly have come from the markholder may well create a likelihood of confusion.

PETA simply outlines the parameters of the parody defense; it does not adopt the initial interest confusion theory or otherwise diminish the necessity of examining context when determining whether a likelihood of confusion exists. Indeed, in *PETA* itself, rather than embracing a new approach, we reiterated that “[t]o determine whether a likelihood of confusion exists, a court should not consider how closely a *fragment* of a given use duplicates the trademark, but must instead consider *whether the use in its entirety creates a likelihood of confusion*.” *Id.* at 366 (internal quotation marks and citation omitted) (emphasis added). When dealing with domain names, this means a court must evaluate an allegedly infringing domain name in conjunction with the content of the website identified by the domain name.⁴

Moreover, even if we did endorse the initial interest confusion theory, that theory would not assist Reverend Falwell here because it provides no basis for liability in circumstances such as these. The few appellate courts that have followed the Ninth Circuit and imposed liability under this theory for using marks on the Internet have done so only in cases involving a factor utterly absent here—one business’s use of another’s mark for its own financial gain. *See, e.g., PAC-CAR Inc. v. TeleScan Techs., L.L.C.*, 319 F.3d 243, 253 (6th Cir. 2003); *Promatek Indus., Ltd. v. Equitrac Corp.*, 300 F.3d 808, 812 (7th Cir. 2002); *Brookfield Communications, Inc. v. West Coast Entm’t Corp.*, 174 F.3d 1036, 1055–56 (9th Cir. 1999).

Profiting financially from initial interest confusion is thus a key element for imposition of liability under this theory. When an alleged infringer

does not compete with the markholder for sales, “some initial confusion will not likely facilitate free riding on the goodwill of another mark, or otherwise harm the user claiming infringement. Where confusion has little or no meaningful effect in the marketplace, it is of little or no consequence in our analysis.” *Checkpoint Sys.*, 269 F.3d at 296–97. For this reason, even the Ninth Circuit has stated that a firm is not liable for using another’s mark in its domain name if it “could not financially capitalize on [a] misdirected consumer [looking for the markholder’s site] even if it so desired.” *Interstellar Starship Servs., Ltd. v. Epix, Inc.*, 304 F.3d 936, 946 (9th Cir. 2002).

This critical element—use of another firm’s mark to capture the markholder’s customers and profits—simply does not exist when the alleged infringer establishes a gripe site that criticizes the markholder. *See* Hannibal Travis, *The Battle For Mindshare: The Emerging Consensus that the First Amendment Protects Corporate Criticism and Parody on the Internet*, 10 Va. J.L. & Tech. 3, 85 (Winter 2005) (“The premise of the ‘initial interest’ confusion cases is that by using the plaintiff’s trademark to divert its customers, the defendant is engaging in the old ‘bait and switch.’ But because . . . Internet users who find [gripe sites] are not sold anything, the mark may be the ‘bait,’ but there is simply no ‘switch.’”) (citations omitted).⁶ Applying the initial interest confusion theory to gripe sites like Lamparello’s would enable the markholder to insulate himself from criticism—or at least to minimize access to it. We have already condemned such uses of the Lanham Act, stating that a markholder cannot “‘shield itself from criticism by forbidding the use of its name in commentaries critical of its con-

⁴Contrary to Reverend Falwell’s suggestions, this rule does not change depending on how similar the domain name or title is to the mark. Hence, Reverend Falwell’s assertion that he objects only to Lamparello using the domain name www.falwell.com and has no objection to Lamparello posting his criticisms at “www.falwelliswrong.com,” or a similar domain name, does not entitle him to a different evaluation rule. Rather it has long been established that even when alleged infringers use the *very marks at issue* in titles, courts look to the underlying *content* to determine whether the titles create a likelihood of confusion as to source. *See, e.g., Parks v. LaFace Records*, 329 F.3d 437, 452–54 (6th Cir. 2003); *Mattel*, 296 F.3d at 901–02; *Westchester Media v. PRL USA Holdings, Inc.*, 214 F.3d 658, 667–68 (5th Cir. 2000); *Rogers v. Grimaldi*, 875 F.2d 994, 1000–01 (2d Cir.1989).

⁶Although the appellate courts that have adopted the initial interest confusion theory have only applied it to profit-seeking uses of another’s mark, the district courts have not so limited the application of the theory. Without expressly referring to this theory, two frequently-discussed district court cases have held that using another’s domain name to post content antithetical to the markholder constitutes infringement. *See Planned Parenthood Fed’n of Am., Inc. v. Bucci*, No. 97 Civ. 0629, 1997 WL 133313 (S.D.N.Y. March 24, 1997), *aff’d*, 152 F.3d 920 (2d Cir. 1998) (table) (finding use of domain name “www.plannedparenthood.com” to provide links to passages of anti-abortion book constituted infringement); *Jews for Jesus v. Brodsky*, 993 F. Supp. 282 (D.N.J. 1998), *aff’d*, 159 F.3d 1351 (3d Cir. 1998) (table) (finding use of “www.jewsforjesus.org” to criticize religious group constituted infringement). We think both cases were wrongly decided to the extent that in determining whether the domain names were confusing, the courts did not consider whether the websites’ content would dispel any confusion. In expanding the initial interest confusion theory of liability, these cases cut it off from its moorings to the detriment of the First Amendment.

duct.’” *CPC Int’l*, 214 F.3d at 462 (quoting *L.L. Bean, Inc. v. Drake Publishers, Inc.*, 811 F.2d 26, 33 (1st Cir. 1987)). “[J]ust because speech is critical of a corporation and its business practices is not a sufficient reason to enjoin the speech.” *Id.*

In sum, even if we were to accept the initial interest confusion theory, that theory would not apply in the case at hand. Rather, to determine whether a likelihood of confusion exists as to the source of a gripe site like that at issue in this case, a court must look not only to the allegedly infringing domain name, but also to the underlying content of the website. When we do so here, it is clear, as explained above, that no likelihood of confusion exists. Therefore, the district court erred in granting Reverend Falwell summary judgment on his infringement, false designation, and unfair competition claims.

III.

We evaluate Reverend Falwell’s cybersquatting claim separately because the elements of a cybersquatting violation differ from those of traditional Lanham Act violations. To prevail on a cybersquatting claim, Reverend Falwell must show that Lamparello: (1) “had a bad faith intent to profit from using the [www.falwell.com] domain name,” and (2) the domain name www.falwell.com “is identical or confusingly similar to, or dilutive of, the distinctive and famous [Falwell] mark.” *PETA*, 263 F.3d at 367 (citing 15 U.S.C. § 1125(d)(1)(A)).

“The paradigmatic harm that the ACPA was enacted to eradicate” is “the practice of cybersquatters registering several hundred domain names in an effort to sell them to the legitimate owners of the mark.” *Lucas Nursery & Landscaping, Inc. v. Grosse*, 359 F.3d 806, 810 (6th Cir. 2004). The Act was also intended to stop the registration of multiple marks with the hope of selling them to the highest bidder, “distinctive marks to defraud consumers” or “to engage in counterfeiting activities,” and “well-known marks to prey on consumer confusion by misusing the domain name to divert customers from the mark owner’s site to the cybersquatter’s own site, many of which are pornography sites that derive advertising revenue based on the number of visits, or ‘hits,’ the site receives.” S. Rep. No. 106-140, 1999 WL 594571, at *5–6. The Act was not intended to prevent “noncommercial uses of a mark, such as for comment, criticism, parody,

news reporting, etc.,” and thus they “are beyond the scope” of the ACPA. *Id.* at *9.

To distinguish abusive domain name registrations from legitimate ones, the ACPA directs courts to consider nine nonexhaustive factors:

- (I) the trademark or other intellectual property rights of the person, if any, in the domain name;
- (II) the extent to which the domain name consists of the legal name of the person or a name that is otherwise commonly used to identify that person;
- (III) the person’s prior use, if any, of the domain name in connection with the bona fide offering of any goods or services;
- (IV) the person’s bona fide noncommercial or fair use of the mark in a site accessible under the domain name;
- (V) the person’s intent to divert consumers from the mark owner’s online location to a site accessible under the domain name that could harm the goodwill represented by the mark, either for commercial gain or with the intent to tarnish or disparage the mark, by creating a likelihood of confusion as to the source, sponsorship, affiliation, or endorsement of the site;
- (VI) the person’s offer to transfer, sell, or otherwise assign the domain name to the mark owner or any third party for financial gain without having used, or having an intent to use, the domain name in the bona fide offering of any goods or services, or the person’s prior conduct indicating a pattern of such conduct;
- (VII) the person’s provision of material and misleading false contact information when applying for the registration of the domain name, the person’s intentional failure to maintain accurate contact information, or the person’s prior conduct indicating a pattern of such conduct;
- (VIII) the person’s registration or acquisition of multiple domain names which the person knows are identical or confusingly similar to marks of others that are distinctive at the time of the registration of such domain

names, or dilutive of famous marks of others that are famous at the time of registration of such domain names, without regard to the goods or services of the parties; and

- (IX) the extent to which the mark incorporated in the person's domain name registration is or is not distinctive and famous within the meaning of subsection (c)(1) of this section.

15 U.S.C. § 1125(d)(1)(B)(i); *see also* H.R. Rep. No. 106-412 (1999), 1999 WL 970519, at *10.

These factors attempt “to balance the property interests of trademark owners with the legitimate interests of Internet users and others who seek to make lawful uses of others’ marks, including for purposes such as comparative advertising, *comment*, *criticism*, parody, news reporting, fair use, etc.” H.R. Rep. No. 106-412, 1999 WL 970519, at *10 (emphasis added). “The first four [factors] suggest circumstances that may tend to indicate an absence of bad-faith intent to profit from the goodwill of a mark, and the others suggest circumstances that may tend to indicate that such bad-faith intent exists.” *Id.* However, “[t]here is no simple formula for evaluating and weighing these factors. For example, courts do not simply count up which party has more factors in its favor after the evidence is in.” *Harrods Ltd. v. Sixty Internet Domain Names*, 302 F.3d 214, 234 (4th Cir. 2002). In fact, because use of these listed factors is permissive, “[w]e need not . . . march through” them all in every case. *Virtual Works, Inc. v. Volkswagen of Am., Inc.*, 238 F.3d 264, 269 (4th Cir. 2001). “The factors are given to courts as a guide, not as a substitute for careful thinking about whether the conduct at issue is motivated by a bad faith intent to profit.” *Lucas Nursery & Landscaping*, 359 F.3d at 811.

After close examination of the undisputed facts involved in this case, we can only conclude that Reverend Falwell cannot demonstrate that Lamparello “had a bad faith intent to profit from using the [www.fallwell.com] domain name.” *PETA*, 263 F.3d at 367. Lamparello clearly employed www.fallwell.com simply to criticize Reverend Falwell’s views. Factor IV of the ACPA, 15 U.S.C. § 1125(d)(1)(B)(i)(IV), counsels against finding a bad faith intent to profit in such circumstances because “use of a domain name for purposes of . . . comment, [and] criticism,” H.R. Rep. No. 106-412, 1999 WL 970519,

at *11, constitutes a “bona fide noncommercial or fair use” under the statute, 15 U.S.C. § 1125(d)(1)(B)(i)(IV). That Lamparello provided a link to an Amazon.com webpage selling a book he favored does not diminish the communicative function of his website. The use of a domain name to engage in criticism or commentary “even where done for profit” does not alone evidence a bad faith intent to profit, H.R. Rep. No. 106-412, 1999 WL 970519, at *11, and Lamparello did not even stand to gain financially from sales of the book at Amazon.com. Thus factor IV weighs heavily in favor of finding Lamparello lacked a bad faith intent to profit from the use of the domain name.

Equally important, Lamparello has not engaged in the type of conduct described in the statutory factors as typifying the bad faith intent to profit essential to a successful cybersquatting claim. First, we have already held, *supra* Part II.B, that Lamparello’s domain name does not create a likelihood of confusion as to source or affiliation. Accordingly, Lamparello has not engaged in the type of conduct—“creating a likelihood of confusion as to the source, sponsorship, affiliation, or endorsement of the site,” 15 U.S.C. § 1125(d)(1)(B)(i)(V)—described as an indicator of a bad faith intent to profit in factor V of the statute.

Factors VI and VIII also counsel against finding a bad faith intent to profit here. Lamparello has made no attempt—or even indicated a willingness—“to transfer, sell, or otherwise assign the domain name to [Reverend Falwell] or any third party for financial gain.” 15 U.S.C. § 1125(d)(1)(B)(i)(VI). Similarly, Lamparello has not registered “multiple domain names,” 15 U.S.C. § 1125(d)(1)(B)(i)(VIII); rather, the record indicates he has registered only one. Thus, Lamparello’s conduct is not of the suspect variety described in factors VI and VIII of the Act.

Notably, the case at hand differs markedly from those in which the courts have found a bad faith intent to profit from domain names used for websites engaged in political commentary or parody. For example, in *PETA* we found the registrant of www.peta.org engaged in cybersquatting because www.peta.org was one of *fifty to sixty* domain names Doughney had registered, *PETA*, 263 F.3d at 362, and because Doughney had evidenced a clear intent to sell www.peta.org to PETA, stat-

ing that PETA should try to “‘settle’ with him and ‘make him an offer.’” *Id.* at 368. *See also Virtual Works*, 238 F.3d at 269–70. Similarly, in *Coca-Cola Co. v. Purdy*, 382 F.3d 774 (8th Cir. 2004), the Eighth Circuit found an anti-abortion activist who had registered domain names incorporating famous marks such as “Washington Post” liable for cybersquatting because he had registered almost *seventy* domain names, had offered to stop using the Washington Post mark if the newspaper published an opinion piece by him on its editorial page, and posted content that created a likelihood of confusion as to whether the famous markholders sponsored the anti-abortion sites and “ha[d] taken positions on hotly contested issues.” *Id.* at 786. In contrast, Lamparello did not register multiple domain names, he did not offer to transfer them for valuable consideration, and he did not create a likelihood of confusion.

Instead, Lamparello, like the plaintiffs in two cases recently decided by the Fifth and Sixth Circuits, created a gripe site. Both courts expressly refused to find that gripe sites located at domain names nearly identical to the marks at issue violated the ACPA. In *TMI, Inc. v. Maxwell*, 368 F.3d 433, 434–35 (5th Cir. 2004), Joseph Maxwell, a customer of homebuilder TMI, registered the domain name “www.trendmakerhome.com,” which differed by only one letter from TMI’s mark, TrendMaker Homes, and its domain name, “www.trendmakerhomes.com.” Maxwell used the site to complain about his experience with TMI and to list the name of a contractor whose work pleased him. After his registration expired, Maxwell registered “www.trendmakerhome.info.” TMI then sued, alleging cybersquatting. The Fifth Circuit reversed the district court’s finding that Maxwell violated the ACPA, reasoning that his site was noncommercial and designed only “to inform potential customers about a negative experience with the company.” *Id.* at 438–39.

Similarly, in *Lucas Nursery & Landscaping*,

a customer of Lucas Nursery registered the domain name “www.lucasnursery.com” and posted her dissatisfaction with the company’s landscaping services. Because the registrant, Grosse, like Lamparello, registered a single domain name, the Sixth Circuit concluded that her conduct did not constitute that which Congress intended to proscribe—i.e., the registration of multiple domain names. *Lucas Nursery & Landscaping*, 359 F.3d at 810. Noting that Grosse’s gripe site did not create any confusion as to sponsorship and that she had never attempted to sell the domain name to the markholder, the court found that Grosse’s conduct was not actionable under the ACPA. The court explained: “One of the ACPA’s main objectives is the protection of consumers from slick internet peddlers who trade on the names and reputations of established brands. The practice of informing fellow consumers of one’s experience with a particular service provider is surely not inconsistent with this ideal.” *Id.* at 811.

Like Maxwell and Grosse before him, Lamparello has not evidenced a bad faith intent to profit under the ACPA. To the contrary, he has used www.fallwell.com to engage in the type of “comment[] [and] criticism” that Congress specifically stated militates against a finding of bad faith intent to profit. *See* S. Rep. No. 106-140, 1999 WL 594571, at *14. And he has neither registered multiple domain names nor attempted to transfer www.fallwell.com for valuable consideration. We agree with the Fifth and Sixth Circuits that, given these circumstances, the use of a mark in a domain name for a gripe site criticizing the markholder does not constitute cybersquatting.

IV.

For the foregoing reasons, Lamparello, rather than Reverend Falwell, is entitled to summary judgment on all counts. Accordingly, the judgment of the district court is reversed and the case is remanded for entry of judgment for Lamparello.

**Comedy III Productions, Inc. v. Gary Saderup, Inc.,
21 P.3d 797 (Cal. 2001) (excerpt).**

MOSK, J.

A California statute grants the *right of publicity* to specified successors in interest of deceased celebrities, prohibiting any other person from using a celebrity's name, voice, signature, photograph, or likeness for commercial purposes without the consent of such successors. (Former Civ.Code, § 990.)¹ The United States Constitution prohibits the states from abridging, among other fundamental rights, freedom of speech. . . . In the case at bar we resolve a conflict between these two provisions. The Court of Appeal concluded that the lithographs and silkscreened T-shirts in question here received no First Amendment protection simply because they were reproductions rather than original works of art. As will appear, this was error: reproductions are equally entitled to First Amendment protection. We formulate instead what is essentially a balancing test between the First Amendment and the right of publicity based on whether the work in question adds significant creative elements so as to be transformed into something more than a mere celebrity likeness or imitation. Applying this test to the present case, we conclude that there are no such creative elements here and that the right of publicity prevails. On this basis, we will affirm the judgment of the Court of Appeal.

I. The Statute

* * * * *

Section 990 declares broadly that "Any person who uses a deceased personality's name, voice, signature, photograph, or likeness, in any manner, on or in products, merchandise, or goods, or for purposes of advertising or selling, or soliciting purchases of, products, merchandise, goods, or services, without prior consent from the person or persons specified in subdivision (c), shall be liable for any damages sustained by the person or persons injured as a result thereof." The amount recoverable includes "any profits from the unauthorized use," as well as punitive damages, attorney fees, and costs.

The statute defines "deceased personality" as

a person "whose name, voice, signature, photograph, or likeness has commercial value at the time of his or her death," whether or not the person actually used any of those features for commercial purposes while alive.

The statute further declares that "The rights recognized under this section are property rights" that are transferable before or after the personality dies, by contract or by trust or will. Consent to use the deceased personality's name, voice, photograph, etc., must be obtained from such a transferee or, if there is none, from certain described survivors of the personality. Any person claiming to be such a transferee or survivor must register the claim with the Secretary of State before recovering damages.

The right to require consent under the statute terminates if there is neither transferee nor survivor, or 50 years after the personality dies.³

The statute provides a number of exemptions from the requirement of consent to use. Thus a use "in connection with any news, public affairs, or sports broadcast or account, or any political campaign" does not require consent. Use in a "commercial medium" does not require consent solely because the material is commercially sponsored or contains paid advertising; "Rather it shall be a question of fact whether or not the use . . . was so directly connected with" the sponsorship or advertising that it requires consent. Finally, subdivision (n) provides that "[a] play, book, magazine, newspaper, musical composition, film, radio or television program," work of "political or newsworthy value," "[s]ingle and original works of fine art," or "[a]n advertisement or commercial announcement" for the above works are all exempt from the provisions of the statute.

II. Facts

Plaintiff Comedy III Productions, Inc. (hereafter Comedy III), brought this action against defendants Gary Saderup and Gary Saderup, Inc. (hereafter collectively Saderup), seeking damages and injunctive relief for violation of sec-

¹After we granted review, the Legislature renumbered the statute as section 3344.1 of the Civil Code. (Stats. 1999, ch. 998, § 1; *id.*, ch. 1000, § 9.5.) At the same time, it amended the wording of the statute in several respects. Because we interpret the former statute, we will refer to it throughout, in the present tense, as section 990.

³Under the new statute, this period has increased to 70 years.

tion 990 and related business torts. The parties waived the right to jury trial and the right to put on evidence, and submitted the case for decision on the following stipulated facts:

Comedy III is the registered owner of all rights to the former comedy act known as The Three Stooges, who are deceased personalities within the meaning of the statute.

Saderup is an artist with over 25 years' experience in making charcoal drawings of celebrities. These drawings are used to create lithographic and silkscreen masters, which in turn are used to produce multiple reproductions in the form, respectively, of lithographic prints and silkscreened images on T-shirts. Saderup creates the original drawings and is actively involved in the ensuing lithographic and silkscreening processes.

Without securing Comedy III's consent, Saderup sold lithographs and T-shirts bearing a likeness of The Three Stooges reproduced from a charcoal drawing he had made. These lithographs and T-shirts did not constitute an advertisement, endorsement, or sponsorship of any product.

Saderup's profits from the sale of unlicensed lithographs and T-shirts bearing a likeness of The Three Stooges was \$75,000 and Comedy III's reasonable attorney fees were \$150,000.

On these stipulated facts the court found for Comedy III and entered judgment against Saderup awarding damages of \$75,000 and attorney fees of \$150,000 plus costs. ...

* * * * *

The Court of Appeal affirmed the judgment.... In so doing, it rejected Saderup's contentions that his conduct (1) did not violate the terms of the statute, and (2) in any event was protected by the constitutional guaranty of freedom of speech.

We granted review to address these two issues.

III. Discussion

A. The Statutory Issue

Saderup contends the statute applies only to uses of a deceased personality's name, voice, photograph, etc., for the purpose of advertising, selling, or soliciting the purchase of, products or services. He then stresses the stipulated fact (and subsequent finding) that the lithographs and T-shirts at issue in this case did not constitute an advertisement, endorsement, or sponsorship of any product. He concludes the statute therefore

does not apply in the case at bar. As will appear, the major premise of his argument—his construction of the statute—is unpersuasive.

* * * * *

... [T]he plain meaning of the statute ... makes liable any person who, without consent, uses a deceased personality's name, voice, photograph, etc., either (1) "on or in" a product, or (2) in "advertising or selling" a product. The two uses are not synonymous: in the apt example given by the Court of Appeal, there is an obvious difference between "placing a celebrity's name on a 'special edition' of a vehicle, and using that name in a commercial to endorse or tout the same or another vehicle."

Applying this construction of the statute to the facts at hand, we agree with the Court of Appeal that Saderup sold more than just the incorporeal likeness of The Three Stooges. Saderup's lithographic prints of The Three Stooges are themselves tangible personal property, consisting of paper and ink, made as products to be sold and displayed on walls like similar graphic art. Saderup's T-shirts are likewise tangible personal property, consisting of fabric and ink, made as products to be sold and worn on the body like similar garments. By producing and selling such lithographs and T-shirts, Saderup thus used the likeness of The Three Stooges "on ... products, merchandise, or goods" within the meaning of the statute.

* * * * *

B. The Constitutional Issue

Saderup next contends that enforcement of the judgment against him violates his right of free speech and expression under the First Amendment. He raises a difficult issue, which we address below.

The right of publicity is often invoked in the context of commercial speech when the appropriation of a celebrity likeness creates a false and misleading impression that the celebrity is endorsing a product. ... Because the First Amendment does not protect false and misleading commercial speech ..., and because even nonmisleading commercial speech is generally subject to somewhat lesser First Amendment protection ..., the right of publicity may often trump the right of advertisers to make use of celebrity figures.

But the present case does not concern commercial speech. As the trial court found, Saderup's portraits of The Three Stooges are expressive works and not an advertisement for or endorsement of a product. Although his work was done for financial gain, "[t]he First Amendment is not limited to those who publish without charge.... [An expressive activity] does not lose its constitutional protection because it is undertaken for profit." (*Guglielmi v. Spelling-Goldberg Productions* (Cal. 1979) 603 P.2d 454 (conc. opn. of Bird, C.J.) (*Guglielmi*).)

The tension between the right of publicity and the First Amendment is highlighted by recalling the two distinct, commonly acknowledged purposes of the latter. First, "to preserve an uninhibited marketplace of ideas' and to repel efforts to limit the "uninhibited, robust and wide-open" debate on public issues.'" (*Guglielmi, supra*.) Second, to foster a "fundamental respect for individual development and self-realization. The right to self-expression is inherent in any political system which respects individual dignity. Each speaker must be free of government restraint regardless of the nature or manner of the views expressed unless there is a compelling reason to the contrary." (*Ibid.*, fn. omitted....)

The right of publicity has a potential for frustrating the fulfillment of both these purposes. Because celebrities take on public meaning, the appropriation of their likenesses may have important uses in uninhibited debate on public issues, particularly debates about culture and values. And because celebrities take on personal meanings to many individuals in the society, the creative appropriation of celebrity images can be an important avenue of individual expression. As one commentator has stated: "Entertainment and sports celebrities are the leading players in our Public Drama. We tell tales, both tall and cautionary, about them. We monitor their comings and goings, their missteps and heartbreaks. We copy their mannerisms, their styles, their modes of conversation and of consumption. Whether or not celebrities are 'the chief agents of moral change in the United States,' they certainly are widely used—far more than are institutionally anchored elites—to symbolize individual aspirations, group identities, and cultural values. Their images are thus important expressive and communicative resources: the peculiar,

yet familiar idiom in which we conduct a fair portion of our cultural business and everyday conversation." (Madow, *Private Ownership of Public Image: Popular Culture and Publicity Rights* (1993) 81 Cal. L. Rev. 125, 128 (Madow, italics and fns. omitted).)

As Madow further points out, the very importance of celebrities in society means that the right of publicity has the potential of censoring significant expression by suppressing alternative versions of celebrity images that are iconoclastic, irreverent, or otherwise attempt to redefine the celebrity's meaning. (Madow, *supra*, 81 Cal. L. Rev. at pp. 143–145....) A majority of this court recognized as much in *Guglielmi*: "The right of publicity derived from public prominence does not confer a shield to ward off caricature, parody and satire. Rather, prominence invites creative comment." ...

For similar reasons, speech about public figures is accorded heightened First Amendment protection in defamation law. ... The rationale for such differential treatment is, first, that the public figure has greater access to the media and therefore greater opportunity to rebut defamatory statements, and second, that those who have become public figures have done so voluntarily and therefore "invite attention and comment." Giving broad scope to the right of publicity has the potential of allowing a celebrity to accomplish through the vigorous exercise of that right the censorship of unflattering commentary that cannot be constitutionally accomplished through defamation actions.

Nor do Saderup's creations lose their constitutional protections because they are for purposes of entertaining rather than informing. As Chief Justice Bird stated in *Guglielmi*, invoking the dual purpose of the First Amendment: "Our courts have often observed that entertainment is entitled to the same constitutional protection as the exposition of ideas. That conclusion rests on two propositions. First, '[t]he line between informing and entertaining is too elusive for the protection of the basic right. Everyone is familiar with instances of propaganda through fiction. What is one man's amusement, teaches another doctrine.'" ... "Second, entertainment, as a mode of self-expression, is entitled to constitutional protection irrespective of its contribution to the marketplace of ideas. 'For expression is an

integral part of the development of ideas, of mental exploration and of the affirmation of self. The power to realize his potentiality as a human being begins at this point and must extend at least this far if the whole nature of man is not to be thwarted.’” (*Ibid.*)

Nor does the fact that expression takes a form of nonverbal, visual representation remove it from the ambit of First Amendment protection. . . .

Moreover, the United States Supreme Court has made it clear that a work of art is protected by the First Amendment even if it conveys no discernable message

Nor does the fact that Saderup’s art appears in large part on a less conventional avenue of communications, T-shirts, result in reduced First Amendment protection. . . . First Amendment doctrine does not disfavor nontraditional media of expression.

But having recognized the high degree of First Amendment protection for noncommercial speech about celebrities, we need not conclude that all expression that trenches on the right of publicity receives such protection. The right of publicity, like copyright, protects a form of intellectual property that society deems to have some social utility. . . .

The present case exemplifies this kind of creative labor. Moe and Jerome (Curly) Howard and Larry Fein fashioned personae collectively known as The Three Stooges, first in vaudeville and later in movie shorts, over a period extending from the 1920’s to the 1940’s. . . . The three comic characters they created and whose names they shared—Larry, Moe, and Curly—possess a kind of mythic status in our culture. Their journey from ordinary vaudeville performers to the heights (or depths) of slapstick comic celebrity was long and arduous. Their brand of physical humor—the nimble, comically stylized violence, the “nyuk-nyuks” and “whoop-whoop-whoops,” eye-pokes, slaps and head conks . . . —created a distinct comedic trademark. Through their talent and labor, they joined the relatively small group of actors who constructed identifiable, recurrent comic personalities that they brought to the many parts they were scripted to play. . . .

In sum, society may recognize, as the Legislature has done here, that a celebrity’s heirs and

assigns have a legitimate protectible interest in exploiting the value to be obtained from merchandising the celebrity’s image, whether that interest be conceived as a kind of natural property right or as an incentive for encouraging creative work. . . . Although critics have questioned whether the right of publicity truly serves any social purpose . . . , there is no question that the Legislature has a rational basis for permitting celebrities and their heirs to control the commercial exploitation of the celebrity’s likeness.

Although surprisingly few courts have considered in any depth the means of reconciling the right of publicity and the First Amendment, we follow those that have in concluding that depictions of celebrities amounting to little more than the appropriation of the celebrity’s economic value are not protected expression under the First Amendment. . . .

. . . [T]wo principles . . . apply to this case: (1) state law may validly safeguard forms of intellectual property not covered under federal copyright and patent law as a means of protecting the fruits of a performing artist’s labor; and (2) the state’s interest in preventing the outright misappropriation of such intellectual property by others is not automatically trumped by the interest in free expression or dissemination of information; rather, as in the case of defamation, the state law interest and the interest in free expression must be balanced, according to the relative importance of the interests at stake. . . .

* * * * *

It is admittedly not a simple matter to develop a test that will unerringly distinguish between forms of artistic expression protected by the First Amendment and those that must give way to the right of publicity. Certainly, any such test must incorporate the principle that the right of publicity cannot, consistent with the First Amendment, be a right to control the celebrity’s image by censoring disagreeable portrayals. Once the celebrity thrusts himself or herself forward into the limelight, the First Amendment dictates that the right to comment on, parody, lampoon, and make other expressive uses of the celebrity image must be given broad scope. The necessary implication of this observation is that the right of publicity is essentially an economic right. What the right of publicity holder possesses is not a right of censorship, but a right to prevent others from

misappropriating the economic value generated by the celebrity's fame through the merchandising of the "name, voice, signature, photograph, or likeness" of the celebrity. (§ 990.)

Beyond this precept, how may courts distinguish between protected and unprotected expression? Some commentators have proposed importing the fair use defense from copyright law (17 U.S.C. § 107), which has the advantage of employing an established doctrine developed from a related area of the law. ... Others disagree, pointing to the murkiness of the fair use doctrine and arguing that the idea/expression dichotomy, rather than fair use, is the principal means of reconciling copyright protection and First Amendment rights. ...

We conclude that a wholesale importation of the fair use doctrine into right of publicity law would not be advisable. At least two of the factors employed in the fair use test, "the nature of the copyrighted work" and "the amount and substantiality of the portion used" (17 U.S.C. § 107(2), (3)), seem particularly designed to be applied to the partial copying of works of authorship "fixed in [a] tangible medium of expression" (17 U.S.C. § 102); it is difficult to understand why these factors would be especially useful for determining whether the depiction of a celebrity likeness is protected by the First Amendment.

Nonetheless, the first fair use factor—"the purpose and character of the use" (17 U.S.C. § 107(1))—does seem particularly pertinent to the task of reconciling the rights of free expression and publicity. As the Supreme Court has stated, the central purpose of the inquiry into this fair use factor "is to see, in Justice Story's words, whether the new work merely 'superse[d] the objects' of the original creation [citations], or instead adds something new, with a further purpose or different character, altering the first with new expression, meaning, or message; it asks, in other words, whether and to what extent the new work is 'transformative.'"

[Citation.] Although such transformative use is not absolutely necessary for a finding of fair use, [citation] the goal of copyright, to promote science and the arts, is generally furthered by the creation of transformative works." (*Campbell v. Acuff-Rose Music, Inc.* (1994) 510 U.S. 569, 579, fn. omitted.)

This inquiry into whether a work is "transformative" appears to us to be necessarily at the heart of any judicial attempt to square the right of publicity with the First Amendment. As the above quotation suggests, both the First Amendment and copyright law have a common goal of encouragement of free expression and creativity, the former by protecting such expression from government interference, the latter by protecting the creative fruits of intellectual and artistic labor. ... When artistic expression takes the form of a literal depiction or imitation of a celebrity for commercial gain, directly trespassing on the right of publicity without adding significant expression beyond that trespass, the state law interest in protecting the fruits of artistic labor outweighs the expressive interests of the imitative artist. ...

On the other hand, when a work contains significant transformative elements, it is not only especially worthy of First Amendment protection, but it is also less likely to interfere with the economic interest protected by the right of publicity. As has been observed, works of parody or other distortions of the celebrity figure are not, from the celebrity fan's viewpoint, good substitutes for conventional depictions of the celebrity and therefore do not generally threaten markets for celebrity memorabilia that the right of publicity is designed to protect. ... Accordingly, First Amendment protection of such works outweighs whatever interest the state may have in enforcing the right of publicity. The right-of-publicity holder continues to enforce the right to monopolize the production of conventional, more or less fungible, images of the celebrity.¹⁰

¹⁰There is a fourth factor in the fair use test not yet mentioned, "the effect of the use upon the potential market for or value of the copyrighted work" (17 U.S.C. § 107(4)), that bears directly on this question. We do not believe, however, that consideration of this factor would usefully supplement the test articulated here. If it is determined that a work is worthy of First Amendment protection because added creative elements significantly transform the celebrity depiction, then independent inquiry into whether or not that work is cutting into the market for the celebrity's images—something that might be particularly difficult to ascertain in the right of publicity context ...—appears to be irrelevant. Moreover, this "potential market" test has been criticized for circularity: it could be argued that if a defendant has capitalized in any way on a celebrity's image, he or she has found a potential market and therefore could be liable for such work. ... The "transformative" test elaborated in this opinion will, we conclude, protect the right-of-publicity holder's core interest in monopolizing the merchandising of celebrity images without unnecessarily impinging on the artists' right of free expression.

* * * * *

We emphasize that the transformative elements or creative contributions that require First Amendment protection are not confined to parody and can take many forms, from factual reporting ... from heavy-handed lampooning ... to subtle social criticism

Another way of stating the inquiry is whether the celebrity likeness is one of the “raw materials” from which an original work is synthesized, or whether the depiction or imitation of the celebrity is the very sum and substance of the work in question. We ask, in other words, whether a product containing a celebrity’s likeness is so transformed that it has become primarily the defendant’s own expression rather than the celebrity’s likeness. And when we use the word “expression,” we mean expression of something other than the likeness of the celebrity.

We further emphasize that in determining whether the work is transformative, courts are not to be concerned with the quality of the artistic contribution—vulgar forms of expression fully qualify for First Amendment protection. ... On the other hand, a literal depiction of a celebrity, even if accomplished with great skill, may still be subject to a right of publicity challenge. The inquiry is in a sense more quantitative than qualitative, asking whether the literal and imitative or the creative elements predominate in the work.

Furthermore, in determining whether a work is sufficiently transformative, courts may find useful a subsidiary inquiry, particularly in close cases: does the marketability and economic value of the challenged work derive primarily from the fame of the celebrity depicted? If this question is answered in the negative, then there would generally be no actionable right of publicity. When the value of the work comes principally from some source other than the fame of the celebrity—from the creativity, skill, and reputation of the artist—it may be presumed that sufficient transformative elements are present to warrant First Amendment protection. If the question is answered in the affirmative, however, it does not necessarily follow that the work is without First Amendment protection—it may still be a transformative work.

In sum, when an artist is faced with a right of publicity challenge to his or her work, he or she

may raise as affirmative defense that the work is protected by the First Amendment inasmuch as it contains significant transformative elements or that the value of the work does not derive primarily from the celebrity’s fame.

Turning to the present case, we note that the trial court, in ruling against Saderup, stated that “the commercial enterprise conducted by [Saderup] involves the sale of lithographs and T-shirts which are not original single works of art, and which are not protected by the First Amendment; the enterprise conducted by [Saderup] was a commercial enterprise designed to generate profits solely from the use of the likeness of The Three Stooges which is the right of publicity ... protected by section 990.” Although not entirely clear, the trial court seemed to be holding that *reproductions* of celebrity images are categorically outside First Amendment protection. The Court of Appeal was more explicit in adopting this rationale: “Simply put, although the First Amendment protects speech that is sold [citation], reproductions of an image, made to be sold for profit do not per se constitute speech.” But this position has no basis in logic or authority. No one would claim that a published book, because it is one of many copies, receives less First Amendment protection than the original manuscript. It is true that the statute at issue here makes a distinction between a single and original work of fine art and a reproduction. ... Because the statute evidently aims at preventing the illicit merchandising of celebrity images, and because single original works of fine art are not forms of merchandising, the state has little if any interest in preventing the exhibition and sale of such works, and the First Amendment rights of the artist should therefore prevail. But the inverse—that a reproduction receives no First Amendment protection—is patently false: a reproduction of a celebrity image that, as explained above, contains significant creative elements is entitled to as much First Amendment protection as an original work of art. The trial court and the Court of Appeal therefore erred in this respect.

Rather, the inquiry is into whether Saderup’s work is sufficiently transformative. Correctly anticipating this inquiry, he argues that all portraiture involves creative decisions, that therefore no portrait portrays a mere literal likeness, and that accordingly all portraiture, including repro-

ductions, is protected by the First Amendment. We reject any such categorical position. Without denying that all portraiture involves the making of artistic choices, we find it equally undeniable, under the test formulated above, that when an artist's skill and talent is manifestly subordinated to the overall goal of creating a conventional portrait of a celebrity so as to commercially exploit his or her fame, then the artist's right of free expression is outweighed by the right of publicity. As is the case with fair use in the area of copyright law, an artist depicting a celebrity must contribute something more than a "merely trivial" variation, [but must create] something recognizably "his own" . . . , in order to qualify for legal protection.

On the other hand, we do not hold that all reproductions of celebrity portraits are unprotected by the First Amendment. The silkscreens of Andy Warhol, for example, have as their subjects the images of such celebrities as Marilyn Monroe, Elizabeth Taylor, and Elvis Presley. Through distortion and the careful manipulation of context, Warhol was able to convey a message that went beyond the commercial exploitation of celebrity images and became a form of ironic social comment on the dehumanization of celebrity itself. . . . Such expression may well be entitled to First Amendment protection. Although the distinction between protected and unprotected expression will sometimes be subtle, it is no more so than other distinctions triers of fact are called on to make in First Amendment jurisprudence.

...

Turning to Saderup's work, we can discern no significant transformative or creative contribution. His undeniable skill is manifestly subordi-

nated to the overall goal of creating literal, conventional depictions of The Three Stooges so as to exploit their fame. Indeed, were we to decide that Saderup's depictions were protected by the First Amendment, we cannot perceive how the right of publicity would remain a viable right other than in cases of falsified celebrity endorsements.

Moreover, the marketability and economic value of Saderup's work derives primarily from the fame of the celebrities depicted. While that fact alone does not necessarily mean the work receives no First Amendment protection, we can perceive no transformative elements in Saderup's works that would require such protection.

Saderup argues that it would be incongruous and unjust to protect parodies and other distortions of celebrity figures but not wholesome, reverential portraits of such celebrities. The test we articulate today, however, does not express a value judgment or preference for one type of depiction over another. Rather, it reflects a recognition that the Legislature has granted to the heirs and assigns of celebrities the property right to exploit the celebrities' images, and that certain forms of expressive activity protected by the First Amendment fall outside the boundaries of that right. Stated another way, we are concerned not with whether conventional celebrity images should be produced but with who produces them and, more pertinently, who appropriates the value from their production. Thus, under section 990, if Saderup wishes to continue to depict The Three Stooges as he has done, he may do so only with the consent of the right of publicity holder.

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