CHAPTER I: INTRODUCTION

The concept of property is among the oldest institutions of human civilization. It is widely recognized that people may own real property and tangible objects. The common law and the criminal law protect private property from interference by others. The Fifth Amendment to the U.S. Constitution protects private property against takings by the government for public use without just compensation. The philosophical bases for protection of private property are well entrenched in most societies: Private property results when labor is applied to nature, as an incentive for discovery, as an essential part of personhood, and as a foundation for an ordered economic system.

Ideas and information, by definition, are less tangible. They exist in the mind and work of humans. Legal protection for intellectual work evolved much later in the development of human society than did protection for tangible property. The protection of such "intellectual property" raises complex philosophical questions. Should the first person to discover a way of performing an important task—for example, a procedure for closing a wound—be entitled to prevent others from using this procedure? Should the first person to pen a phrase or hum a melody be entitled to prevent others from copying such words or singing the song? Should such "intellectual property rights" be more limited than traditional property rights (i.e., the fee simple)? This book explores the legal institutions and rules that have developed to protect intellectual property.

This chapter has two principal purposes. It first explores the principal philosophical foundations for the protection of intellectual property. Understanding the reasons why we protect intellectual property—and how those reasons differ from the justifications for real and other forms of tangible property—motivates the many legal rules that will

follow in this book. The second section provides a comparative overview of the principal modes of intellectual property protection: trade secret, patent, copyright, and trademark/trade dress. Understanding the intellectual property landscape requires thinking about each form of intellectual property not just in isolation but as it interacts with the others. The remainder of this book explores these areas in detail, highlighting their logic and interplay in promoting progress in technology and the arts.

A. PHILOSOPHICAL PERSPECTIVES

Philosophical accounts of intellectual property fall into two broad categories. In the first and more common one, theories that have previously been used to justify tangible property are applied and extended to intangible resources. By contrast, in the second, the theories focus less on trying to think of intellectual property as a form of "property," and instead emphasize the specific type of behavior (e.g., copying, counterfeiting) that the intellectual property regime seeks to curtail. Locke's labor theory and Hegel's personhood account exemplify the first category, while Kant's autonomy-based theory remains the best-known justification within the second.

Property-based justifications for intellectual property protection, whether economic or moral, must contend with a fundamental difference between intangible and tangible property. Tangible property, whether land or chattels, is composed of atoms, physical things that can occupy only one place at any given time. This means that possession of a physical thing is necessarily "exclusive"—if I have it, you don't. Indeed, the core of property lies in the right granted to the "owner" of a thing or a piece of land to exclude others from certain uses of it. Settled ownership rights in land and goods are thought to prevent both disputes over who can use the property for what purpose, and the overuse of property that would result if everyone had common access to it.

Intangibles, though, do not have this characteristic of excludability. If I know a particular piece of information, and I tell it to you, you have not deprived me of it. Rather, we both possess it. The fact that the possession and use of intangibles such as information is largely "nonrivalrous" is critical to intellectual property theory because it means that the traditional economic justification for tangible property does not fit intellectual property. In the state of nature, there is no danger of overusing or overdistributing information, and no danger of fighting over who gets to use it. Everyone can use the information without diminishing its value.

Theorists have therefore turned elsewhere to justify exclusive rights in intangibles. Over the course of human history, numerous theories have been put forth to explain intellectual property protection. The principal basis for such protection in the United States is the utilitarian or economic incentive framework. Nonetheless, other theories—most notably the natural rights and personhood justifications—have been important in understanding the development and scope of intellectual property law, both here and abroad. The four sections that follow examine different philosophical theories. In reading them, consider how each might apply to the creation of rights and ownership interests in intangibles.

1. Historical Background

John Locke
TWO TREATISES ON GOVERNMENT
Third Edition, 1698

Though the earth and all inferior creatures be common to all men, yet every man has a "property" in his own "person." This nobody has any right to but himself. The "labour" of his body and the "work" of his hands, we may say, are properly his. Whatsoever, then, he removes out of the state that Nature hath provided and left it in, he hath mixed his labor with it, and joined to it something that is his own, and thereby makes it his property. It being by him removed from the common state Nature placed it in, it hath by this labour something annexed to it that excludes the common right of other men. For this "labour" being the unquestionable property of the labourer, no man but he can have a right to what that is once joined to, at least where there is enough, and as good left in common for others.

He that is nourished by the acorns he picked up under an oak, or the apples he gathered from the trees in the wood, has certainly appropriated them to himself. . . . That labour put a distinction between them and common. . . . And will any one say he had no right to those acorns or apples he thus appropriated because he had not the consent of all mankind to make them his? Was it a robbery thus to assume to himself what belonged to all in common? If such a consent as that was necessary, man had starved, notwithstanding the plenty God had given him. We see in commons, which remain so by compact, that it is the taking any part of what is common, and removing it out of the state Nature leaves it in, which begins the property, without which the common is of no use. And the taking of this or that part does not depend on the express consent of all the commoners. . . .

It will, perhaps, be objected to this, that if gathering the acorns or other fruits, of the earth, etc., makes a right to them, then any one may engross as much as he will. To which I answer, Not so. The same law of Nature that does by this means give us property, does also bound that property too. . . . As much as any one can make use of to any advantage of life before it spoils, so much he may by his labor fix his property in. Whatever is beyond this is more than his share, and belongs to others. . . .

As much land as a man tills, plants, improves, cultivates, and can use the product of, so much is his property. He by his labor does, as it were, enclose it from the common. . . . Nor was this appropriation of any parcel of land, by improving it, any prejudice to any other man, since there was still enough and as good left, and more than the yet unprovided could use. So that, in effect, there was never the less left for others because of his enclosure for himself. For he that leaves as much as another can make use of does as good as take nothing at all.

COMMENTS AND QUESTIONS

1. How do Locke's theories of real property apply to intellectual property? Should we treat the two as the same for ownership purposes? What would Locke say about the exclusive rights granted by the patent laws, to prevent others from using the claimed invention for up to 20 years, whether or not they discovered the invention on their own? Surely if Locke considered the working of land and raw materials to be "labor" that justified ownership of the resulting product, he would have considered labor toward the creation of a new *idea*—the "sweat of the brow"—to be equally deserving of protection. Or do the differences between real and intellectual property mean that Locke's arguments shouldn't apply to intellectual property?

Should it matter whether Locke's hypothetical creator was the only one likely to come up with his particular invention or discovery? If others would have discovered the same phenomenon a few years (or a few weeks) later, does Locke's argument for property rights lose its force? We might distinguish between a Lockean theory of copyright, which prevents copying, and an effort to justify patent law, which precludes even independent invention and therefore restricts the labor of others.

For illumination on these and related points, see Edwin C. Hettinger, *Justifying Intellectual Property*, 18 PHIL. & PUB. AFF. 31 (1989). Hettinger critiques the major theories of intellectual property rights. As to Lockean labor theory, Hettinger observes:

> [A]ssuming that labor's fruits are valuable, and that laboring gives the laborer a property right in this value, this would entitle the laborer only to the value she added, and not to the *total* value of the resulting product. Though exceedingly difficult to measure, these two components of value (that attributable to the object labored on and that attributable to the labor) need to be distinguished. …
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> Property rights in the thing produced are . . . not a fitting reward if the value of these rights is disproportional to the effort expended by the laborer. "Effort" includes (1) how hard someone tries to achieve a result, (2) the amount of risk voluntarily incurred in seeking this result, and (3) the degree to which moral considerations played a role in choosing the result intended. The harder one tries, the more one is willing to sacrifice, and the worthier the goal, the greater are one's deserts.

Id. at 37, 41-42. Robert Nozick made the first point by means of reductio ad absurdum: he asks whether the owner of a can of tomato juice who dumps it into the ocean can thereafter claim ownership of all the high seas. *See* ROBERT NOZICK, ANARCHY, STATE AND UTOPIA 175 (1984).

Doesn't Locke justify taking something only if you can make productive use of it? Many patent suits today are filed by "non-practicing entities" who don't make products themselves, but sue those who do. Should a Lockean approach to IP require that the owner make productive use of the right?

2. An application of the Lockean approach with an especially detailed consideration of the Lockean "proviso" (i.e., that "as much and as good" be left for others after appropriation) can be found in Wendy J. Gordon, *A Property Right in Self-*

Expression: Equality and Individualism in the Natural Law of Intellectual Property, 102 YALE L.J. 1533 (1993). The proviso poses a problem we will see throughout the course: how to delimit the rights of a creator in the face of claims by consumers and other members of the public at large.

Professor Gordon challenges the extreme view taken by some commentators that a creator's rights should be absolute. The absolutist view proceeds from the idea that since the creator is solely responsible for the creation, no one is harmed if the creation is withheld from the public entirely. And since the creator can withhold it entirely, he or she can naturally restrict its availability in any manner, including a high price or conditions on its purchase. *See* JOHN STUART MILL, PRINCIPLES OF POLITICAL ECONOMY 142 (1872). Through the examination of various examples—such as the Church of Scientology's efforts to restrain books critical of its teachings, West Publishing's suit to enjoin Lexis from offering page numbers corresponding to West's case reports, and Disney's efforts to prevent bawdy parodies of its images that ridicule sanitized popular culture—Gordon suggests that, sometimes at least, the public can be worse off if a creation is offered and then limited in its use than it would have been had the creation never been made.

3. Robert Nozick's ANARCHY, STATE AND UTOPIA (1984) offers a different philosophical perspective on intellectual property rooted in the libertarian tradition. It is not clear how libertarians should think of intellectual property rights. On the one hand, ownership of property seems necessary to the market exchange that is at the heart of the libertarian model of society. On the other hand, one might view the free flow of information unfettered by property rights as the norm, and view government-enforced intellectual property rights as an unnecessary aberration.

4. Moral rights are strongly emphasized in the continental European justifications for intellectual property. Those justifications to some extent parallel Locke's arguments, but there are important differences. Continental scholars emphasize the importance of reputation and noneconomic aspects of intellectual property, factors that lead them to support moral rights in copyright law. Professor Alfred Yen presents a thorough account of the role of natural rights in American copyright law. *See* Alfred Yen, *Restoring the Natural Law: Copyright as Labor and Possession*, 51 OHIO ST. L.J. 517 (1990).

PROBLEM I-1

You are a botanist exploring a remote region of a small tropical country. You stumble across a field of strange flowers that you have never encountered before. The tribespeople tell you that they use the flower to heal various ailments by rubbing its petals on the skin and chanting a healing prayer. You pluck one of the flowers and when you return to your campsite that night, you show it to a fellow explorer who is an expert in biochemistry. The biochemist smells the flower and says that it is vaguely reminiscent of Substance P. Substance P is a medicine widely used to treat a variety of serious diseases. She tells you that Substance P is easy to detect: It turns bright yellow when exposed to intense heat. That evening, you put the flower over the campfire and, sure enough, it turns bright yellow. When you return home, you work for months to isolate the active ingredient in the flower. It is not Substance P, but a close structural analog. In chemical experiments, the extract shows great promise for fighting many of the diseases that Substance P can treat without Substance P's dreaded side effects.

What rights, if any, should you have in this discovery and research? Should those rights prevent anyone else from going back to the tropical country, finding the flower, and isolating the chemical you have discovered?

You make a profit selling your medicine throughout the world, including to the native tribespeople of the tropical country. John, a chemist in your company, is angered by this policy. Your formula is a carefully guarded secret, but John publishes it in THE NEW ENGLAND JOURNAL OF MEDICINE. A nonprofit organization begins producing the medicine and selling your product to the native tribespeople at a discount. The organization advertises that it is selling your medicine for pennies a year. Should you be able to stop them from selling your medicine? Should you be able to stop them from using the name of your medicine in their ads?

You have named your medicine "Tropicurical." To advertise the product, one of the employees in your advertising department writes a song based on the very distinctive sounds of the wind in the inland coves of the country mixed with the native birds' calls. The tribespeople of the tropical country have a song that sounds remarkably similar to your advertising tune. The song is important to their tribal identity, and they argue that it is inappropriate to use their distinctive tribal song to commercialize your product. They ask you to stop using it. Should they be able to stop you from using the name or song?

When you refuse to stop using the Tropicurical song to advertise your product, the tribespeople write a new version of their song entitled "Tropicursical" with angry lyrics claiming that your product destroys culture. Should you be able to stop them from singing the song? NATIONAL GEOGRAPHIC records the tribespeople singing "Tropicursical." The recording plays as part of the news report on their television show. It is also available for download on NATIONAL GEOGRAPHIC's website. Individuals download copies of the song and e-mail it to their friends. It spreads like wildfire over the Internet, and eventually popular radio stations play it over the air. Should you be able to stop these copies and performances?

2. The Personhood Framework

Margaret Jane Radin
Property and Personhood
34 STANFORD LAW REVIEW 957 (1982)

This article explores the relationship between property and personhood, a relationship that has commonly been both ignored and taken for granted in legal thought. The premise underlying the personhood perspective is that to achieve proper self-development—to be *a person*—an individual needs some control over resources in the external environment. The necessary assurances of control take the form of property rights. Although explicit elaboration of this perspective is wanting in modern writing on property, the personhood perspective is often implicit in the connections that courts and commentators find between property and privacy or between property and liberty. In addition to its power to explain certain aspects of existing schemes of property entitlement, the personhood perspective can also serve as an explicit source of values for making moral distinctions in property disputes and hence for either justifying or criticizing current law. . . .

In what follows I shall discuss the personhood perspective as Hegel developed it in *Philosophy of Right*, trace some of its later permutations and entanglements with other perspectives on property, and try to develop a contemporary view useful in the context of the American legal system. . . .

I. Property for Personhood: An Intuitive View

Most people possess certain objects they feel are almost part of themselves. These objects are closely bound up with personhood because they are part of the way we constitute ourselves as continuing personal entities in the world. They may be as different as people are different, but some common examples might be a wedding ring, a portrait, an heirloom, or a house.

One may gauge the strength or significance of someone's relationship with an object by the kind of pain that would be occasioned by its loss. On this view, an object is closely related to one's personhood if its loss causes pain that cannot be relieved by the object's replacement. If so, that particular object is bound up with the holder. For instance, if a wedding ring is stolen from a jeweler, insurance proceeds can reimburse the jeweler, but if a wedding ring is stolen from a loving wearer, the price of a replacement will not restore the status quo—perhaps no amount of money can do so.

The opposite of holding an object that has become a part of oneself is holding an object that is perfectly replaceable with other goods of equal market value. One holds such an object for purely instrumental reasons. The archetype of such a good is, of course, money, which is almost always held only to buy other things. A dollar is worth no more than what one chooses to buy with it, and one dollar bill is as good as another. Other examples are the wedding ring in the hands of the jeweler, the automobile in the hands of the dealer, the land in the hands of the developer, or the apartment in the hands of the commercial landlord. I shall call these theoretical opposites—property that is

bound up with a person and property that is held purely instrumentally—personal property and fungible property respectively. . . .

III. Hegel, Property, and Personhood

A. *Hegel's* Philosophy of Right

. . . Because the person in Hegel's conception is merely an abstract unit of free will or autonomy, it has no concrete existence until that will acts on the external world. . . . Hegel concludes that the person becomes a real self only by engaging in a property relationship with something external. Such a relationship is the goal of the person. In perhaps the best-known passage from this book, Hegel says:

> The person has for its substantive end the right of placing its will in any and every thing, which thing is thereby mine; [and] because that thing has no such end in itself, its destiny and soul take on my will. [This constitutes] mankind's absolute right of appropriation over all things.

Hence, "property is the first embodiment of freedom and so is in itself a substantive end.". . .

Hegel seems to make property "private" on the same level as the unit of autonomy that is embodying its will by holding it. He argues that property is private to individuals when discussing it in the context of the autonomous individual will and that it is essentially common within a family, when discussing it in the context of the autonomous family unit. He does not make the leap to state property, however, even though his theory of the state might suggest it. For Hegel, the properly developed state (in contrast to civil society) is an organic moral entity. . . . and individuals within the state are subsumed into its community morality. . . .

B. Hegel and Property for Personhood

[A] theory of personal property can build upon some of Hegel's insights. First, the notion that the will is embodied in things suggests that the entity we know as a person cannot come to exist without both differentiating itself from the physical environment and yet maintaining relationships with portions of that environment. The idea of embodied will, cut loose from Hegel's grand scheme of absolute mind, reminds us that people and things have ongoing relationships which have their own ebb and flow, and that these relationships can be very close to a person's center and sanity. If these relationships justify ownership, or at least contribute to its justification, Hegel's notion that ownership requires continuous embodiment of the will is appealing.

Second, Hegel's incompletely developed notion that property is held by the unit to which one attributes autonomy has powerful implications for the concept of group development and group rights. Hegel thought that freedom (rational self-determination) was only possible in the context of a group (the properly organized and fully developed state). Without accepting this role for the state, one may still conclude that in a given social context certain groups are likely to be constitutive of their members in the sense that the members find self-determination only within the groups. This might have political consequences for claims of the group on certain resources of the external world (i.e., property).

Third, there may be an echo of Hegel's notion of an objective community morality in the intuition that certain kinds of property relationships can be presumed to bear close bonds to personhood. If property in one's body is not too close to personhood to be considered property at all, then it is the clearest case of property for personhood. The property/privacy nexus of the home is also a relatively clear case in our particular history and culture. . . .

[T]he personhood theory helps us understand the nature of the right dictating that discrete units [i.e., an undivided, individual asset] ought to be protected.

An argument that discrete units are more important than total assets takes the following form. A person cannot be fully a person without a sense of continuity of self over time. To maintain that sense of continuity over time and to exercise one's liberty or autonomy, one must have an ongoing relationship with the external environment, consisting of both "things" and other people. One perceives the ongoing relationship to the environment as a set of individual relationships, corresponding to the way our perception separates the world into distinct "things." Some things must remain stationary if anything is to move; some points of reference must be constant or thought and action is not possible. In order to lead a normal life, there must be some continuity in relating to "things." One's expectations crystallize around certain "things," the loss of which causes more disruption and disorientation than does a simple decrease in aggregate wealth. For example, if someone returns home to find her sofa has disappeared, that is more disorienting than to discover that her house has decreased in market value by 5%. If, by magic, her white sofa were instantly replaced by a blue one of equal market value, it would cause no loss in net worth but would still cause some disruption in her life.

This argument assumes that all discrete units one owns and perceives as part of her continuing environment are to some degree personal. If the white sofa were totally fungible, then magically replacing it with a blue one would cause no disruption. In fact, neither would replacing it with money. . . .

But the theory of personal property suggests that not all object-loss is equally important. Some objects may approach the fungible end of the continuum so that the justification for protecting them as specially related to persons disappears. They might just as well be treated by whatever general moral rules govern wealth-loss at the hands of the government. If the moral rules governing wealth-loss correspond to Michelman's utilitarian suggestion—government may take whatever wealth is necessary to generate higher welfare in which the individual can confidently expect to share—then the government could take some fungible items without compensation. In general, the moral inquiry for whether fungible property could be taken would be the same as the moral inquiry for whether it is fair to impose a tax on this particular person.

On the other hand, a few objects may be so close to the personal end of the continuum that no compensation could be "just." That is, hypothetically, if some object were so bound up with me that I would cease to be "myself" if it were taken, then a government that must respect persons ought not to take it. If my kidney may be called my property, it is not property subject to condemnation for the general public welfare.

Hence, in the context of a legal system, one might expect to find the characteristic use of standards of review and burdens of proof designed to shift risk of error away from protected interests in personal property. For instance, if there were reason to suspect that some object were close to the personal end of the continuum, there might be a prima facie case against taking it. That prima facie case might be rebutted if the government could show that the object is not personal, or perhaps that the object is not "too" personal compared with the importance to the government of acquiring that particular object for social purposes.

COMMENTS AND QUESTIONS

1. How well does Professor Radin's theory of real property apply to intellectual property? Can an individual be so "bound up" in their inventions or works of authorship that their loss would occasion more than economic damage? Does it affect your answer that intellectual property can be used simultaneously by many people without depleting its functional value to anyone—so that an author's "loss" is not the physical deprivation of stolen chattels, but the less personal fact that someone else has copied her work? Is this more like giving blood than donating a kidney?

It may be that the investment of "personhood" in intellectual property varies greatly, both with the type of intellectual property at issue and with the time and effort the owner put into developing it. For example, an author may feel more connected to a novel on which she has worked for several years than to a massive software program for navigating a jumbo jet or a company's customer list. Should the law take account of these differences, giving greater protection to more personal works? For a critique of Radin's broader personhood perspective, see Stephen J. Schnably, *Property and Pragmatism: A Critique of Radin's Theory of Property and Personhood*, 45 STAN. L. REV. 347 (1993) (challenging Radin's appeal to consensus and arguing that this focus obscures issues of power and the like).

In other work, Professor Radin addresses forms of property that should not be subject to market exchange at all. *See* Margaret Jane Radin, *Market-Inalienability*, 100 HARV. L. REV. 1849 (1987).

2. Personhood theories of IP rights focus on the connection between the creator's identity and the thing created. But consumers too may identify with creative works. Indeed, Radin's example of the couch suggests that buyers too have an identity interest bound up with the things they own (or, perhaps, read). How should the law take that interest into account? Does it suggest that we need to give broader scope for user-generated content like fan fiction and videos that incorporate literary characters or songs? Or might it suggest the opposite—that consumers have an interest in the purity of their iconic works, free from the unauthorized modification of those works by others? *See* Justin Hughes, *"Recoding" Intellectual Property and Overlooked Audience Interests*, 77 TEX. L. REV. 923 (1999). Creators are often motivated as much if not more by attribution and fairness than by the prospect of money. *See* JESSICA SILBEY, THE EUREKA MYTH: CREATORS, INVENTORS, AND EVERYDAY INTELLECTUAL PROPERTY (2014).

3. Distributive and Social Justice

More recently, the idea of distributive justice has entered the fray in theoretical discussions of intellectual property. While it is rarely offered up as a standalone justification, it is usually discussed in the construction and application of different intellectual property regimes. Put simply, principles of distributive justice" are seen as "providing moral guidance for the political processes and structures that affect the distribution of benefits and burdens in societies, and any principles which do offer this kind of moral guidance on distribution, regardless of the terminology they employ, should be considered principles of distributive justice." Julian Lamont & Christi Favor, *Distributive Justice*, in THE STANFORD ENCYCLOPEDIA OF PHILOSOPHY (Edward N. Zalta ed., Winter 2017).

At its root, distributive justice derives from a strong commitment to equality. In A THEORY OF JUSTICE (1971)—probably the most influential work of political philosophy written in the past century—John Rawls offers an "ideal contractarian" theory of distributive shares. To determine the just allocation of the benefits and burdens of social life, he asks what distributive principles suitably disinterested persons would choose. To ask what selfish people would want, or what social contract would actually result from a convocation of all members of society, Rawls argues, would ensure that the naturally smart or strong, or people who shared a particular race, nationality, religion, or ideology, dominated the rest, if any agreement could be reached at all. Rawls rejects this construction of the "original position" for choosing social rules—which more libertarian philosophers, such as David Gauthier, come closer to favoring—because he finds this consequence intuitively unacceptable. He assumes instead that the resources and opportunities a person should have available should not depend primarily on how fortunate he or she was in the natural lottery of talents and parents, or in what group that person happens to be born.

Rawls, therefore, tries to determine principles that rational people behind a "veil of ignorance" would choose. Rawls contends that the veil must be quite opaque. It must, for example, exclude from the minds of those choosing principles of justice all knowledge of their own abilities, desires, parentage, and social stratum.

Rawls concludes that people behind the veil of ignorance would adopt what he calls the "difference principle." They would agree, he says, that the fundamental institutions of society should be arranged so that the distribution of "primary goods"—not only wealth, income, and opportunities for work or leisure, but also what Rawls terms the "bases of self-respect"—is to the maximal advantage of a representative member of the least advantaged social class. Defining the least advantaged class and the proper set of primary goods is difficult and contentious. In POLITICAL LIBERALISM (1993), Rawls refines his theory of distributive justice in the following passage:

> [M]easures are required to assure that the basic needs of all citizens can be met so that they can take part in political and social life.
>
> About this last point, the idea is not that of satisfying needs as opposed to mere desires and wants; nor is it that of redistribution in favor of greater

> equality. The constitutional essential here is rather that below a certain level of material and social well-being, and of training and education, people simply cannot take part in society as citizens, much less equal citizens.

Id. at 166.

Within intellectual property, distributive justice ideals are often used to determine the allocation of rights, liabilities and immunities among different actors. Distributive justice principles here ordinarily operate by identifying a particular class of actors who require a specific kind of rule, independent of the rules that affect society more generally. An example here is the additional protection that copyright law offers the authors and their heirs by way of its rules relating to termination of transfers. Here, the motivating idea is that authors and their heirs may require additional financial protection multiple decades (thirty-five years) after the initial transfer.

Closely related to—but somewhat distinct from—distributive justice is the idea of "social justice" that some scholars have used to describe the commitment to equality and fairness in the working of intellectual property regimes. While this idea is inchoate and less structured, it is more expansive and of wide application. Legal scholars Lateef Mtima and Steven Jamar describe the idea as follows:

> Social justice is a protean concept that varies with circumstances. It includes the aspirational ideal of substantive equality as well as the relatively easily addressable procedural equality. Social justice includes at least some aspects of individual liberty (e.g., autonomy) as well as incorporating some communitarian liberty values such as religious association, pursuit of legitimate group interests, and civic virtues such as voting. Social justice includes not only access to, but also inclusion in, the social, cultural, and economic life of the country. Indeed, it extends beyond inclusion in social, cultural, and economic life to full participation in and ability to affect the direction of civil society in all its manifestations. Social justice thus rests upon the core values of equality, liberty, and advancing the general welfare enshrined in the Declaration of Independence and Preamble to the U.S. Constitution. . . .
>
> In the field of intellectual property, social justice includes the ability to enjoy the fruits of others at some base level of procedural equality (equal access to the works of others) and, to a lesser but important extent, the ability to have some base level of substantive equality in the beneficial impact of intellectual property created by others. Even more importantly, social justice in the area of intellectual property extends beyond mere access and beyond mere passive observation or enjoyment of others' works (e.g., listening to a recording or seeing a movie): it includes the ability to participate in the creation and exploitation of intellectual property both in a procedurally fair way and a substantively significant way.

Lateef Mtima & Steven D. Jamar, *Fulfilling the Copyright Social Justice Promise: Digitizing Textual Information*, 55 N.Y.L.S.L. REV. 77, 83–84 (2010).

COMMENTS AND QUESTIONS

1. Do you agree with Rawls that people behind the veil of ignorance would agree that the fundamental institutions of society should be arranged so that the distribution of "primary goods"—including property—is to the maximal advantage of a representative member of the least advantaged social class? Would you agree to this principle if you were behind a veil of ignorance?

Consider political scientist James Q. Wilson's critique:

> [E]verybody in Rawls's universe is averse to risk; each wants to make certain that, if he winds up on the bottom of the heap, the bottom is as attractive as possible.
>
> But many people are in fact not averse to risk, they are risk takers; to them, a just society would be one in which inequalities in wealth were acceptable provided that the people at the top of the heap got there as a result of effort and skill. And even people who are not risk takers may endorse this position because they think it fair that rewards should be proportional to effort, even if some people lose out entirely. (These same people might also expect their church or government to take care of those who lost out.) They have this view of fairness because they recognize that people differ in talent, energy, temperament, and interests; that conflicts among such people are inevitable; and that matching, as best one can, rewards to contributions is the best way of handling that conflict.
> . . .
>
> Equality is a special and, as it turns out, rare and precarious case of equity. Settled living, and in particular the accumulation of private property, makes equality of outcomes impossible because inequality of contributions become manifest. The task of settled societies is to devise ways of assuring that outcomes are proportional to worth, reasonably defined.

JAMES Q. WILSON, THE MORAL SENSE 73–76 (1993); *see also* ERIC RAKOWKSI, EQUAL JUSTICE (1991) (advocating a more meritocratic "equality of fortune" that affords all members of society a just initial distribution of resources but tolerates inequalities resulting from exercise of free will—notably, occupational preferences, wise business decisions, and diligence in school, training, and work).

2. *Justifying Intellectual Property*. At a basic level, technological advance produces higher standards of living. It enables society to accomplish more with fewer resources and therefore increases productivity. Furthermore, no one is required to purchase IP-protected goods. Therefore, in an exchange economy, only those who value such goods more than their cost will purchase the goods. Moreover, patent and copyright protection eventually expire. At a coarse level of granularity, modern societies have the benefit of all manner of innovation and creativity—from sanitation technologies that support safe drinking water to telecommunications and modern medicines. As such, innovation tends to reduce poverty and raise standards of living in an absolute sense over the long run. Professor Merges argues that a Rawlsian perspective can therefore justify IP rights in broad brush. *See* ROBERT P. MERGES, JUSTIFYING INTELLECTUAL PROPERTY (2011).

He also identified a series of "mid-level principles"—nonremoval from the public domain, proportionality of IP rights to value or significance of the work covered by the right, economic efficiency, and respect for the dignity of the author—that seek to balance the interests of creators and users of IP. *See also* Peter S. Menell, *Intellectual Property and Social Justice: Mapping the Next Frontier*, in STEVEN D. JAMAR & LATEEF MTIMA (EDS), HANDBOOK OF INTELLECTUAL PROPERTY AND SOCIAL JUSTICE: ACCESS, INCLUSION, EMPOWERMENT (2023).

3. *Access to Medicine*. The argument that intellectual property protection increases productivity and eventually becomes available to all affords little solace to those who cannot afford to purchase patented, life-saving medicines. Should the patent rights give way for life-saving medicines and treatments? To what extent would such a rule undermine the race to discover cures for disease? Is unequal access to medicine best addressed through social insurance institutions? *See* William W. Fisher & Talha Syed, *Global Justice in Healthcare: Developing Drugs for the Developing World*, 40 U.C. DAVIS L. REV. 581 (2007).

4. *Access to Culture and Cumulative Creativity*. We can also see distributive values in the broadening of expressive opportunities for authors and artists. Since expression often builds on and reacts to prior expressive works, such distributive values can run counter to the provision of exclusive rights. Limiting doctrines and the fair use privilege implicitly cross-subsidizes cumulative creators. Such freedom to build on the work of others can, however, adversely affect authors' moral and dignitary interests. See Molly Shaffer Van Houweling, Distributive Values in Copyright, 83 TEX. L. REV. 1535 (2005); Peter S. Menell, Adapting Copyright for the Mashup Generation, 164 U. PA. L. REV. 441 (2016)

5. *IP and Inequality*. While the digital revolution has provided especially rapid technological advance, it has also contributed to skewing of wealth distribution. Like the technological advances of the Industrial Revolution, the Digital Revolution of the past several decades—characterized by scalability of information technologies, network effects, and displacement of labor by smart machines—has produced a new Gilded Age. Many of the wealthiest people in the world are technology entrepreneurs. The sports and entertainment professions, which depend critically upon copyright, trademark, and publicity right protections, also contribute to high wealth for a relatively small "superstar" class.

6. *Gender and Racial Equality*. The concentration of wealth and economic leverage that intellectual property produces places vast power in the hands of a relatively small group of entrepreneurs and their representatives. The class of venture capitalists, corporate titans, and Hollywood moguls reflect historical gender and race biases. *See* K.J. Greene, *Intellectual Property at the Intersection of Race and Gender: Lady Sings the Blues*, 16 AM. U. J. GENDER, SOC. POL'Y & L. 365 (2008). Yet copyright protection has been especially effective in providing whatever limited "equality of opportunity" Black people in America have enjoyed in the United States. Indeed, copyright has been the most important form of property for many of the wealthiest black families. *See* Justin Hughes & Robert P. Merges, *Copyright and Distributive Justice*, 92 NOTRE DAME L.

REV. 513 (2016). At the same time, IP raises the cost of music and other content, and that disadvantages the poor, who are disproportionately non-white.

Moreover, adequately funded and well-produced film, art, music, and literature play an inestimable role in promoting social and cultural understanding and tolerance. As much as lawyers emphasize the role of legal advocacy in shifting the law, the television series Will and Grace likely had more influence in shifting the nation's and Supreme Court's views on gay marriage than anything that lawyers argued. Similarly, works such as TO KILL A MOCKINGBIRD and *The Help* powerfully communicated the indignity of the Jim Crow South. The public's gradual embrace of R&B, jazz, and gospel—what was once referred to as "race music"—played a critical role in building a more cohesive and inclusive nation. *See* K.J. Greene, *"Copynorms," Black Cultural Protection, and the Debate over African-American Reparations*, 25 CARDOZO ARTS & ENT. L.J. 1179 (2008). At the same time, art and literature can also reinforce stereotypes. The ability to challenge, rework, and criticize canons of literature may be critical to interrogating and undermining those stereotypes.

7. *IP and the Environment*. While motivating the development of better environmental technologies, the patent system potentially constrains the diffusion of technological advances that seek to ameliorate environmental harms. Even if advances in wind turbine and solar technologies dramatically lowered the cost of producing electricity, distributing that energy to consumers depends critically upon a grid infrastructure that can move decentralized sources of electricity to market. Moreover, such energy must compete with harmful alternatives. Without fees to internalize those harmful effects, renewable sources of energy face a competitive disadvantage. Thus, intellectual property cannot be the sole policy to address problems like pollution and climate change. Prizes, subsidies, and externality-internalizing fees on fossil fuels offer complementary tools for balancing the R&D appropriability problem, the environmental externalities of fossil fuel consumption, and the geopolitical distortions of reliance on oil. *See* PETER S. MENELL & SARAH M. TRAN, INTELLECTUAL PROPERTY, INNOVATION AND THE ENVIRONMENT (2014).

8. *IP and Colonialism*. Locke and Hegel reflect a classical European view of the world as a set of raw materials ready to be harvested, worked, and owned by the enlightened colonists. In real property, that view produced an era of colonial empires that few would want to replicate today. Is there an analogous problem with asserting dominion over the intangible resources of the commons? Several scholars have argued that there is something wrong with taking traditional knowledge from the developing world and turning it into an IP right owned by those in the developed world who "discovered" it. See EVANA WRIGHT, PROTECTING TRADITIONAL KNOWLEDGE: LESSON FROM GLOBAL CASE STUDIES (2020); Srividhya Ragavan, *Protection of Traditional Knowledge*, 2 MINN. INTELL. PROP. REV. 1 (2001); VANDANA SHIVA, BIOPIRACY: THE PLUNDER OF NATURE AND KNOWLEDGE (1997). Perhaps ironically, many of those scholars argue for IP rights in traditional knowledge to permit local peoples to engage in appropriation of their own. *See* Stephen R. Munzer & Kal

Raustiala, *The Uneasy Case for Intellectual Property Rights in Traditional Knowledge*, 27 CARDOZO ARTS & ENT. L.J. 37 (2009).

4. Autonomy

The eighteenth-century German philosopher Immanuel Kant developed the most nuanced and influential account of human autonomy, from which he explained the working of various private legal rights. *See* ARTHUR R. RIPSTEIN, FORCE AND FREEDOM: KANT'S LEGAL AND POLITICAL PHILOSOPHY (2009). In a 1785 essay, Kant deployed some of these insights to copyright protection. *See* Immanuel Kant, *On the Wrongfulness of Unauthorized Publication of Books*, in PRACTICAL PHILOSOPHY 27, 29–35 (Mary J. Gregor ed. & trans., Cambridge 1996) (1785). Drawing on an autonomy-driven theory that is independent of property, Kant contends that unauthorized publication of another's work is morally problematic and therefore legitimately the basis of a private action (i.e., for copyright infringement). *Id*. at 34-35.

According to Kant, when an author expresses herself in a book, that expression is more than just a commodity. It is instead a form of communication, something he terms a "speech act." Control over the speech act is distinct from the ownership of the book. When a publisher prints a book, that publisher is purporting to act on behalf of the author by speaking in her name publicly. Such behavior is unproblematic when authorized by the author, since the publisher is then the legitimate voice of the author. When the publication is altogether unauthorized, however, the publisher is now speaking as the author without her consent. This in turn forces the author to commit a speech act against her own will by either acknowledging the existence of such speech or taking responsibility for it. Such unauthorized publication therefore interferes with the individual autonomy of the author as a moral agent to speak on her own terms, rendering it wrongful and thus potentially actionable. Copyright law, in this understanding, exists to safeguard an author's autonomy as speaker interacting with the public.

COMMENTS AND QUESTIONS

1. Does Kant's autonomy-based theory have any applicability beyond the domain of copyright law? While Kant focused most immediately on copyright law, could his idea be extended to other forms of intellectual property rights that implicate the individual self, such as rights of publicity? *See* Alice Haemmerli, *Whose Who? The Case for a Kantian Right of Publicity*, 49 DUKE L.J. 383 (1999).

Even within the domain of copyright law, does Kant's theory sufficiently explain the full extent of modern copyright doctrine? Are performances, displays, and distributions—forms of infringement today—equally forms of speech under Kant's account? *See* ABRAHAM DRASSINOWER, WHAT'S WRONG WITH COPYING? (2015).

2. One of the most notable features of Kant's theory is that it purports to justify copyright without reference to the consequences of the regime and its effects, i.e., consequentialism. In other words, it develops a defense for the regime from within by focusing on the irreducibility of human autonomy as a value. This form of justification is often referred to as an "immanent" defense of the system. *See* Shyamkrishna

Balganesh, *The Immanent Rationality of Copyright Law*, 115 MICH. L. REV. 1047 (2017) (reviewing Drassinower's account). Are other intellectual property regimes besides copyright capable a similar immanent defense? Is there an autonomy right to one's own name and likeness, for instance? *See* Chapter VI(D).

3. Does the notion of author autonomy suggest that intellectual property and privacy concerns are related? Should intellectual property regimes such as copyright give greater weight to an individual's desire to have their expression stay out of public scrutiny? *Compare* Shyamkrishna Balganesh, *Privative Copyright*, 73 VAND. L. REV. 1 (2020) (arguing that copyright law does and should continue to recognize the role of privacy concerns) *with* Eric Goldman & Jessica Silbey, *Copyright's Memory Hole*, 2019 BYU L. R3V. 929 (2020) (arguing for a more limited recognition of privacy concerns within copyright).

4. Copyright cases often feature not just rote copying, but defendants who engage in their own speech modifying or commenting on the copyright owner's expression. Do those defendants have autonomy rights in their speech too? If the autonomy right is morally defensible regardless of consequence, how are we to balance those interests?

5. The Utilitarian/Economic Incentive Perspective

i. Promoting Innovation and Creativity

Both the United States Constitution and judicial decisions emphasize incentive theory in justifying intellectual property. The Constitution expressly conditions the grant of power in the patent and copyright clause on a particular end, namely "to Promote the Progress of Science and useful Arts." U.S. CONST., ART. I, §8, CL. 8. As the Supreme Court explained in *Mazer v. Stein*, 347 U.S. 201 (1954):

> The copyright law, like the patent statutes, makes reward to the owner a "secondary consideration." *United States v. Paramount Pictures*, 334 U.S. 131, 158. However, it is "intended definitely to grant valuable, enforceable rights to authors, publishers, etc., without burdensome requirements: 'to afford greater encouragement to the production of literary [or artistic] works of lasting benefit to the world.'" *Washington Pub. Co. v. Pearson*, 306 U.S. 30. The economic philosophy behind the clause empowering Congress to grant patents and copyrights is the conviction that it is the best way to advance public welfare through the talents of authors and inventors in "Science and useful Arts." Sacrificial days devoted to such creative activities deserve rewards commensurate with the services rendered.

To understand why the Framers thought exclusive rights in inventions and creations would promote the public welfare, consider what might happen absent any intellectual property protection. Invention and creation require the investment of resources—the time of an author or inventor, and often expenditures on facilities, prototypes, supplies, etc. In a private market economy, individuals will not invest in invention or creation unless the expected return from doing so exceeds the cost of doing so—that is, unless they can reasonably expect to make a profit from the endeavor. To profit from a new idea or work of authorship, the creator must be able either to sell it to others or to put it

to some use that provides her with a comparative advantage in a market, such as by reducing the cost of producing goods.

But ideas (and writings, for that matter) are notoriously hard to control. Even if the idea is one that the creator can use herself, for example, to boost productivity in her business, she will sometimes reap a reward from that idea only to the extent that her competitors don't find out about it. A creator who depends on secrecy for value, therefore, lives in constant peril of discovery and disclosure. Competitors may steal the idea or learn of it from an ex-employee. They may be able to figure it out by watching the creator's production process or by examining the products she sells. Finally, they may come upon the idea on their own or discover it in the published literature. In all of these cases, the secrecy value of the idea will be irretrievably lost.

The creator who wants to sell her idea is in an even more difficult position. Selling information requires disclosing it to others. Once the information has been disclosed outside a small group, however, it is extremely difficult to control. Information has the characteristics of what economists call a "public good"—it may be "consumed" by many people without depletion, and it is difficult to identify those who will not pay and prevent them from using the information. *See* Kenneth J. Arrow, *Economic Welfare and the Allocation of Resources for Invention*, in THE RATE AND DIRECTION OF INVENTIVE ACTIVITY: ECONOMIC AND SOCIAL FACTORS 609, 614–16 (1962). Once the idea of the intermittent windshield wiper is disclosed, others can imitate its design relatively easily. Once a book is published, others can copy it at low cost. It is difficult to exclude nonpurchasers from sharing in the benefits of the idea. Ideas and information can also be used by many without depleting the enjoyment of others. Unlike an ice cream cone, a good story or the concept of intermittent windshield wipers can be enjoyed by many without diminishing enjoyment of these creations by others.[1] If we assume that it is nearly costless to distribute information to others—an assumption that was once unrealistic, but now has become much more reasonable with advances in digital technology (including the Internet)—it will prove virtually impossible to charge for information over the medium run in the absence of effective intellectual property or some other means of protection (such as technological protection measures). If the author of a book charges more than the cost of distribution, hoping to recover some of her expenditures in writing the work, competitors will quickly jump in to offer the book at a lower price. Competition will drive the price of the book toward its marginal cost—in this case, the cost of producing and distributing one additional copy. In such a competitive market, the author will be unable to recoup the fixed cost of writing the book. More to the point, if this holds true generally, authors may be expected to leave the profession in droves, since they cannot make any money at it. The result, according to economic theory, would be an underproduction of books and other works of invention and creation with similar public goods characteristics.

[1] To some extent this statement oversimplifies the problem by ignoring possible second-order distorting effects. In practice, if you taught several hundred million people to fish, the result might be depletion of a physical resource (fish) that would otherwise not have occurred. Similarly, wide dissemination of some information may have particular effects on secondary markets.

Information is not the only example of a public good. Economists generally offer lighthouses and national defense as examples of public goods, since it is virtually impossible to provide the benefits of either one only to paying clients. It is impossible to exclude some ships and not others from the benefits of a lighthouse. Furthermore, the use of the lighthouse by one ship does not deplete the value of its hazard warning to others. As a result, it would be inefficient to exclude nonpayers from using the lighthouse's warning system even if we could, since consumption of this good is "nonrivalrous" (meaning that everyone can benefit from it once it is produced). For these reasons, the market will in theory undersupply such goods because producers cannot reap the marginal (incremental) value of their investment in providing them.[2]

Can you see why broadcast television signals, beautiful gardens on a public street, and national defense are also public goods?

By contrast, markets for pure private goods, such as ice cream cones, feature exclusivity and rivalrous competition—the ice cream vendor provides the good only to those who pay the price, and the consumer certainly depletes the amount of the good available to others. Thus, the market system provides adequate incentives for the creation of ice cream cones: sellers can exact their cost of production, and the value of the product is fully enjoyed by the purchaser.

In the case of national defense (and most lighthouses), we avoid the underproduction that would result from leaving provision of the good to the market by having the government step in and pay for the public good. For a variety of reasons, we have not gone that route with many forms of information. Instead, the government has created time-limited intellectual property rights over technological inventions and expressive creativity to encourage inventors and authors to invest in the development of new ideas and works of authorship. Thus, the economic justification for intellectual property lies not in rewarding creators for their labor but in ensuring that they (and other creators) have appropriate incentives to engage in innovative and creative activities. Unfortunately, this approach comes at a cost. Granting inventors and authors rights to exclude others from using their inventions, discoveries, and expression limits the diffusion of those ideas and so prevents some others from benefiting from and building upon these advances, at least for the duration of intellectual property protection. In economic terms, intellectual property rights prevent competition in the sale of the particular invention or expressive work covered by those rights, and therefore allows the intellectual property owner to raise the price of that work above the marginal cost of reproducing it. This means that fewer people will acquire the work than if it were distributed on a competitive basis, and they will pay more for access. A fundamental principle of our economic system is the proposition that free market competition will

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[2] Ronald Coase questioned the contention that lighthouses must be publicly provided. *See* Ronald H. Coase, *The Lighthouse in Economics*, in THE FIRM, THE MARKET, AND THE LAW (1988); *but see* David E. Van Zandt, *The Lessons of the Lighthouse: "Government" or "Private" Provision of Goods*, 22 J. LEGAL STUDIES 47 (1993) (reporting that lighthouses relying on voluntary payments failed and that government support played a critical role in their provision); Elodie Bertrand, *The Coasean Analysis of Lighthouse Financing: Myths and Realities*, 30 CAMBRIDGE J. ECON. 389 (2006).

ensure an efficient allocation of resources, absent market failures. In fact, the principal thrust of the antitrust laws serves precisely this goal. In this limited sense, then, intellectual property rights appear to run counter to free market competition: they limit the ability of competitors to copy or closely imitate the intellectual efforts of the first person to develop an idea. These rights enable those possessing intellectual property rights to charge monopoly prices or to otherwise limit competition, such as by controlling the use of the intellectual work in subsequent products.

Because intellectual property rights impose social costs on the public, the intellectual property laws can be justified by the public goods argument only to the extent that they do on balance encourage enough creation and dissemination of new works to offset those costs. One of the reasons that intellectual property rights are limited in scope, duration, and effect is to balance these costs and benefits. For example, the limited term of intellectual property rights ensures that inventions will be freely available after that fixed term. The key to economic efficiency lies in balancing the social benefit of providing economic incentives for creation and the social costs of limiting the diffusion of knowledge. We will encounter this critical trade-off throughout our study of intellectual property. The two examples below highlight some of the major issues.

a. Economic Incentive Benefit

Intellectual property protection is necessary to encourage inventors, authors, and artists to invest in the process of creation. Without such protection, others could copy or otherwise imitate the intellectual work without incurring the costs and effort of creation, thereby inhibiting the original creators from reaping a reasonable return on their investment. Consider the following example:

> After years of effort and substantial expense, Earnest Inventor develops the Mousomatic, a significantly better mousetrap. Not only does it catch mice better than the competition's trap, but it also neatly packages the dead mice in disposable sanitary bags. Consumers are willing to pay substantially more for this product than for its competitors. The Mousomatic catches the attention of Gizmo Gadget Incorporated. Gizmo copies the basic design of the Mousomatic and offers its version of the Mousomatic at a substantial discount. (Gizmo can still earn a profit at this lower price because it had minimal research and development expense.) To stay in business, Earnest is forced to lower his price. Market competition pushes the price down to the cost of production and distribution. In the end, Earnest is unable to recover his cost of research and development and suffers a loss. Although he has numerous other interesting ideas, he decides that they are not worth pursuing because Gizmo, or some other company, will simply copy them if they turn out well.

The existence of intellectual property rights encourages Earnest and other inventors to pursue their creative efforts. If Earnest can obtain the right to prevent others from copying his inventions, then he stands a much better chance to reap a profit. Hence, he will be much more inclined to make the initial investment in research and development.

In the end, not only will Earnest be wealthier, but the public will be enriched by the new and better products brought forth by intellectual property protection.

b. Costs of Limiting Diffusion

Legal protection for ideas and their expression prevents others from using those works to develop similar works that build upon them. Knowledge in society is cumulative. In the words of Sir Isaac Newton, "If I have seen further [than others], it is by standing on the shoulders of giants." Hence, society at large can be harmed by intellectual property protection to the extent that it unnecessarily raises the cost of acquiring a product (through monopoly pricing by the right holder) and limits others from making further advances. Consider the following scenario:

> Professor Lee conducts research on drug treatments at University College. Grants from the federal government fund her laboratory. For the past decade, Professor Lee has competed with colleagues at other laboratories to discover the cure for a prevalent form of cancer. It is likely that the first person to discover the cure will win a Nobel Prize, as well as numerous other financial and professional rewards. In early 1995, Professor Lee hits upon the Alpha drug, which cures the disease. She files for and receives a patent. Professor Hu, a researcher at another research institution, independently discovers the identical cure a few months later. With patent in hand, Professor Lee starts selling Alpha for a price 100 times the cost of production. Because Alpha is a life-saving cure, those stricken with the disease who can afford the treatment are more than willing to pay the price. Then, to relieve the suffering of millions, Professor Hu begins selling Alpha at the cost of production. Moreover, she has developed an improvement on the Alpha drug, Alpha+, that reduces the side effects of the treatment. Professor Lee quickly obtains an injunction preventing Hu from selling either version of Alpha for the life of the patent.

This example raises serious questions about whether intellectual property protection is desirable, at least for this class of invention. Professor Lee does not bear significant risk in pursuing the invention because the government and university generously fund her research. Furthermore, the potential for a Nobel Prize, expanded research funding, and professional recognition provide substantial encouragement for Professor Lee to pursue a cure whether or not she gains financially from sales of Alpha. Moreover, other researchers were poised to make the same discovery at about the time that Professor Lee made her discovery. Yet she has the right not only to block sales of Alpha by competitors, but also to block sales of improvements such as Alpha+. Does such a system benefit society? One must also consider that without the financial incentive of a patent, there would perhaps have been less competition to discover and market any cure for cancer.

Similar problems can arise in the copyright domain. In 1936, Margaret Mitchell published her epic novel GONE WITH THE WIND. The plot revolves around Scarlett O'Hara, a hard-working and ambitious Southern woman who lives through the American Civil War and Reconstruction. GONE WITH THE WIND quickly became one of

the most popular books ever written, eventually selling more than 30 million copies throughout the world. Ms. Mitchell would receive a Pulitzer Prize, and the novel would become the basis for one of the most successful movies ever.

Sixty-five years later, Alice Randall, an African-American historian, set out to tell the history of the Civil War-era South from another viewpoint. She invented Cynara, a slave on Scarlett's plantation who also happened to be Scarlett's half-sister. Although Mitchell's novel did not depict Cynara, many other characters in Randall's novel mimic characters in the original. Randall's THE WIND DONE GONE (2001) depicts the mistreatment and suffering of slaves in their vernacular dialect. Randall believed that GONE WITH THE WIND, as the lens through which millions viewed the deep South during the Civil War era, provided a unique vehicle for communicating the racial injustice of American history. Margaret Mitchell's estate sued Randall for copying GONE WITH THE WIND without authorization, obtaining a preliminary injunction. Although Randall eventually prevailed on appeal under the fair use doctrine, *Suntrust Bank v. Houghton Mifflin Co*., 268 F.3d 1257 (11th Cir. 2001), this controversy illustrates how strong copyright protection can potentially inhibit cumulative creativity.

In applying a utilitarian framework, we must balance the economic incentive benefits of intellectual property rights against the costs of limiting diffusion of knowledge. A critical issue in assessing the need for intellectual property protection is whether innovators have sufficient means to appropriate an adequate return on investment in research and development. In this regard, the market itself often provides means by which inventors can realize sufficient rewards to pursue innovation without formal intellectual property rights beyond contract law. The first to introduce a product can in many contexts earn substantial and long-lived advantages in the market. In many markets, the costs or time required to imitate a product (for example, to reverse engineer a complex machine) are so great that the first to market a product has substantial opportunity for profit. Moreover, as we will see in Chapter II, inventors can often prevent imitation through contractual means, such as trade secrecy and licensing agreements with customers. Where the invention relates to a manufacturing process, the innovator may be able to maintain protection through secrecy even after the product is on the market. Alternatively, a producer may be able to bundle products with essential services and contracts for updates of the product. In addition, the producer may be able to spread the costs of research and development among a group of firms through research joint ventures.

In those areas in which economic incentives for innovation are inadequate, and the creation of intellectual property rights is the most efficacious way of encouraging progress, society must determine the appropriate requirements for, duration and scope of, and set of rights afforded intellectual property. Over the past half century, economists have developed and refined models to assess the appropriate trade-off between the social benefits of providing economic incentives for innovation through intellectual property rights and the social costs of limiting diffusion of knowledge. Professor William

Nordhaus developed the first formal model analyzing the optimal duration of intellectual property. His model of the innovative process assumed that investments in research produced a single independent innovation. WILLIAM NORDHAUS, INVENTION, GROWTH, AND WELFARE: A THEORETICAL TREATMENT OF TECHNOLOGICAL CHANGE 3–7 (1969). In this simple setting, the optimal patent duration balanced the incentive benefits of protection against the deadweight loss of monopoly pricing and the resulting limitations on dissemination.

Since Nordhaus's important early work, economic historians and economic theorists have greatly enriched our understanding of the innovative process and the implications for public policy. Historical and industry studies of the innovation process find that inventions are highly interdependent: "Technologies . . . undergo a gradual, evolutionary development which is intimately bound up with the course of their diffusion." Paul David, *New Technology, Diffusion, Public Policy, and Industrial Competitiveness* 20 (Center for Economic Policy Research, Pub. No. 46, Apr. 1985). In fact, "secondary inventions"—including essential design improvements, refinements, and adaptations to a variety of uses—are often as crucial to the generation of social benefits as the initial discovery. Economic theorists have developed models of the innovative process incorporating rivalrous and cumulative innovation, uncovering a range of important effects. *See* Suzanne Scotchmer, *Standing on the Shoulders of Giants: Cumulative Research and the Patent Law*, 5 J. ECON. PERSPECTIVES 29 (1991). Most notably, excessive protection for first-generation innovation can impede later innovations if licensing is costly. More generally, these models cast doubt on the notion that society can perfectly calibrate intellectual property rewards for each innovation.

As is increasingly evident, the range of innovative activity and creative expression in our society is vast and ever changing. As the materials in this book highlights, the intellectual property institutions and rules that have evolved to promote technology and the arts are intricate. It will be the challenge of future generations of policymakers, judges, and lawyers to refine the ability of the intellectual property system to enhance the public welfare.

COMMENTS AND QUESTIONS

1. One significant difference between the natural rights perspective and the utilitarian perspective relates to who is entitled to the fruits of productive labor. In the natural rights framework, the inventor or author is entitled to the social benefits produced by his or her efforts. In the utilitarian framework, reward to the inventor or author is a secondary consideration; the principal objective is to enrich the public at large. Which view is more compelling? Consider in this regard the optimal division of benefits from the invention of Alpha among Professor Lee, Professor Hu, and the public at large. Is Professor Lee entitled to all or even a lion's share of the benefits?

2. In 1996, the REPORT OF THE PRESIDENT'S COMMISSION ON THE PATENT SYSTEM identified four major economic justifications for the patent laws. First, a patent system provides an incentive to invent by offering the possibility of reward to the inventor and to those who support him. This prospect encourages the expenditure of time and private

risk capital in research and development efforts. Second, and complementary to the first, a patent system stimulates the investment of additional capital needed for the further development and marketing of the invention. In return, the patent owner is given the right, for a limited period, to exclude others from making, using, or selling the invented product or process. Third, by affording protection, a patent system encourages early public disclosure of technological information, some of which might otherwise be kept secret. Early disclosure reduces the likelihood of duplication of effort by others and provides a basis for further advances in the technology involved. Fourth, a patent system promotes the beneficial exchange of products, services, and technological information across national boundaries by providing protection for industrial property of foreign nationals.

While directed specifically at the patent system, many of these arguments have application to all forms of intellectual property.

Are these incentives necessary to invention and creation? Using cost and other data from publishing companies, Professor (later Justice) Stephen Breyer contended that lead time advantages and the threat of retaliation reduce the cost advantages of copiers, thus obviating if not eliminating the need for copyright protection for books. *See* Stephen Breyer, *The Uneasy Case for Copyright: A Study in Copyright of Books, Photocopies and Computer Programs*, 84 HARV. L. REV. 281 (1970). *But see* Barry W. Tyerman, *The Economic Rationale for Copyright Protection for Published Books: A Reply to Professor Breyer*, 18 UCLA L. REV. 1100 (1971); Stephen Breyer, *Copyright: A Rejoinder*, 20 UCLA L. REV. 75 (1972). This debate took place decades ago. Have advances in technology strengthened or weakened Breyer's argument?

3. *Intellectual Property as Property*. It is tempting to view intellectual property through a tangible property lens. *See* Richard Epstein, *The Disintegration of Intellectual Property? A Classical Liberal Response to a Premature Obituary*, 62 STAN. L. REV. 455 (2010). After all, intellectual property draws on tangible property concepts of first-in-time, exclusivity, and transferability, and scholars have explored the philosophy of tangible property rules and institutions for centuries. However, simplistic Blackstonian conceptions of land and other tangible resources miss a lot of the most important economic and social concerns relating to protecting intangible resources. *See* Peter S. Menell, *Governance of Intellectual Resources and Disintegration of Intellectual Property in the Digital Age*, 26 BERKELEY TECH. L.J. 1523 (2011); Mark A. Lemley, *Property, Intellectual Property, and Free Riding*, 83 TEX. L. REV. 1031 (2005). Nonetheless, tangible property law and institutions dealing with more complex resources (such as water, wild animals, oil and natural gas) and circumstances (control of the dead hand, shared use of resources) offer valuable insights into the design of intellectual property rules and institutions

4. *Comparative Institutional Analysis*. Numerous institutional mechanisms exist for addressing the public goods problem inherent in the production of ideas and information—direct government funding of research, government research subsidies, promotion of joint ventures, and prizes. The case for intellectual property rights ideally compares all of these options. *See* Daniel J. Hemel & Lisa Larrimore Ouellette, *Beyond*

the Patents-Prizes Debate, 92 TEX. L. REV. 303 (2013). Intellectual property rights have the advantage of limiting the government's role in allocating resources to a finite set of decentralized decisions: whether particular inventions are worthy of a fixed period of protection. The market then serves as the principal engine of progress. Decentralized consumers generate demand for products and competing decentralized sellers produce them. By contrast, most other incentive systems, especially large-scale research funding, require central planning on a mass scale. Most economists place more confidence in the former means of allocating resources. The case for intellectual property rights, then, is based more on a generalized perception of institutional choice than on strong direct evidence of the superiority of intellectual property rights relative to the alternatives.

Is the market the best way of allocating resources to inventions in all cases? Claire Xue and Lisa Ouellette have argued that the patent system undersupplies vaccines because preventing a disease is frequently less profitable than treating it, even though society would be better off with prevention. *See* Claire Xue & Lisa Ouellette, *Innovation Policy and the Market for Vaccines*, 7 J. L. & BIOSCIENCES 1 (2020)

4. *Open Source Movement*. The emergence of cooperative working environments for the development of software has raised questions about the core precept underlying the utilitarian/economic perspective: that exclusive property rights represent the most effective means for promoting creative enterprise. Open source software traces its origins to the early 1970s and the culture of collaborative research on computer software that existed in many software research environments. To perpetuate that model in the face of increasingly proprietary software, Richard Stallman, a former researcher in MIT's Artificial Intelligence Laboratory, established the Free Software Foundation (FSF) to promote users' rights to use, study, copy, modify, and redistribute computer programs. Open source programs such as GNU/Linux have become widely used throughout the computing world. In the process, they have spawned a large community of computer programmers and service organizations committed to the principles of open source development. The growth and success of Linux has brought the open source movement into the mainstream computer software industry. Today, a variety of vendors, such as Red Hat, distribute open source software, and it has tens of millions of users worldwide. Indeed, open source software powers many of the most important internet sites, including Google. Does this experience refute the logic underlying the property rights paradigm or merely broaden the range of viable governance structures?

5. Drawing loosely upon Thomas Jefferson's natural rights insight that "ideas should freely spread from one to another . . . for the moral and mutual instruction of man, and improvement of his condition," ANDREW A. LIPSCOMB & ALBERT ELLERY BERGH EDS., THE WRITINGS OF THOMAS JEFFERSON, vol. 13: 333–35 (Writings (document 12): letter from Thomas Jefferson to Isaac McPherson, 13 Aug. 1813) (1905) and The Grateful Dead's success in encouraging fans to distribute bootleg recordings as a way to drive tour and merchandising revenue, John Perry Barlow proclaimed that intellectual property was foolhardy and should not be enforceable on the Internet. John Perry Barlow, *The Economy of Ideas*, 2.03 WIRED 84 (Mar. 1994). This insight resonated with many in the computer hacker community who believe that "information

wants to be free." Professor Lawrence Lessig explored and expanded upon this perspective in his books FREE CULTURE: HOW BIG MEDIA USES TECHNOLOGY AND THE LAW TO LOCK DOWN CULTURE AND CONTROL CREATIVITY (2004) and THE FUTURE OF IDEAS: THE FATE OF THE COMMONS IN A CONNECTED WORLD (2001), although he emphasized preserving spaces free of intellectual property. For historical analysis of Jefferson's thinking and its application to intellectual property, see Adam Mossoff, *Who Cares What Thomas Jefferson Thought about Patents? Reevaluating the Patent Privilege in Historical Context*, 92 CORNELL L. REV. 953 (2007); Justin Hughes, *Copyright and Incomplete Historiographies—of Piracy, Propertization, and Thomas Jefferson*, 79 S. CAL. L. REV. 993 (2006).

What is likely to happen if we abolish ownership of information on the Internet? In general? Consider the implications for particular works of authorship: musical compositions, sound recordings, software, movies, databases. Will people stop producing these works? Or will other types of incentives and appropriation mechanisms (e.g., encryption, secrecy) continue to encourage invention and creativity? What are the advantages and disadvantages of these alternative mechanisms? Are people intrinsically motivated to create certain types of works, whether or not they get paid? Compare ROBERT LEVINE, FREE RIDE: HOW DIGITAL PARASITES ARE DESTROYING THE CULTURE BUSINESS, AND HOW THE CULTURE BUSINESS CAN FIGHT BACK (2011) and MICHELE BOLDRIN & DAVID LEVINE, AGAINST INTELLECTUAL MONOPOLY (2007).

6. The rapid growth of generative AI has resulted in the creation of vast numbers of new works of art, music, and writing with minimal human effort. Does an AI need the incentive of copyright to create? Should anyone own new works that are generated in a matter of seconds from a simple prompt?

ii. Ensuring Integrity of the Marketplace

Unlike patent and copyright, trademark law does not protect innovation or creativity directly. Rather, it aims to protect the integrity of the marketplace by prohibiting the use of marks associated with particular manufacturers in ways that would cause confusion as to the sources of the goods. In so doing, trademark law reduces consumer confusion and enhances incentives for firms to invest in activities (including R&D) that improve brand reputation. This function, however, is part of a larger framework of laws and institutions that regulate the quality of information in the marketplace. *See* Peter S. Menell & Suzanne Scotchmer, *Intellectual Property Law*, in 2 HANDBOOK OF LAW AND ECONOMICS 1474, 1536–56 (A. Mitchell Polinsky & Steven Shavell eds., 2007).

The efficiency of the marketplace depends critically upon the quality of information available to consumers. In markets in which the quality of goods is uniform or easily inspected at the time of purchase, consumers can determine the attributes themselves and no information problem arises. In many markets, however—such as used automobiles, computers, watches, as well as designer handbags—an information asymmetry exists: sellers typically have better information about their products or services than buyers can uncover without buying the product. *See* George A. Akerlof, *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, 84 Q.J.

ECON. 488 (1970). Unscrupulous sellers will be tempted to make false or misleading product claims or copy the trademark of a rival producer known for superior quality. It is often easier to copy a trademark than to duplicate production techniques, quality assurance programs, and the like. For example, two watches that look the same on the outside may have very different mechanical features, manufacturing quality, and composition of materials used.

Proliferation of unreliable information in the marketplace increases consumers' costs of search and distorts the provision of goods. Consumers will have to spend more time and effort inspecting goods, researching the product market, and testing products. Manufacturers will have less incentive to produce quality goods as others will be able to free-ride on such reputations. In markets for products where quality is costly to observe, high-quality manufacturers might not be able to survive without effective mechanisms for policing the source of products and the accuracy of claims relating to unobservable product characteristics.

Trademarks, as concise and unequivocal indicators of the source (e.g., Apple) and nature (e.g., iPhone) of particular goods, counteract the "market for lemons" problem by communicating to consumers the enterprise responsible for the goods and, in some cases, the specifications of the goods. The brand name Coca-Cola, for example, informs the consumer of the maker of the soft drink beverage as well as the taste that they can expect. If the product meets or exceeds expectations, then the trademark owner gains a loyal customer who will be willing to pay a premium in future transactions; if the product disappoints, then the trademark owner will have more difficulty making future sales to that consumer (or will have to offer a discount to attract their business). In this way, trademarks implicitly communicate unobservable characteristics about the quality of branded products, thereby fostering incentives for firms to invest in product quality, even when such attributes are not directly observable prior to a purchasing decision. Sellers who enter the high-quality segment of the market must initially invest in building a strong reputation. Only after consumers become acquainted with the attributes of their brand can they recoup these costs. As this process unfolds, high-quality items can sell for a premium above their costs of production, since consumers will expect them to be of high quality. Trademarks also facilitate efficient new business models, such as franchising, which generate economies of scale and scope in marketing and facilitate rapid business diffusion across vast geographic areas.

The marking of products also creates incentives for disreputable sellers to pass off their own wares as the goods of better-respected manufacturers. Trademark law (as well as false advertising and unfair competition laws more generally) harnesses the incentives of sellers in the marketplace to police the use of marks and advertising claims of competitors. Sellers often have the best information about the quality of products in the marketplace; they also have a direct stake in preventing competitors from free-riding on their brand, reputation, and consumer loyalty. By creating private causes of action, trademark and false advertising law take advantage of this informational base and incentive structure as well as the vast, decentralized enforcement resources of trademark owners to regulate the informational marketplace, effectively in the name of consumers.

As with patent and copyright law, the creation of intellectual property rights in words, phrases, logos, and other identifying product features can entail several types of costs. Protection of descriptive terms as trademarks can increase search costs and impair competition by raising the marketing costs of competitors. For example, if a cookie manufacturer were to obtain a trademark on the word "cookie," then other companies interested in selling cookies would have a much more difficult time communicating the nature of their goods to consumers. If, however, the trademark was to "Mrs. Fields Cookies" and any protection for "cookies" was disclaimed, then potential competitors would be able to describe their products in the most easily recognized manner and would be able to develop their own marks—such as "ACME Cookies." At a minimum, trademark protection for descriptive terms significantly reduces the effective range of terms that others can use commercially.

More generally, trademark protection for descriptive terms can impede competition. Gaining control over the most effective term for describing a product raises the costs of potential competitors seeking to sell in that marketplace. By not being able to use a term or means of communication most easily understood by the consuming public, the entrant must bear higher marketing costs. Limitations on the use of trademarked terms for purposes of comparative advertising would also impede vigorous competition.

Trademark protection can also interfere with both communicative and creative expression. Broad exclusive trademark rights would limit the ability of others (including non-competitors) to comment on and poke fun at trademarks and their owners. As we will see, various doctrines limit such adverse effects. But as trademark protection has expanded beyond the traditional core—for example, to encompass a broad conception of connection to, sponsorship of, and affiliation with a trademark owner—it becomes more difficult to assess the boundaries, leading film and television production companies, for example, to tread carefully (and increasingly incur the costs of licensing transactions) in the use of trademarks in their works.

COMMENTS AND QUESTIONS

1. *Comparative Institutional Analysis*. In addition to private rights of action for trademark infringement and false advertising, several other mechanisms are available to provide and regulate market information, such as deceit and fraud common law causes of action and privately enforced consumer protection statutes, public regulation and public enforcement of unfair competition laws, and industry self-regulation and certification organizations. How do these institutions compare with trademark protection? Should they supplement or substitute for trademark protection?

2. *Status Goods*. Some trademarks also serve a more ambiguous function: signaling status or identity for some consumers. Some have referred to such commodities as "Veblen" goods, reflecting Thorstein Veblen's theory of conspicuous consumption. *See* THORSTEIN VEBLEN, THE THEORY OF THE LEISURE CLASS: AN ECONOMIC STUDY OF INSTITUTIONS (1899). This theory posits that unlike normal goods, demand for status goods increases with their price. Purchasers of such goods may be interested in being associated with a particular brand—such as a Rolex watch, a t-shirt with the name and

colors of a particular university, or a corporate brand—possibly apart from whether it is authentic or the quality associated with the authentic good. Some purchasers of such goods may well prefer a less expensive, counterfeit version. They presumably would not be confused when purchasing such goods (e.g., a Rolex watch sold on a street corner for $10). Of course, where both buyers and sellers are aware of the difference between cheap imitations of a luxury good and the genuine article, things might be different. It could be that cheap imitations in some ways promote sales of the luxury good.

The marketing of less expensive, lower quality imitations of status goods creates the possibility of separate harm to the sellers and purchasers of authentic goods. The availability of counterfeit articles could well divert some consumers who would otherwise purchase the authentic article, although this effect is likely to be relatively small due to the large price differential and the availability of the authentic goods for those who are interested. The lower quality of the counterfeit goods could, however, erode the goodwill associated with the authentic manufacturer through post-sale confusion—on-lookers who mistake the shoddier counterfeit good for the authentic good and are thereby less inclined to purchase the authentic version, thereby reducing sales by the trademark owner. In addition, due to the proliferation of non-easily recognized "fakes," prior and potential purchasers of the authentic "status" goods may be less interested in owning a much less rare commodity. The value of ownership may be sullied. In essence, status goods exhibit a negative network externality, whereby proliferation of such goods erodes the value to prior purchasers. Should trademark law be concerned with this effect?

B. OVERVIEW OF INTELLECTUAL PROPERTY

Intellectual property law has traditionally been taught along doctrinal lines. Separate courses have covered patent, copyright, and trademarks, with trade secrets often lost between the gaps. Yet the practice of intellectual property law increasingly cuts across these lines. Computer technology companies, for example, frequently require lawyers to address trade secret, copyright, patent, trademark, and antitrust issues simultaneously. Moreover, from a purely practical standpoint, clients are ultimately interested in appropriating a return from their investments, not in how many patents, copyrights, or trademarks their lawyers can obtain. Thus, intellectual property lawyers must possess an integrated understanding of these various fields to provide sound advice.

With this objective in mind, our book integrates the various modes of intellectual property in a functional manner. Before we begin this more detailed study, however, a brief survey of the overall landscape of intellectual property is in order. The following section sketches the elements of each of the principal modes of intellectual property protection in a comparative framework. These elements are summarized in Table 1-1. As an initial exploration, we conclude the chapter with a problem highlighting the integrated nature of intellectual property law and the challenges of applying its many branches to a real-world problem.

TABLE 1-1
Principal Modes of Legal Protection for Intellectual Work

	Trade secret	*Utility Patent*	*Design Patent*	*Copyright*	*Trademark/dress*
Underlying Theory	Freedom of contract; protection against unfair means of competition	Limited monopoly to encourage production of utilitarian works in exchange for immediate disclosure and ultimate enrichment of the public domain	Limited monopoly to encourage production of ornamental designs for articles of manufacture to encourage expressive creativity	Limited (although relatively long-lived) monopoly to encourage the authorship of expressive works; developed initially as a means of promoting publishing	Perpetual protection for distinctive nonfunctional names and dress to improve the quality of information in the marketplace
Source of Law	Federal statute (Defend Trade Secrets Act); State statutes (Uniform Trade Secrets Act); common law	Patent Act (federal)	Patent Act (federal)	Copyright Act (federal); common law (limited)	Lanham Act (federal); common law (unfair competition)
Subject Matter	Formula, pattern, compilation, program, device, method, technique, process	Process, machine, manufacture, or composition of matter; plants (asexually reproducing)—*excluding:* abstract ideas, laws of nature, natural phenomena	Surface ornamentation and three-dimensional shapes—*excluding*: functional features	Works of authorship *limited by* idea/expression dichotomy (no protection for ideas, systems, methods, procedures); no protection for facts/research	Trademarks; service marks; certification marks; collective marks; trade dress—*excluding* generic terms, functional features

	Trade secret	*Utility Patent*	*Design Patent*	*Copyright*	*Trademark/dress*
Standard for Protection	Information not generally known or available; reasonable efforts to maintain secrecy; commercial value	Novelty; non - obviousness; utility (distinctiveness for plant patents)	Novelty, originality, ornamentality	Originality; authorship; fixation in a tangible medium	Distinctiveness; secondary meaning (for descriptive and geographic m arks); use in commerce; famous mark (for dilution protection)
Scope of Protection	Protection against misappropriation—acquisition by improper means or unauthorized disclosure	Exclusive rights to make, use, sell, offer to sell, or import innovation; extends to "equivalents"	Exclusive rights to make, use, sell, offer to sell, or import innovation	Rights of reproduction, adaptation, distribution, performance, and display; limited protection for attribution and integrity afforded some works of visual art; protection against circumvention of technical protection measures	Exclusive rights in U.S. if likelihood of confusion; false designation of origin (§ 43(a)); dilution (for famous marks)
Period of Protection	Until becomes public knowledge	20 years from filing (utility); extensions up to 5 years for drugs, medical devices and additives	15 years from grant	Life of author + 70 years; "works for hire": minimum of 95 years after publication or 120 years after creation	Perpetual, subject to abandonment

	Trade secret	*Utility Patent*	*Design Patent*	*Copyright*	*Trademark/dress*
Disclosure	Loss of protection (unless sub rosa)	Right to patent lost if disclosure more than one year before filing; full disclosure is required in patent application; marking enhances damages	Right to patent lost if disclosure more than one year before filing; full disclosure in patent application; marking enhances damages	© notice and publication no longer required, but confers benefits	® notice optional, but confers benefits
Rights of Others	Independent discovery; reverse engineering; whistleblower immunity	Only if licensed; can request reexamination by Patent Office	Only if licensed; can request reexamination by Patent Office	Fair use; compulsory licensing for musical compositions, cable TV, et al.; independent creation	Truthful indication of source; fair and nominative use (e.g., comment)
Costs of Protection	Security expenses; personnel dissatisfaction; litigation costs	Filing, issue, and maintenance fees; litigation costs	Filing and issue fees	None (protection attaches upon fixation); publication requires notice; suit requires registration	Registration search; marking product (optional)
Remedies	Civil suit; damages (potentially double); injunctive relief; criminal prosecution	Injunctive relief and damages (potentially treble); attorney fees (in exceptional cases)	Injunctive relief and damages (total profit); attorney fees (in exceptional cases)	Injunction; destruction of infringing articles; damages (actual or profits); statutory ($200–$150,000); attorney fees (within court's discretion); criminal prosecution	Injunction; destruction of infringing articles; disgorgement; damages; attorney fees (in exceptional cases); criminal prosecution

1. Trade Secret

Trade secret protection emerged from common law doctrines that protect against the misappropriation of confidential information that is the subject of reasonable efforts to maintain secrecy. As such, they are more akin to traditional tort and contract law than to patent or copyright law. While protection for trade secrets has long been a part of the common law, most states today protect trade secrets by statute. The federal government has taken a growing interest in protecting trade secrets as concerns about international espionage and hacking have grown. The passage of the Defend Trade Secrets Act of 2016 added federal protection for trade secrets.

The purpose of protecting trade secrets is to prevent "theft" of information by unfair or commercially unreasonable means. In essence, trade secret law is a form of private intellectual property law under which creators establish contractual limitations or build legal "fences" that afford protection from misappropriation.

The definition of subject matter eligible for protection is broad: business or technical information of any sort. To be protected by trade secret laws, the information must be a secret. However, only relative and not absolute secrecy is required. In addition, the owner of a trade secret must take reasonable steps to maintain its secrecy. Trade secrets have no definite term of protection but may be protected only as long as they are secret. Once a trade secret is disclosed, protection is lost.

There is no state agency that "issues" (or even registers) trade secrets. Rather, any information that meets the above criteria can be protected. Courts will find misappropriation of trade secrets in two circumstances: (1) where the secrets were obtained by theft or other improper means; or (2) disclosed in violation of an express or implied agreement to keep the information secret. However, trade secret laws do not protect against independent discovery or invention. Nor do they prevent competitors from "reverse engineering" a legally obtained product to determine the secrets contained inside. Moreover, federal trade secret law protects employees and contractors reporting suspected illegal activity to the government or discussing their concerns with counsel if done confidentially. Violations of trade secret law entitle the owner to damages and, in some cases, injunctions against use or further disclosure.

2. Utility Patent

Patent law is the classic example of an intellectual property regime modeled on the utilitarian framework. Following the constitutional authorization to promote progress in the "useful Arts," what we would today call technology and scientific discovery, patent law offers the possibility of a limited period of exclusive rights to encourage research and development aimed at discovering new processes, machines, articles of manufacture, and compositions of matter, and improvements thereof. The public benefits directly through the spur to innovation and disclosure of new technology. After the term of the patent expires, the innovation becomes part of the public domain, freely available to all.

To obtain a utility patent, an inventor must submit an application to the Patent and Trademark Office (PTO) that meets five requirements: patentable subject matter, usefulness, novelty, nonobviousness, and disclosure sufficient to enable others skilled in the art to make and use the invention. While the threshold for usefulness is low, the novelty and non-obviousness standards are substantial, and the PTO conducts an independent review of the application to ensure that it meets these requirements. If the PTO grants the patent, the inventor obtains exclusive rights to make, use, and sell the innovation for a term of up to 20 years from the application filing date. The patent grant is nearly absolute, barring even those who independently develop the invention from practicing its art. Infringement will be found where the accused device, composition, or process embodies all of the elements of a valid patent claim (or accomplishes substantially the same function in substantially the same way to achieve the same result).

3. Design Patent

As the industrial revolution unfolded in the early 19th century, advances in iron casting processes, textile manufacturing, and other consumer product industries paved the way for mass producing decorative goods. As patents on these processes and products expired, competition shifted toward the decorative features. Ornamentation of useful articles did not, however, fit easily within utility patent or copyright protection. Although advances in the production processes and casting machinery were eligible for utility patents, the particular designs resulting from such processes and machinery did not qualify for utility patent protection. And copyright protection extended only to books, maps, charts, and prints, not to three-dimensional works.

England's more developed manufacturing economy had already confronted these issues through the enactment of a copyright-based design protection regime. Drawing on England's precedent, a successful American stove manufacturer, along with other industrialists and designers, petitioned Congress to enact design protection modeled on the British legislation. The Commissioner of Patents advocated the legislation in 1841, but under the "design patent" label and the Patent Office's authority. The design patent regime remains today, although copyright protection now extends to useful articles.

To obtain a design patent, a designer must submit an application to the PTO illustrating the design that satisfies four requirements: novelty, originality, ornamentality, and nonobviousness. The ornamentality requirement was intended to exclude design patent protection for functional features. Design patents have a term of 15 years from the grant date.

4. Copyright

Although the copyright and patent laws flow from the same constitutional basis and share the same general approach—statutorily created monopolies to foster progress—they feature different elements and rights, reflecting the very different fields of human ingenuity that they seek to encourage. In general, copyrights are easier to secure and last substantially longer than patents, although the scope of protection afforded copyrights is narrower and less absolute than that given to patents.

Copyright law covers the broad range of literary and artistic expression—including books, poetry, song, dance, dramatic works, computer programs, movies, sculpture, and paintings. Ideas themselves are not copyrightable, but the author's particular expression of an idea is protectable. A work must exhibit a modicum of originality and be fixed in a "tangible medium of expression" to receive protection. Copyright protection attaches as soon as a work is fixed. There is no examination by a governmental authority, although the Copyright Office registers copyrightable works. Such registration is no longer required for validity, but U.S. authors must register their works prior to filing an infringement suit. A copyright lasts for the life of the author plus 70 years or a total of 95 years in the case of entity authors.

The breadth and ease of acquisition of copyright protection are balanced by the more limited rights that copyright law confers. Ownership of a valid copyright protects a copyright holder from unauthorized copying, public performance, and display, and it entitles the holder to make derivative works and to control sale and distribution of the work. These rights, however, are limited in a number of ways. Others may make "fair use" of the material in certain circumstances. The Copyright Act also establishes compulsory licensing for musical compositions and cable television. A limited set of moral rights protects against misattribution or destruction of a narrow class of works of visual art.

Copyright law protects only against *copying* of protected expression. Independent creation of a copyrighted work does not violate the Copyright Act, nor does copying the unprotected elements of a work. Therefore, copyright law must have some mechanism for determining when a work has been copied illegally. While in rare cases direct proof of copying may be available, usually it is not. In its place, courts infer copying from proof that the defendant has had access to the plaintiff's work combined with evidence that the two works are *similar*. Even if copying is established, it must be further shown that the defendant's work is *substantially similar* to protected elements (e.g., excluding ideas) of the plaintiff's work.

With the proliferation of digital technology, Congress has augmented traditional copyright protection by prohibiting the circumvention of technical protection measures intended to prevent unauthorized use and distribution of copyrighted works and alteration of copyright management information. These new rights are subject to various exceptions and limitations.

5. Trademark/Trade Dress

Trademarks are also protected by state statute and common law as well as federal statute, although the source of constitutional authority is different from that of the Patent and Copyright Acts. Rather than deriving from a specific grant of constitutional power, federal power to regulate trademarks and unfair competition is based on the Commerce Clause, which authorizes Congress to regulate foreign and interstate commerce. Unlike patent and copyright protection, trademark law did not evolve from a desire to stimulate particular types of economic activity. Rather, its original purpose was to protect consumers from unscrupulous sellers attempting to fly under the banner of someone

else's logo or identifying symbol. Trademark law has more recently embraced incentive and natural rights rationales. The Lanham Act (the federal trademark statute) protects words, symbols, and other attributes that serve to identify the nature and source of goods or services. Examples of marks protectable under the Lanham Act include corporate and product names, symbols, logos, slogans, pictures and designs, product configurations, colors, and even smells. Not all such marks are protectable, however. To receive trademark protection, a mark need not be new or previously unused, but it must represent to consumers the source of the good or service identified. It cannot be merely a description of the good itself or a generic term for the class of goods or services offered. Further, the identifying mark may not be a functional element of the product itself but must serve a purely identifying purpose. Since 1996, famous marks also receive federal protection against "dilution" by blurring or tarnishment. Finally, trademark protection is directly tied to the use of the mark to identify goods in commerce. Trademarks do not expire on any particular date but continue in force until they are "abandoned" by their owner or become unprotectable.

The PTO examines trademark applications and issues trademark registrations that confer significant benefits upon the registrants, including prima facie evidence of validity; constructive notice to others of the claim of ownership; federal subject matter jurisdiction; incontestability after five years, which confers exclusive right to use the mark; authorization to seek treble damages and attorney fees; and the right to bar importation of goods bearing the infringing mark. Federal trademark registration, however, is not necessary to obtain trademark protection. A trademark owner who believes that another is using the same or a similar mark to identify competing goods can bring suit for trademark infringement. Infringement turns on whether consumers are likely to be confused as to the origin of the goods or services. If so, the trademark owner is entitled to an injunction against the confusing use, damages for past infringement, and in some cases the seizure and destruction of infringing goods.

PROBLEM I-2

MEMORANDUM

To: Associate
From: Senior Partner
Re: HEALTHWARE Inc.

Janet Peterson called me yesterday about a new venture that she plans to try to get off the ground. As you may know, Janet is a computer programmer and a registered nurse. She has an interesting idea for a new venture and would like our advice on how she might structure the business to have the best potential for success.

She would like to call the venture Healthware. Janet believes that she can tap into the diet/health/environmental/mobile device craze by developing a user-friendly app that would monitor the user's diet and fitness activity. The user would input information on their health (e.g., age, weight, medical history, dietary restrictions). Each day, the program would collect information on the user's diet and physical exercise. An accelerometer built into the user's smartphone would collect exercise information. The user could manually enter their food consumption, or could use a Quick Response Code (a matrix barcode) reader to scan dietary information on a growing array of packaged and restaurant foods. The software would periodically provide an analysis of the user's health, as well as suggestions for achieving the user's goals, whether weight reduction, better fitness, or general health. In addition, the program would compile a record of the user's activities which they could bring to annual physicals. Other subroutines would be available for pregnant and lactating women, children, the elderly, diabetics, vegetarians, triathletes, etc. Over time, Healthware would compile data from users for developing an AI-driven health, exercise, and diet predictive model for improving the software's efficacy.

Janet thinks that she could put together the diverse people necessary to pull this project off: programmers, a nutritionist, a physician, a fitness consultant. She is concerned, however, that one of these people could, after they are familiar with the product, develop a competing program.

What are the options for structuring Healthware? What problems do you foresee in structuring this venture? Assuming that the product is popular, what are the major risks to Healthware's success? How can we structure Healthware so as to overcome these problems?

CHAPTER II: TRADE SECRET LAW

A. INTRODUCTION

1. Historical Background

The idea that information should be protected against "theft" (which may include the physical taking of tangible goods containing information or simply the copying or memorization of data) is a venerable one in the law. One scholar traces the earliest legal protection against "misappropriation of trade secrets" to the Roman Empire. *See* A. Arthur Schiller, *Trade Secrets and the Roman Law: The Actio Servi Corrupti*, 30 COLUM. L. REV. 837 (1930).[1] The Roman courts created a cause of action called "actio servi corrupti"—literally, an action for corrupting a slave. According to Schiller, the actio servi corrupti was used to protect slave owners from third parties who would "corrupt" slaves (by bribery or intimidation) into disclosing their owners' confidential business information. The law made such third parties liable to the slave owner for twice the damages he suffered as a result of the disclosure.

While scholarship has cast some doubt on the enforcement of trade secret protection in the Roman Empire, see Alan Watson, *Trade Secrets and Roman Law: The Myth Exploded*, 11 TUL. EUR. & CIV. L.F. 19 (1996), the concept that so-called business or "trade secrets" were entitled to legal protection spread rapidly throughout the world. As early as the Renaissance, most European nation-states had laws that protected businesses (notably, the guild cartels) from those who used their secret processes and ideas without permission.

In preindustrial economies, craftsmen passed along their knowledge of the trade to their apprentice with the understanding that the know-how would be kept secret during the apprenticeship period. *See* Catherine L. Fisk, *Working Knowledge: Trade Secrets, Restrictive Covenants in Employment, and the Rise of Corporate Intellectual Property, 1800–1920*, 52 Hastings L.J. 441, 450–51 (2001). After this training, the apprentice was free to practice the trade. These protections were reinforced by custom, trade guilds, and close-knit communities. See Carlo M. Cipolla, Before The Industrial Revolution: European Economy and Society 1000–1700 (2d ed. 1980).

This informal system, governed principally through social norms and restrictions on apprentice mobility through mandatory periods of service, eroded as industrialization shifted production to factories and labor mobility increased in the early nineteenth century. Factories operated on a far larger scale than traditional craft enterprises and without the social and guild constraints on the dissemination of proprietary techniques and know-how. While patents afforded protection for larger, discrete advances, smaller-bore, incremental know-how was more vulnerable to misappropriation in the impersonal, specialized factory setting. Factory owners in England pressed for a broader form of protection for workplace trade secrets. The know-how behind industrial processes gradually gained recognition and enforcement by common law courts. *See Newbery v. James*, 35 ENG. REP. 1011, 1011–12 (Ch.) (1817); Fisk, *supra*, at 450–88.

[1] Trade secrets may have existed before this time, albeit in unusual forms. *See* Mark C. Suchman, *Invention and Ritual: Notes on the Interrelation of Magic and Intellectual Property in Preliterate Societies*, 89 COLUM. L. REV. 1264, 1274 (1989).

The practice spread to the United States by the mid-nineteenth century and developed rapidly in the common law. *See Vickery v. Welch*, 36 Mass. (19 Pick.) 523, 525–27 (1837).

Trade secret protection could encompass information that was not generally known to the public so long as the employer undertook reasonable precautions to preserve secrecy. This latter requirement brought non-disclosure agreements ("NDAs") into common practice. Failure to guard against disclosure of trade secrets by employees and contractors would jeopardize trade secret protection.

The emerging law of trade secrets was collected in the RESTATEMENT OF TORTS, published in 1939. The RESTATEMENT protected as a trade secret any information "used in one's business" that gives its owner "an opportunity to obtain an advantage over competitors who do not know or use it," so long as the information was in fact a secret. When the RESTATEMENT (SECOND) OF TORTS was published in 1979, the authors omitted the trade secrets provisions on the grounds that the law of trade secrets had developed into an independent body of law that no longer relied on general principles of tort law. Nonetheless, the original RESTATEMENT has remained influential because so many judicial decisions have relied on it, and statutes and other key sources have integrated its tenets.

By the mid-twentieth century, "the body of state and federal law that ha[d] traditionally coped with [industrial espionage] languish[ed] in a deepening maze of conflict and confusion." *See* Note, *Theft of Trade Secrets: The Need for a Statutory Solution*, 120 U. PA. L. REV. 378 (1971). Recognizing this doctrinal muddle and the growing economic importance of trade secret protection, the American Bar Association established a special committee to investigate the drafting of a uniform trade secret act to harmonize protection among the states in 1968. Over the course of the next decade, that committee drafted and refined the Uniform State Trade Secrets Act (UTSA), which the National Commission on Uniform State Laws promulgated in 1979. The UTSA has since been adopted by every state except New York. In the 1990s, the American Law Institute integrated trade secret law into the RESTATEMENT (THIRD) OF UNFAIR COMPETITION. In 2016, Congress enacted the Defend Trade Secrets Act, which brought uniformity of federal law without significantly changing the rules that have developed under state law. Before turning to these modern sources of trade secret protection, it will useful to examine the principles undergirding trade secret protection.

2. Theoretical Justifications for Trade Secrets

Trade secret law has long been justified on two distinct grounds: property rights and unfair competition grounded in tort.

i. Property (and Intellectual Property) Rights

Some jurists have conceptualized "intellectual property" as a species of the broader concept of "property." In addressing whether government disclosure of proprietary information constituted a taking under the Fifth Amendment to the U.S. Constitution, theSupreme Court held that trade secrets constituted a form of property. *See Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1001–04 (1984). In holding that trade

secrets were "property," the court reasoned in part that "[t]rade secrets have many of the characteristics of more tangible forms of property. A trade secret is assignable. A trade secret can form the res of a trust, and it passes to a trustee in bankruptcy." *Id*. at 1002–04.

Courts routinely characterize trade secrets as "property"[2] and grant injunctive relief to prevent their disclosure. The nature of the "property" interest is, however, limited by the relational character of trade secrets. *See* Robert G. Bone, *A New Look at Trade Secret Law: Doctrine in Search of Justification*, 86 CAL. L. REV. 241, 251–60 (1998). As the court in *Peabody v. Norfolk*, 98 Mass. 452, 458 (1868), noted, if a party "invents or discovers and keeps secret a process of manufacture, whether a proper subject for a patent or not, he has not indeed an exclusive right to it as against the public, or against those who in good faith acquire knowledge of it, but he has property in it which a court of chancery will protect against one who, in violation of contract and breach of confidence, undertakes to apply it to his own use, or to disclose it to third persons." The court explained that courts of equity would intervene to "prevent such a breach of trust, when the injury would be irreparable and the remedy at law inadequate, is well established by authority." Thus, injunctions were available for breaches of trust "in the course of confidential employment."

Treatment of trade secrets as property rights vested in the trade secret "owner" is consistent with a view of trade secrets law as providing an additional incentive to innovate beyond that provided by patent law.

Professor Mark Lemley argues that trade secrets make sense not so much as real property, but as intellectual property—that is, as government policy designed to promote innovation and, ironically, to encourage efficient disclosure of secrets. Mark A. Lemley, *The Surprising Virtues of Treating Trade Secrets as IP Rights*, 61 STAN. L. REV. 311 (2008). The idea is that without a legal mechanism to protect secrets, companies will either forgo investment in new innovation or go to unnecessary efforts to hide those innovations—building fences, hiring less-qualified but trusted friends and family members instead of strangers, refusing to share the secret with business partners, and so on. Trade secret law, on this view, encourages both more innovation and more disclosure than we would get without it.

The Kewanee Oil opinion similarly recognized an IP-related goal of trade secret protection: encouragement of research and development:

> Certainly the patent policy of encouraging invention is not disturbed by the existence of another form of incentive to invention. In this respect the two systems are not and never would be in conflict. . . .
>
> Trade secret law will encourage invention in areas where patent law does not reach, and will prompt the independent innovator to proceed with the

[2] *See, e.g., Tabor v. Hoffman*, 118 N.Y. 30, 23 N.E. 12 (1889) (holding that "independent of copyright or letters patent, an inventor or author has, by the common law, an exclusive property in his invention or composition, until by publication it becomes the property of the general public").

> 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.

Kewanee Oil Co. v. Bicron Corp., 416 U.S. 470, 481–85 (1974). The Court recognized 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 discoverer.

Id. at 482 (quoting *A. O. Smith Corp. v. Petroleum Iron Works Co.*, 73 F.2d 531, 539 (6th Cir. 1934). The Court emphasized "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." *See id*. (*citing Wexler v. Greenberg*, 399 Pa. 569, 578–79, 160 A.2d 430, 434–435 (Penn. S. Ct. 1960)). This aligns with Justice Gray's declaration, in a seminal case, that "it is the policy of the law, for the advantage of the public, to encourage and protect invention and commercial enterprise." *Peabody v. Norfolk*, 98 Mass. at 458.

ii. Tort Law

An alternate explanation for much of trade secrets law is what might be described as a "duty-based" theory, or what Melvin Jager calls "the maintenance of commercial morality." 1 MELVIN JAGER, TRADE SECRETS LAW §1.03 (2013), at 1–4. Justice Oliver Wendell Holmes questioned the "property" view of trade secrets in *E.I. du Pont & Co. v. Masland*, 244 U.S. 100, 102 (1917), preferring to characterize these rights in relational terms.

> [T]he word 'property' as applied to . . . 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.

E.I. duPont de Nemours Powder Co. v. Masland, 244 U.S. 100, 102 (1917).[3]

Trade secret law has long been grounded in what has been termed "commercial morality." *See* MELVIN F. JAGER, TRADE SECRETS LAW §1:3 (2013) ("[t]he Anglo-American common law . . . began to develop protection for business secrets to enhance commercial morality and good-faith dealings in business"); Bone, 86 CAL. L. REV. at 244 ("Trade secret law is grounded in "relationally specific duties," such as "disloyal

[3] The *Monsanto* Court distinguished *Masland* by observing that "Justice Holmes did not deny the existence of a property interest; he simply deemed determination of the existence of that interest irrelevant to the resolution of the case." *Monsanto*, 467 U.S. 1004 n.9.

employees who use or disclose their employers' secrets in violation of a duty of confidence stemming from the employer-employee relationship").

The Eastman case illustrates the principle in action. *See Eastman Co. v. Reichenbach*, 20 N.Y.S. 110, 110, 116 (N.Y. Sup. Ct. 1892), *aff'd sub nom. Eastman Kodak Co. v. Reighenbach*, 29 N.Y.S. 1143 (N.Y. Gen. Term 1894). In the late nineteenth century, Eastman (Kodak), a pioneering developer of photographic technology, brought suit against former high-level employees who departed to start a competing business using secret information that they helped develop at Eastman. They had executed assignment agreements covering all inventions, discoveries, and improvements in photography that they might make, discover, or invent while at Eastman and agreed to maintain company secrets in strict confidence and not to disclose or make improper use of them. The court enjoined defendants' competing venture on the ground that

> [t]his is not legitimate competition, which it is always the policy of the law to foster and encourage, but it is *contra bonos mores* [against good morals], and constitutes a breach of trust which a court of law, and much less a court of equity, should not tolerate.

20 N.Y.S. at 116.

This theme pervades trade secret law. As the Supreme Court recognized in *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470 (1974), its landmark decision holding that federal patent law does not preempt state trade secret protection, "[t]he 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 faith dealing is the very life and spirit of the commercial world.'" Id. at 481–82 (1974) (*quoting National Tube Co. v. Eastern Tube Co.*, 3 Ohio Cir. Ct. R., N.S., 459, 462 (1902), *aff'd*, 69 Ohio St. 560, 70 N.E. 1127 (1903)).

By contrast to the property view, the commercial morality concern aims to deter wrongful acts and is therefore sometimes described as a tort theory. Here the aim of trade secret law is to punish and prevent illicit behavior and even to uphold reasonable standards of commercial behavior. Under the tort theory trade secret protection is not explicitly about encouraging investments. It is plain, however, that one consequence of deterring wrongful behavior would be to encourage investment in trade secrets. Hence, despite their conceptual differences, the tort and property/incentive approaches to trade secrets may well push in the same direction.

One significant difference, though, is that the tort view focuses first and foremost on the question of infringement – did the defendant do something wrong? The property and IP views, by contrast, first ask whether there is a property right at all to be protected.

Contracts

While trade secrets protect against theft of a secret by third parties, many trade secret cases arise out of a "duty" explicitly stated in a contract, such as a technology license or an employment agreement. The tort-based breach of duty theory merges in those cases with a standard common law action for breach of contract. *Cf.* Robert G.

Bone, *supra* (questioning any distinct theoretical justification for trade secret law and arguing that contract and tort doctrines provide a proper foundation).

Trade secrets may be valuable because they give parties something to transact over. In so doing, they solve what has been called "Arrow's Information Paradox." People won't pay money for ideas unless they know what those ideas are, so they can decide if the idea is valuable. But without legal protection, disclosing the idea to a potential buyer would destroy its value. Parties sometimes sign "nondisclosure agreements" promising not to use information disclosed so it can be evaluated. Trade secret law can establish a right to protect that information against misuse once it is disclosed even in the absence of an express contract.

3. Overview of Modern Trade Secret Protection

Today, every one of the United States protects trade secrets. Improper use or disclosure of a trade secret was traditionally a common law tort. The UNIFORM TRADE SECRETS ACT has come to unify trade secret protection notwithstanding its predominately state law foundation. THE RESTATEMENT OF TORTS, §§757, 758 as well as the RESTATEMENT (THIRD) OF UNFAIR COMPETITION also serve as valuable sources for navigating trade secret protection.

Only New York has not adopted the UTSA, although some states, like North Carolina, adopted a modified version of the UTSA. New York protects trade secrets under common law, applying the RESTATEMENT OF TORTS framework. Because of the UNIFORM ACT's importance, we reproduce its primary provisions here.

Uniform Trade Secrets Act, with 1985 Amendments

§1. Definitions

As used in this [Act], unless the context requires otherwise:

(1) "Improper means" includes theft, bribery, misrepresentation, breach or inducement of a breach of a duty to maintain secrecy, or espionage through electronic or other means;

(2) "Misappropriation" means:

(i) acquisition of a trade secret of another by a person who knows or has reason to know that the trade secret was acquired by improper means; or

(ii) disclosure or use of a trade secret of another without express or implied consent by a person who

(A) used improper means to acquire knowledge of the trade secret; or

(B) at the time of disclosure or use, knew or had reason to know that his knowledge of the trade secret was

(I) derived from or through a person who had utilized improper means to acquire it;

(II) acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use; or

(III) derived from or through a person who owed a duty to the person seeking relief to maintain its secrecy or limit its use; or

(C) before a material change of his [or her] position, knew or had reason to know that it was a trade secret and that knowledge of it had been acquired by accident or mistake. . . .

(4) "Trade secret" means information, including a formula, pattern, compilation, program, device, method, technique, or process, that:

(i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and

(ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

The federal Defend Trade Secrets Act, enacted in 2016, was "modeled on the Uniform Trade Secrets Act," H. REP. NO. 114-529, 114TH CONG., 2D SESS., DEFENSE SECRETS ACT OF 2016 (2016). It defines trade secret misappropriation using the language of the UTSA. The DTSA augments the UTSA by defining "improper means":

(A) includes theft, bribery, misrepresentation, breach or inducement of a breach of a duty to maintain secrecy, or espionage through electronic or other means; and

(B) does not include reverse engineering, independent derivation, or any other lawful means of acquisition.

The federal definition of secrecy, while still broad, is narrower than the UTSA, limiting the reach of the law to certain types of information:

the term "trade secret" means all forms and types of financial, business, scientific, technical, economic, or engineering information, including patterns, plans, compilations, program devices, formulas, designs, prototypes, methods, techniques, processes, procedures, programs, or codes, whether tangible or intangible, and whether or how stored, compiled, or memorialized physically, electronically, graphically, photographically, or in writing if—

(A) the owner thereof has taken reasonable measures to keep such information secret; and

(B) the information derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, another person who can obtain economic value from the disclosure or use of the information.

18 U.S.C. §1839(3).

Is there any practical difference between these definitions? Texas took the adoption of the federal law as evidence of *disuniformity*, modifying its version of the UTSA in 2017 to adopt the definition of a trade secret in the DTSA (itself held over from the ECONOMIC ESPIONAGE ACT) rather than conforming to the laws of other states.

* * * * *

A trade secret claim can be broken down into three essential elements. First, the subject matter involved must qualify for trade secret protection: it must be the type of knowledge or information that trade secret law was meant to protect, and it must not be generally known to all. On eligible subject matter, the current trend, exemplified by the UTSA, is to protect as a trade secret any valuable information so long as the information is capable of adding economic value to the owner. The requirement that the information not be generally known follows from the label trade "secret." The requirement is meant to ensure that no one claims intellectual property protection for information commonly known in a trade or industry.

The second element is that the holder of the trade secret took *reasonable precautions under the circumstances* to prevent its disclosure. Courts have varied in their rationale for this requirement. Some view it as evidence that the trade secret is valuable enough to bother litigating; others reason that where the plaintiff has taken reasonable precautions, the defendant likely acquired the trade secret wrongfully. Whatever the justification, it is clear that no one may let information about products and operations flow freely to competitors at one time and then later claim that competitors have wrongfully acquired valuable trade secrets. To establish the right, one must be diligent in protecting information. As always, however, the presence of the term "reasonable" ensures close cases and difficult line-drawing for courts, a theme reflected in several of the cases that follow.

Finally, a trade secret plaintiff must prove that the defendant acquired the information wrongfully—in a word, that the defendant *misappropriated* the trade secret. Just because a person's information is valuable does not make it wrong for another to use it or disclose it. But use or disclosure is wrongful when the information is acquired through deception, skullduggery, or outright theft. Close cases abound because of competitors' ingenuity in rooting out information about their rivals' businesses and products.

Most trade secret cases arise not from skullduggery by outsiders but from breach of an obligation to the trade secret holder not to disclose or appropriate the trade secret. Such an obligation can arise by *express contract or an implied duty*. Even in the absence of an express contract, most employees are held to have a duty to protect their employers' interests in their secret practices and information. Even where the duty arises by explicit contract, however, public policy limitations on the scope and duration of the agreement will often come into play, in some cases resulting in substantial judicial modification of the explicit obligations laid out in the contract.

The DEFEND TRADE SECRETS ACT OF 2016 added an important limitation on trade secret protection: an express immunity from suit for whistleblowers, employees and contractors who disclose suspected illegal activity to the government and their attorney confidentially. *See* 18 U.S.C. §1833(b). This limitation on trade secret protection promotes the social interest in rooting out and deterring corporate fraud and other forms of illegal activity.

The United States pioneered modern trade secret law, and other countries have followed suit. The EU Trade Secrets Directive, for instance, largely tracks the UTSA

definitions of secrecy, reasonable efforts, and misappropriation. See Council Directive 2016/943, art. 2–5, 2016 O.J. (L 157/1) 1 (EC).

B. SUBJECT MATTER

1. Defining Trade Secrets

Mallet and Company Inc. v. Lacayo
United States Court of Appeals for the Third Circuit
16 F.4th 364 (3d Cir. 2021)

JORDAN, CIRCUIT JUDGE.

Behind the breads, cakes, and other treats on our grocery store shelves, there is a ferociously competitive market for baking supplies, and that is the setting for this trade secret and unfair competition case.

In 2019, Mallet and Company Inc. ("Mallet") learned that Russell T. Bundy Associates, Inc., doing business as Bundy Baking Solutions ("Bundy"), was becoming its newest competitor in the sale of baking release agents. Release agents are lubricants that allow baked goods to readily separate from the containers in which they are made. Bundy was already well-known for other products it offered to the commercial baking industry when it decided to launch a new subsidiary, Synova LLC ("Synova"), to sell baking release agents. Synova hired two of Mallet's employees, both of whom had substantial access to Mallet's proprietary information. Taking some of that information with them from Mallet to Synova, they helped Synova rapidly develop, market, and sell release ag ents to Mallet's customers. Mallet sued, saying such progress would have taken years to accomplish but for the misappropriation of its trade secrets. Agreeing with Mallet, the District Court issued the preliminary injunction now challenged on appeal, restraining Bundy, Synova, and those employees (collectively, "the Defendants") from competing with Mallet.

While we appreciate the challenges inherent in disputes involving trade secrets and requests for preliminary relief, the injunction at issue is flawed and must be vacated. For the reasons that follow, we will remand for further consideration of what, if any, equitable relief is warranted . . .

I. BACKGROUND

A. Factual Background

1. Mallet and the Defendant Employees

For over eighty years, Mallet has been in the business of developing, manufacturing, and selling baking release agents as well as the equipment used to apply such agents. Release agents are applied to commercial baking pans to ensure the consistent release of baked goods over hundreds of uses. They thus play a crucial role in large-scale baking operations. While the ingredients used to create them—mineral oils, vegetable oils, and lecithin—are commonly known, developing a successful release agent is not as simple as knowing a few of its components. There are "a wide range of factors that have to be considered when formulating a release agent," including product performance, stability,

application, cost, availability, and packaging. And the efficacy of a release agent can greatly depend on the customer's product, pan condition, storage conditions, and machinery used to apply the agent. As a result, there are different kinds of release agents, each with unique properties that may be further tailored to maximize performance when used in the production of certain goods. Still, competitors in the release agent market often manufacture and sell identical or similar products.

. . . Prior to 2018, [Mallet] manufactured about fifty different release agents, including its "Vegalube Super P" ("Super P"), which it calls "the premier and best-performing baking release agent product in the market." Mallet contends that it has "take[n] substantial time, research, and effort" to formulate and perfect its release agents, including Super P. After developing a product in the laboratory, additional work is needed to bring that product to scale and optimize its performance at a customer's facility. . . . To safeguard that competitive advantage, Mallet has put in place several measures to protect its information, including nondisclosure and noncompetition agreements with its employees, restricted access to its lab and formulas, and password protection for its computer network.

Along with its release agent "formulas and [the] processes used to make them[,]" Mallet considers the following information to be its "confidential, proprietary, trade secret information":

specific products sold to customers or purchased from suppliers; all information pertaining to Mallet's business with its customers and its suppliers; Mallet's sales data and cost data; the body of knowledge about the development, production, and application of Mallet's release agents and equipment, including the tailoring of release agents and equipment for specific customer challenges; information about the internal business affairs of any customers, suppliers, distributors, agents and contractors doing business with Mallet; pricing information; strategies; marketing information; and exclusive relationships with certain suppliers of release agent ingredients.

Mallet's Proposed Findings of Fact. According to Mallet, "the trade secret in question here is the overall body of knowledge that connects . . . the development, production, application and implementation of the release agent . . . coupled with Mallet's proprietary equipment, which go hand in hand with [a] formulated solution."

As sweeping as that statement is, Mallet does recognize some limits on what it can claim as a trade secret. For example, it does not consider its "product data sheets" to be trade secret information, since those specification sheets are "produced and provided to consumers of its products[.]" It also agrees that some ingredients in baking release agents . . . have been common knowledge in the industry for more than thirty years, and that the components for release agents are published in product data sheets, articles, and company websites, and are therefore public knowledge, though the precise ratios and processes for combining them are not. . . .

Mallet further recognizes that its own patents disclose "various formulas for the creation of the lubricants[,]" ""examples of blends and blend ratios[,]" and a "series of different formulated release agents[.]" Those patents publicize some properties of each

formulated release agent "based on various tests that Mallet . . . had conducted," including "viscosity, stability, texture and other releasing characteristics." While seeming to concede that information in patents cannot—at least by itself—constitute trade secrets, Mallet . . . distinguishes the "particular formulation[s]" that its patents cover from the "know-how" that Mallet has developed over its eighty-year presence in the marketplace and that it continues to utilize on an ongoing basis for the "formulation, application[,] and implementation of [its] release agents for customers." According to Mallet, that know-how is a trade secret. And two of its former employees, Ada Lacayo and William Bowers, had substantial access to it.

a. Lacayo's Employment with Mallet

[Lacayo worked at Mallet for 20 years] Lacayo's job responsibilities spanned all aspects of Mallet's release agent business, from product development and quality control to customer-specific applications and technical support. Through her director positions, she obtained extensive access to Mallet's technical information. That information allowed her to analyze ingredient interactions, create over two dozen new product formulas and processing methods, and perform "economic justifications and case studies to substantiate improvements." In addition, Lacayo played a key role in quality control, running onsite tests for customers, troubleshooting issues, and recommending changes to improve product performance. Along with educating individual customers, Lacayo promoted Mallet's products, solutions, and machinery more generally. She "wrote and designed manuals, instructional programs, marketing materials, [and] presentations," which she "delivered . . . to diverse audiences in English and Spanish." She also participated in trade shows, "[m]anaged the Latin American machinery and product introduction program," and "[c]onducted seminars on product lines." . . . And as a result of her extensive exposure to all sides of Mallet's business and the "know-how [she] gleaned from Mallet over decades[,]" she was widely known by "the customer base of the baking industry[.]" . . .

2. Bundy, Synova, and the Baking Release Agent Industry

. . . Synova was formally "created on April 27, 2017 and launched on May 15, 2019 to manufacture and distribute external baking release agents and oils." Between its creation and its launch, Synova's President, Robert A. Bundy, was "engaged in business development[,] ... looking for as much information on as many topics as [he] could get" on the baking release agent industry. Along the way, he sought information from and recruited Lacayo and Bowers. . . .

Although Lacayo secretly interviewed and accepted a position with Synova on January 22, 2018, she remained employed with Mallet until February 12, 2018. When she did finally announce that she was leaving Mallet, Lacayo concealed her employment with Synova and informed Mallet that she was instead leaving to take care of her mother.

Just three days before her interview with Synova, on January 19, 2018, Lacayo copied 1,748 files onto a USB drive. Those "bulk copied files were stored across four main (root) folders" titled: "Mallet Lab Methods, MRO Project, Supplier Approval Program, and Supplier Information." She also emailed information, including

screenshots of two formulas, from Mallet's files to her private Gmail account. On February 28, 2018, when she was no longer employed with Mallet, Lacayo emailed to herself a spreadsheet with technical data from Mallet's research. . . .

During discovery in this case, "over 1,000 documents" containing "metadata associated with Mallet" were found on Lacayo's Synova computer, with 649 of those documents having "a Mallet logo ... [branded] on the face of the document." Digital forensic evidence indicates that Lacayo not only copied those documents but also used them, including a Mallet release agent formula and associated pricing information, while working for Synova.

The purloined documents, however, are not the whole of the problem Mallet has with Lacayo. It says that "the value she brings [to a competitor] goes far beyond any particular formula she may have provided" or any documents she may have stolen. "It's really the know-how that she brings" to Synova that Mallet says it is worried about. After "work[ing] for Mallet for" so long, Lacayo "has quite a lot of know-how that went with her to the Bundy organization[,]" including information about "the formulation, application and implementation of release agent" products that Mallet had "developed over the course of its 80 years." And that know-how, it says, "would be impossible to erase from her mind."

In January 2018, Synova was in the earliest stages of its existence, and while "[t]he development of the release agents had already begun," it had not completed a final product. Synova had "identified the archetypes of ingredients that would be required and broadly [knew] the ratios of those ingredients." But it was still in the research and development process and had not yet conducted "any internal product testing on a release agent." As Mr. Bundy explained, "that was part of the reason to hire someone with a good science background[,]" like Lacayo. Less than ten months after joining Synova, Lacayo had formulated a lineup of release agents, which Synova marketed as direct replacements for Mallet's release agents. Indeed, in internal correspondence it explicitly described its new formulas as "Synova=Mallet." Lacayo provided oil blend recipes to Synova, built Synova's processes and programs, and touted her ability to match a Mallet product for a customer. ...

B. Procedural Background

. . . [T]he District Court found that "[a]t least some of the Mallet information in question, possessed by Defendants, satisfies the trade secret definition(s)," including, "among other things, highly sensitive details about how Mallet produces, markets and sells its release agents[.]" The Court listed thirteen categories of Mallet information it deemed "protected materials," as follows:

Mallet's formulas; customer purchase orders demonstrating Mallet's pricing; identification of customers experiencing difficulty with Mallet's products; internal discussions of "actual major problems" at customer locations; internal discussions of how Mallet would address issues with its products; internal discussions of customers' preferences and complaints; Mallet's completed organic certifications; identification of Mallet's supply source for product ingredients; Mallet's internal manuals and

procedures showing how Mallet's lab is operated; pricing and volume data; information about Mallet's equipment; Mallet's training materials showing how Mallet markets and sells its products; and a compilation of Mallet's product specification sheets. . . .

II. DISCUSSION

. . . We fully appreciate the challenges inherent in expedited proceedings. Nevertheless, when an injunction lacks sufficient specificity to permit meaningful appellate review, there needs to be another effort at crafting the contours of the order. Because the District Court did not identify with specificity the information it found to be Mallet's trade secrets, we are not in a position to make an informed decision as to whether Mallet is likely to prevail on its trade secret misappropriation claims. . . .

We will accordingly vacate the injunction order and remand for reconsideration. In doing so, we outline a few matters to be considered when identifying allegedly misappropriated trade secrets. We also discuss the permissible scope of an injunction and the limits of a district court's discretion when determining the associated amount of a bond.

A. A preliminary injunction predicated on trade secret misappropriation must adequately identify the allegedly misappropriated trade secrets.

. . . For a federal trade secret misappropriation claim, [plaintiff must show]: "(1) the existence of a trade secret . . . (2) that 'is related to a product or service used in, or intended for use in, interstate or foreign commerce[,]' and (3) the misappropriation of that trade secret[.]" *Oakwood Labs. LLC v. Thanoo*, 999 F.3d 892, 905 (3d Cir. 2021). And, of course, each of those elements is predicated on an adequate identification of what the plaintiff contends to be its trade secret. See id. ("To plead the existence of a trade secret in a misappropriation claim . . ., [a plaintiff] must sufficiently identify the information it claims as a trade secret[.]").

The Defend Trade Secrets Act ("DTSA") defines a trade secret as information that "the owner thereof has taken reasonable measures to keep . . . secret" and that "derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable through proper means by, another person who can obtain economic value from the disclosure or use of the information[.]" 18 U.S.C. §1893(3). We cannot evaluate whether a plaintiff is likely to succeed on any element of a trade secret misappropriation claim until the plaintiff has sufficiently described those trade secrets. *See Porous Media Corp. v. Midland Brake Inc.*, 187 F.R.D. 598, 600 (D. Minn. 1999) ("Failure to identify the trade secrets with sufficient specificity renders the Court powerless to enforce any trade secret claim."). It follows that a district court's injunction order must first adequately identify the information to which it accords trade secret status. Otherwise, the injunction order lacks the foundation necessary for holding a plaintiff likely to prevail on its misappropriation claim. Without that information, the injunction order fails to comply with Rule 65(d), and it must be vacated.

The District Court determined that "[a]t least some of the Mallet information in question" constitutes protectable trade secrets, "includ[ing], among other things, highly sensitive details about how Mallet produces, markets and sells its release agents[.]"

Absent from the District Court's high-level description, however, are any specifics of what those "highly sensitive details" are. Rather, we are left with a list of thirteen broad categories of Mallet information which the District Court deemed "protected materials":

> Mallet's formulas; customer purchase orders demonstrating Mallet's pricing; identification of customers experiencing difficulty with Mallet's products; internal discussions of "actual major problems" at customer locations; internal discussions of how Mallet would address issues with its products; internal discussions of customers' preferences and complaints; Mallet's completed organic certifications; identification of Mallet's supply source for product ingredients; Mallet's internal manuals and procedures showing how Mallet's lab is operated; pricing and volume data; information about Mallet's equipment; Mallet's training materials showing how Mallet markets and sells its products; and a compilation of Mallet's product specification sheets.

While some information falling within those categories may very well include trade secrets, there is a fair probability that many of the categories—and perhaps all of them—also include information that does not qualify for trade secret protection.

The injunction order's statement of protected material is better characterized as a list of general categories of business and technical information, a list that could be used to describe documents found in any number of corporations. *See A&P Tech., Inc. v. Lariviere*, 2017 WL 6606961, at *10 (S.D. Ohio Dec. 27, 2017) ("Terms such as 'engineering,' 'research and development procedures and materials,' and 'marketing materials' could be applied to almost any corporation in existence, and do not in any way allow Defendants to properly craft a defense around the alleged misappropriation of trade secrets."). The generic list thus falters against the standard for specifying a trade secret. At a minimum, "the subject matter of the trade secret must be described 'with sufficient particularity to separate it from matters of general knowledge in the trade or of special knowledge of those persons who are skilled in the trade, and to permit the defendant to ascertain at least the boundaries within which the secret lies.'" *Oakwood*, 999 F.3d at 906) (*quoting Diodes, Inc. v. Franzen*, 260 Cal.App.2d 244, 67 Cal.Rptr. 19, 24 (1968) (describing the minimum specificity threshold to survive a motion to dismiss). That is especially the case where, as here, the record suggests that those boundaries may not be particularly clear.[23]

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[23] Mallet contends that its trade secrets are adequately identified because of the following series of steps: (1) the District Court's order granting an injunction was based on the Court's Findings of Fact, Conclusions of Law & Order deciding a preliminary injunction was warranted; (2) the Court's Finding of Fact ¶8—stating that "Lacayo had access to, and was intimately familiar with, Mallet's protectable information."; (3) those seventeen paragraphs in Mallet's Proposed Findings of Fact—the contents of which summarized broadly that Lacayo had access to and knowledge of trade secret information; (4) all of those exhibits are declarations and excerpts of deposition testimony that themselves attach exhibits; and (5) somewhere in there are trade secrets. At oral argument, Mallet cited a range of documents as proof that it had specified its trade secrets. Circumstances such as access to trade secrets, unusually accelerated or low-cost development of a competing product, and relative lack of prior expertise, may, in combination, establish a likelihood of success on the element of misappropriation, *see Oakwood*, 999 F.3d 908, 911-12.

For example, Mallet recognizes that its own patents publicly disclose some of its formulas, but it appears to contend that even formulas thus publicly disclosed are part of its trade secrets. (*See* Mallet Depo.) ("What I am saying is while these formulations were developed here, it doesn't necessarily mean that the exact formula in one of these [patent] tables is at question as a trade secret. These are examples only. They form a part of the examples of the patent. . . . *They are part of a trade secret*.") (emphasis added).) If that is really its position—and it is hard for us to tell—then it is hard to take entirely seriously. A formula disclosed in a patent is, by definition, not a secret. Nevertheless, "[w]hile the precise information provided within or directly ascertainable from a patent cannot constitute a trade secret, patent holders are not necessarily precluded from cultivating trade secrets that go beyond the corpus of the patent or that refine the patent's process in some proprietary way." *AutoTrakk, LLC v. Auto. Leasing Specialists, Inc.*, 2017 WL 2936730, at *5 (M.D. Pa. July 10, 2017). Problematically, though, Mallet fails to explain how we or anyone else is to distinguish between what is generally known or available information and what it contends to be protectable trade secrets. With a wave of the hand, it declares everything to be secret know-how. (*See* Mallet Depo. ("The issue at hand is not so much that the formula might be the same or different. What is at hand is that the know-how that Ms. Lacayo took from Mallet, and is applying within Bundy, is all about delivering the performance, the quality, and those other factors I mentioned to the customer to provide them the solution. That know-how was developed by Mallet over 80 years.").)

When the breadth of a trade secret description is so far-reaching that it includes publicly available information (like patent disclosures) and admitted industry knowledge, that information is not specific enough to be accorded trade secret status. *DeRubeis v. Witten Techs., Inc.*, 244 F.R.D. 676, 689 (N.D. Ga. 2007) ("If the list is too general, it will encompass material that the defendant will be able to show cannot be trade secret." While we recognize the difficulty inherent in articulating what trade secrets Lacayo and Bowers may have misappropriated—and it certainly appears they took things that may qualify as trade secrets—"care must [still] be taken to not allow a plaintiff in a trade secret misappropriation case to make generalized claims that leave a defendant wondering what the secrets at issue might be[.]" *Oakwood*, 999 F.3d at 907.

The District Court, in effect, recapitulated Mallet's own broadly stated categories of information. . . . But, like Mallet, it did not identify which formulas it referred to, nor did it describe any characteristics or properties contributing specific competitive value to Mallet that could serve as a marker for separating Mallet's formulas from publicly available information or generally known formulas in the industry. The District Court also concluded that "pricing and volume data" and "Mallet's training materials showing how [it] markets and sells its products" are trade secrets. But those trade secret descriptions fare no better than Mallet's assertion that "pricing information[,]

strategies[, and] marketing information" are trade secrets. Specific examples are needed and, if provided, could very well suffice to support injunctive relief.[25]

. . . [I]t is first and foremost the plaintiff's burden to specifically identify what it contends to be its trade secrets and to demonstrate with record evidence a "significantly better than negligible" chance, of establishing the existence of those trade secrets. If a plaintiff fails to meet that burden, the district court faces the same problem we now have on appeal, and a preliminary injunction for trade secret misappropriation ought not issue.

While we are persuaded that some of Mallet's information—such as that contained in its patents—cannot legitimately have the protected status that it may have been afforded by the District Court, we lack the information necessary to decide anything more about what allegedly does have that protected status and Mallet's likelihood of success in establishing misappropriation of that specific information. So, instead, we share two observations for consideration on remand.

First, information will not necessarily be deprived of protection as a trade secret because parts of it are publicly available. A confidential compilation and organization of public information can amount to a trade secret. "Courts have long recognized that 'a trade secret can exist in a combination of characteristics and components, each of which, by itself, is in the public domain, but the unified process, design and operation of which, in unique combination, affords a competitive advantage and is a protectable secret.'" *AirFacts, Inc. v. de Amezaga*, 909 F.3d 84, 96 (4th Cir. 2018) (*quoting Imperial Chem. Indus. v. Nat'l Distillers & Chem. Corp.*, 342 F.2d 737, 742 (2d Cir. 1965)). Similarly, "[w]hile the precise information provided within or directly ascertainable from a patent [or other published document] cannot constitute a trade secret," that does not, as noted earlier, mean that a patentee is "precluded from cultivating trade secrets that go beyond the corpus of the patent or that refine the patent's process in some proprietary way." *AutoTrakk, LLC*, 2017 WL 2936730, at *5.

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[25] Though our decision relies on the District Court's findings of fact, we note that on remand the Court is not bound by its initial findings and should again carefully assess the evidentiary record, weighing all conflicting evidence. We offer two examples of findings that give us pause, at least as presently explained. First, extensive evidence was introduced showing that many of both Mallet's and Synova's products were single ingredient oils, some of which were simply repackaged for sale. Given that, we hesitate to agree with the District Court that the testimony relating to unformulated pure oils is a "red herring" and immaterial to Mallet's right to relief. As of December 7, 2020, repackaged mineral oils constituted approximately half of Synova's Supra and Primo series. Further, we wonder whether a single naturally occurring ingredient can be repackaged as a product and then be considered a formula warranting trade secret protection, but we leave that for consideration in the first instance on remand.

Second, the Court found that "Mallet's evidence establishes that the formulation of its relevant products takes substantial time, sometime years" and that "Lacayo's testimony, to the effect that formulating such products is 'very easy,' was not credible." But those findings make no mention of other evidence that supported Lacayo's claim about the ease of developing some formulas. Two other witnesses—including Mallet's own witness, Roja Ergun—acknowledged that some basic release agents were in fact easy to make. . . . Further insight into the District Court's weighing of such conflicting evidence will assist us in providing meaningful appellate review.

Second, an employee's general know-how should be distinguished from the particular secrets held by an employer. In other words, while an employee's general knowhow does not constitute trade secret information, employers remain free to identify and protect their particular proprietary information. Admittedly, the line distinguishing between the two—an employee's general knowledge or skill and an employer's protectable trade secrets—may often be difficult to draw. Thus, in exercising its equitable discretion, a district court need not draw the line with precision, but the plaintiff has to provide something better than sweeping generalities for the court to work with. It is the trade secret owner that bears the burden of demonstrating its claimed secrets are protectable and are not general industry knowledge. Just how much specificity a court should require of the plaintiff-owner is again a context-specific matter. We cannot provide a bright-line rule. The best we can do is say that Mallet's very general description of categories does not "sufficiently identify the information it claims as a trade secret," *Oakwood*, 999 F.3d at 905, and thus does not suffice to justify the sweeping injunction the District Court issued. . . .

COMMENTS AND QUESTIONS

1. *The Often Fuzzy Line between General Skill and Trade Secrets*. Trade secret law aims to protect valuable information while at the same time not interfering with labor mobility and robust competition. Unlike patents, trade secrets are not reduced to claims filed with a public authority. Furthermore, plaintiffs generally do not provide detailed identification of trade secrets in the complaint so as to avoid disclosure. They typically toe the FED. R. CIV. P. 8(a) notice-pleading standard, subject to the dictates of *Bell Atl. Corp. v. Twombly*, 550 U.S. 544 (2007), and *Ashcroft v. Iqbal*, 556 U.S. 662 (2009). How might Mallet have better identified its trade secrets to sustain the preliminary injunction? What risks would it have faced by providing greater specificity? Was the plaintiff's problem in Mallet just a failure to specify the secrets? Or is the claim that all its formulas and business know-how are trade secrets a sign that it can't identify secrets that meet the standards of the DTSA?

2. *Identification of Trade Secrets*. The lack of clearly defined trade secret boundaries in advance of a misappropriation action "raises the possibility that the trade secret owner will tailor the scope of the trade secret in litigation to conform to the litigation strategy." *TLS Mgmt & Mktng Serv. v. Rodríguez-Toledo*, 966 F.3d 46, 52 (1st Cir. 2020). To address the notice problem of amorphous, overbroad, and shifting trade secret misappropriation allegations, some states require trade secret plaintiffs to identify the secrets in question with specificity as part of the early case management. See, e.g., CAL. CODE CIV. PRO. §2019.210 (requiring "the party alleging the misappropriation [to] identify the trade secret with reasonable particularity"); *SL Montevideo Tech., Inc. v. Eaton Aerospace, LLC*, 491 F.3d 350, 354 (8th Cir. 2007) (observing that "[s]imply to assert that a trade secret resides in some combination of otherwise known data is not sufficient, as the combination itself must be delineated with some particularity in establishing its trade secret status"). As the DTSA has taken hold, federal courts have increasingly pushed plaintiffs to identify the trade secrets at issue through an early pretrial disclosure process. See Quintara Biosciences v. Ruifeng Biztech, 2021 WL

2166880 (N.D. Cal. May 27, 2021) (requiring the trade secret claimants in a DTSA case to submit a statement identifying the particular trade secrets at issue; *see generally* PETER S. MENELL, ET. AL., TRADE SECRET CASE MANAGEMENT JUDICIAL GUIDE ch. 4 (2023). This distinctive augmentation of civil procedure is often intertwined with the scheduling of discovery. Courts have cautioned, however, that "identifying a trade secret is not intended to be a mini-trial on the merits but is instead a preliminary step before reaching the merits." *Brescia v. Angelin*, 172 Cal.App.4th 135, 144 (Cal. Ct. App. 2009).

3. *Secrecy*. While information must not be generally known or readily ascertainable in order to be a secret, the plaintiff can still disclose the secret for business purposes. As one court put it:

> Although the law requires secrecy, it need not be absolute. Public revelation would, of course, dispel all secrecy, but the holder of a secret need not remain totally silent:
>
> > He may, without losing his protection, communicate to employees involved in its use. He may likewise communicate it to others pledged to secrecy. . . . Nevertheless, a substantial element of secrecy must exist, so that except by the use of improper means, there would be difficulty in acquiring the information.
>
> RESTATEMENT OF TORTS, §757 Comment b (1939). We conclude that a holder may divulge his information to a limited extent without destroying its status as a trade secret. To hold otherwise would greatly limit the holder's ability to profit from his secret. If disclosure to others is made to further the holder's economic interests, it should, in appropriate circumstances, be considered a limited disclosure that does not destroy the requisite secrecy. The only question is whether we are dealing with a limited disclosure here. . . .
>
> Looking . . . to the policy considerations involved, we glean two reasons why Metallurgical's disclosures to others are limited and therefore insufficient to extinguish the secrecy Metallurgical's other evidence has suggested. First, the disclosures were not public announcements [such as disclosures in an issued patent]; rather, Metallurgical divulged its information to only two businesses with whom it was dealing. . . . Second, the disclosures were made to further Metallurgical's economic interests. Disclosure to Consarc was made with the hope that Consarc could build the second furnace. A long-standing agreement gave La Floridienne the right, as a licensee, to the information in exchange for royaltypayments. Metallurgical therefore revealed its discoveries as part of business transactions by which it expected to profit.

Metallurgical Indus. v Fourtek, 790 F.2d 1195, 1200 (5th Cir. 1986). Should the fact that neither Consarc or Floridienne signed NDAs doom Metallurgical's trade secret misappropriation lawsuit against Fourtek, a consultant who had signed an NDA? What if Metallurgical had sold the furnace technology to the general public? *Cf. Turret Labs v. CargoSprint, LLC*, 2022 WL 701161 (2d Cir. Mar. 9, 2022) (holding that the failure

to obtain a confidentiality agreement from business partners showed that the plaintiff did not take reasonable efforts to protect its secrets).

4. *Compilations of Unprotectable Information*. The categories of information eligible for protection as trade secrets are expansive. As Mallet makes clear, they include secret combinations of items which by themselves can be publicly known. They also include both scientific and technical information and business information, such as customer lists and business plans. As we will see throughout our study of IP law, the protection of compilations of elements that are themselves unprotectable is a major theme.

Courts have frequently held certain basic ideas or concepts incapable of protection as secrets because they were too well known to derive value from secrecy. *See Buffets, Inc. v. Klinke*, 73 F.3d 765 (9th Cir. 1996) (holding that the plaintiff could not claim its relatively straightforward recipes for barbecued chicken and macaroni and cheese as trade secrets); *Bimbo Bakeries USA v. Sycamore*, 39 F.4th 1250, 1259–64 (3d Cir. 2022) (finding bread recipe unprotectable because the individual elements were sufficiently obvious); *but cf. Camp Creek Hospitality Inns v. Sheraton Franchise Corp.*, 139 F.3d 1396 (11th Cir. 1997) (holding that a hotel could protect information about its prices, discounts, and occupancy levels as a trade secret where it was closely guarded information in the industry); *Nextdoor.com, Inc. v. Abhyanker*, 2013 WL 3802526 (N.D. Cal. July 19, 2013) (finding that the decision to test a new neighborhood-oriented social network in a particular neighborhood could be a trade secret where the plaintiff did substantial investigation to select the most appropriate neighborhood to launch the network).

5. *Novelty*. Courts have made it clear that trade secrets need not be entirely new to receive trade secret protection. The idea may have occurred to someone before; it may even be in use by another. But if it is *not generally known or readily ascertainable* to the competitors in an industry, it may still qualify for trade secret protection. One widely cited decision described the standard for protectable ideas as follows:

> [U]niqueness in the patent law sense is not an essential element of a trade secret, for the patent laws are designed to encourage invention, whereas trade secret law is designed to protect against a breach of faith. However, the trade secret must "possess at least that modicum of originality which will separate it from everyday knowledge." Cataphote Corporation v. Hudson, 444 F.2d 1313, 1315 (5th Cir. 1971). As stated in an authoritative treatise on this subject:
>
> > As distinguished from a patent, a trade secret need not be essentially new, novel or unique; therefore, prior art is a less effective defense in a trade secret case than it is in a patent infringement case. The idea need not be complicated; it may be intrinsically simple and nevertheless qualify as a secret, unless it is in common knowledge and, therefore, within the public domain.
>
> 2 CALLMAN, UNFAIR COMPETITION, TRADEMARKS AND MONOPOLIES §52.1 (3d ed. 1968).

Forest Laboratories v. The Pillsbury Co., 425 F.2d 621, 624 (7th Cir. 1971). Some courts have gone even further, suggesting that "[a] trade secret may be no more than 'merely a mechanical improvement that a good mechanic can make.'" *SI Handling Systems, Inc. v. Heisley*, 753 F.2d 1244, 1256 (3d Cir. 1985). And information may not be generally known or even readily ascertainable to people in one industry even if it is wellknown in a completely different field. *See Masimo v. True Wearables*, 2022 WL 205485 (Fed. Cir. Jan. 24, 2022). By contrast, "[i]nformation in published patents or patent applications is readily ascertainable by proper means." *Olaplex Inc. v. L'Oreal USA*, 855 F. Appx. 701 (Fed. Cir. 2021).

Why not require novelty in order to protect a trade secret? That is, why should the law protect the "secrecy" of a piece of information if others have already discovered it?

6. Why should we bother to protect secrets that were stumbled upon with little or no investment in research but that happen to have "value"? Does the economic rationale for intellectual property suggest that such secrets will be underproduced absent protection?

7. Why is secrecy required at all? Trade secrets are not misappropriated unless information is taken by improper means or from a confidential relationship. Why aren't those tortious elements enough? It is certainly possible to envision a "misappropriation" tort that punishes diversion of information, whether or not it is secret. Indeed, some cases discussed in Chapter VI(B) and VI(C) have created just such a common law tort.

One possible objection to such a scheme is that it would chill the legitimate acquisition of information from competitors. But the only information protected by a misappropriation tort that is not also protected by trade secret law is public information. Since it is publicly available, the need for competitors to acquire it directly from another company or through dubious means is presumably low.[4]

But there may be a gray area between "secret" information and "public" information. If three large companies all use the same process but guard it closely, is it a secret? If a company guards a process closely as a secret, but an account of the process is available in an obscure published source, does the company have a protectable trade secret?

8. *Known vs. Knowable*. Does it matter how obscure the published source is if the defendant in fact obtains the information from the plaintiff rather than going to the publicly available source? What theory of trade secrets would support a finding of liability in such a case?

Many courts following the RESTATEMENT OF TORTS took the position that if the defendant in fact obtained the information from the plaintiff, then it must be a trade

[4] Another reason for limiting common law protection to secret information may be concern over preemption of state common law by the federal intellectual property laws. Federal courts have generally held that state laws that create property rights in public information are preempted by the patent and copyright laws. There are two rationales for such preemption. First, federal laws reflect a judgment that unpatentable inventions ought to belong to the public. Second, preemption "channels" inventions into one or another form of protection. We focus on federal preemption in in Chapters II(H), III(K), and VI(A).

secret. Thus, in *Rohm & Haas Co. v. Adco Chemical Co.*, 689 F.2d 424 (3d Cir. 1982), defendant Harvey was a former Rohm & Haas employee who was hired by Adco to duplicate a process for producing "paint delivery vehicles," the chemicals added to paint that allow it to be applied to surfaces easily. There seems no question in the case that Harvey did, in fact, memorize the plaintiff's formula and take it to Adco. In their defense, the defendants offered evidence that a series of prior publications had, in fact, disclosed Rohm & Haas's process. The court nonetheless concluded that it was a protectable trade secret, in part because the defendants did not in fact obtain the information from those publications.

This view gives broad scope to trade secret protection, because it allows a plaintiff to protect information that could have been acquired properly but in fact was not. It also underscores the unfair competition rationale for trade secret protection—the problem is not that the defendant acquired the information, but the way in which the defendant acquired it.

In a significant break with the RESTATEMENT OF TORTS rule, the UTSA provides that information is not a trade secret if it is "generally known" or "readily ascertainable by proper means." (California, by contrast, treats ready ascertainability as a defense, not part of the plaintiff's case. *See* CAL. CIV. CODE § 3426.1(d)(1); *ABBA Rubber Co. v. Seaquist*, 286 Cal.Rptr. 518 (Ct. App. 1991). Under this view, once a secret is readily available through public sources, it loses all trade secret protection. At this point, the defendant is free to obtain the information from the public source or from the plaintiff herself. See RESTATEMENT (THIRD) OF UNFAIR COMPETITION §39, *Comment f*, at 433 ("When the information is readily ascertainable from such [public] sources, however, actual resort to the public domain is a formality that should not determine liability.").

Even jurisdictions that follow the RESTATEMENT OF TORTS view place limit what can qualify for trade secret protection. If information is generally known to the public, or even within a specialized industry, it does not qualify for protection. No company can claim that "$E=mc^2$" is a trade secret, for example, even if it keeps the formula under lock and key, and even if the defendant steals it from the company rather than obtaining it elsewhere. *See, e.g., Spring Indus. v. Nicolozakes*, 58 U.S.P.Q.2d 1794 (Ohio Ct. App. 2000) (information on gravel mining not a trade secret despite efforts to keep it confidential). We consider the rather different issue of whether two parties could agree to treat the formula as a secret in Section D.

9. Mallet offered strong evidence that the defendants surreptitiously absconded with much of the knowledge that Mallet developed over decades of building its business, yet its failure to specifically identify the trade secrets barred effective relief. Is that result unfair? Are some trade secrets too broad and amorphous to garner effective protection? Does the court's concern for free competition justify its complete overturning of the preliminary injunction? Would Mallet have been better served by seeking an early trial on the merits rather than pursuing preliminary relief?

PROBLEMS

Problem II-1. Company X possesses a valuable piece of information about the process for making its product. That information is not known at all outside company X. Suppose X discloses the information to two companies, A and B. A receives the information in confidence, and subject to a written agreement that it will not use or disclose the information outside the bounds of the relationship. B receives the information without any restrictions whatever on its use. Does X have a protectable trade secret that it can assert against A? Against B? Against C, who steals the information from X's computer network?

Does your answer change if X, A, B, and C are the only companies in the industry?

Problem II-2. StartUp, Inc., is the only participant in a new market. The market is based on a product for which StartUp has a non-exclusive license from the inventor; that is, StartUp cannot prevent others from obtaining a similar license. Nonetheless, StartUp has exhaustively researched the demand for the product, has concluded that a market exists, and has worked to stimulate demand. As a result, it has both "made" a market for the product and developed a comprehensive list of customers.

Thaddeus, a sales representative for StartUp, leaves to found his own company. He gets a license to make the product from its inventor. He takes with him from StartUp the customer list he worked with as an employee, his personal knowledge of and contacts with specific customers, and StartUp's knowledge of the market. StartUp sues Thaddeus for misappropriation of trade secrets. What result?

Problem II-3. Research Co. is a major pharmaceutical company working on a cure for certain types of cancer. Derek is a molecular biologist employed by Research. After several years on the job, Derek leaves Research for Conglomerate, Inc., another pharmaceutical company, which has decided to work on the same cancer cure. At the time Derek leaves, Research has not been successful in finding a cancer cure. However, as a result of his work at Research, Derek is able to help Conglomerate avoid several unproductive avenues of research. Aided in part by this knowledge, Conglomerate (using scientists other than Derek) develops a cancer cure before Research. Research sues Conglomerate, alleging misappropriation of trade secrets. Does Research have a case?

Problem II-4. The Church of True Belief is a religious group founded around a set of closely guarded scriptural materials supposedly handed down to Church's elders from Church's deity. After a bitter theological dispute, a group of adherents leaves the church to form the House of Absolute Belief. They take with them a copy of Church's confidential scriptures, which they rely on in gaining adherents and founding the new House. Church sues House for misappropriation of trade secrets.

At trial, the issue is whether the scriptures qualify as a trade secret. The evidence indicates that the scriptures had never before been removed from the confines of Church, that both Church and House are tax-exempt nonprofit organizations which rely on

donations for their funding, and that Church (but not House) rations access to the scriptures in proportion to the size of an adherent's donation.

Can the scriptures qualify as a trade secret? Does your answer depend on whether the governing law is the UTSA, the RESTATEMENT OF TORTS, or the RESTATEMENT (THIRD) OF UNFAIR COMPETITION?

Problem II-5. Pear Computer Corporation, known for its obsessive secrecy, password protects all its files. Can the password itself be a trade secret? Does it matter whether the UTSA or the Restatement applies?

2. Reasonable Efforts to Maintain Secrecy

Besides the existence of a trade secret, plaintiffs must show under the Uniform Act that they have taken "reasonable measures" to protect the secrecy of their idea. Certainly, a plaintiff cannot publicly disclose the secret and still expect to protect it. But precautions must go further than that. Generally, they must include certain efforts to prevent theft or use of the idea by former employees.

Rockwell Graphic Systems, Inc. v. DEV Industries, Inc.
United States Court of Appeals for the Seventh Circuit
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. . . .

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 purchaser 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 pretrial 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 assembly drawings. . . . 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.

. . . 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 unsuccessful 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. 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. 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 efforts 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 . . .

[T]he 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.

. . . 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. 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. . . .

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). 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. 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. . . .

Reversed and remanded.

COMMENTS AND QUESTIONS

1. Contrast *Rockwell* with the Minnesota Supreme Court's decision in *Electro-Craft Corp. v. Controlled Motion, Inc.*, 332 N.W.2d 890 (Minn. 1983), a case that also involved information taken by former employees and used in starting a competing company. The court found that the information the employees took was not generally known or readily ascertainable in the industry. However, it found that the information did not constitute a trade secret:

> (c) Reasonable efforts to maintain secrecy. It is this element upon which [plaintiff Electro-Craft Corp., or "ECC"]'s claim founders. The district court found that, even though ECC had no "meaningful security provisions," ECC showed an intention to keep its data and processes secret. This finding does not bear upon the statutory requirement that ECC use "efforts that are reasonable under the circumstances to maintain . . . secrecy." Minn. Stat. §325C.01, subd. 5(ii). . . . [E]ven under the common law, more than an "intention" was required—the plaintiff was required to show that it had manifested that intention by making some effort to keep the information secret.
>
> This element of trade secret law does not require maintenance of absolute secrecy; only partial or qualified secrecy has been required under the common law. What is actually required is conduct which will allow a court acting in equity to enforce plaintiff's rights. . . .
>
> In the present case, even viewing the evidence most favorably to the findings below, we hold that ECC did not meet its burden of proving that it used reasonable efforts to maintain secrecy as to [the subject matter of the suit, a product called the ECC 1125]. We acknowledge that ECC took minimal precautions in screening its Handbook and publications for confidential information and by requiring some of its employees to sign a confidentiality agreement, but these were not enough.
>
> First, ECC's physical security measures did not demonstrate any effort to maintain secrecy. By "security" we mean the protection of information from discovery by outsiders. Security was lax in this case. For example, the main plant had a few guarded entrances, but seven unlocked entrances existed without signs warning of limited access. Employees were at one time required to wear badges, but that system was abandoned by the time of the events giving rise to this case. The same was generally true of the Amery, Wisconsin plant

where ECC 1125 and brushless motors were manufactured. One sign was posted at each plant, however, marking the research and development lab at Hopkins and the machine shop at Amery as restricted to "authorized personnel." Discarded drawings and plans for motors were simply thrown away, not destroyed. Documents such as motor drawings were not kept in a central or locked location, although some design notebooks were kept locked.

The relaxed security by itself, however, does not preclude a finding of reasonable efforts by ECC to maintain secrecy. Other evidence did not indicate that industrial espionage is a major problem in the servo motor industry. Therefore, "security" measures may not have been needed, and the trial court could have found trade secrets if ECC had taken other reasonable measures to preserve secrecy.

However, ECC's "confidentiality" procedures were also fatally lax, and the district court was clearly in error in finding ECC's efforts to be reasonable. By "confidentiality" in this case we mean the procedures by which the employer signals to its employees and to others that certain information is secret and should not be disclosed. Confidentiality was important in this case, for testimony demonstrated that employees in the servo motor business frequently leave their employers in order to produce similar or identical devices for new employers. ECC has hired many employees from other corporations manufacturing similar products.[16] If ECC wanted to prevent its employees from doing the same thing, it had an obligation to inform its employees that certain information was secret.

ECC's efforts were especially inadequate because of the non-intuitive nature of ECC's claimed secrets here. The dimensions, etc., of ECC's motors are not trade secrets in as obvious a way as a "secret formula" might be. ECC should have let its employees know in no uncertain terms that those features were secret.

Instead, ECC treated its information as if it were not secret. None of its technical documents were marked "Confidential," and drawings, dimensions and parts were sent to customers and vendors without special marking. Employee access to documents was not restricted. ECC never issued a policy statement outlining what it considered secret. Many informal tours were given to vendors and customers without warnings as to confidential information. Further, two plants each had an "open house" at which the public was invited to observe manufacturing processes. . . .

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[16] One ECC employee actually prided himself on the information he had brought with him from his former employer. One day, just before that employee left ECC to join another company, the president of ECC found him copying documents after hours. ECC never questioned the employee or warned him or his new employer that certain information was confidential.

> In summary, ECC has not met its burden of proof in establishing the existence of any trade secrets. The evidence does not show that ECC was ever consistent in treating the information here as secret.

Given that the information in question was not in fact known at all outside ECC, why shouldn't ECC be able to prevent its employees from using the information they acquired there? Should the laxity of ECC's precautions matter if no one other than the defendants, in fact, took advantage of it?

2. There is an intuitive relationship between the existence of a secret and reasonable efforts to protect a secret. After all, if something is not a secret, there would not seem to be any point to protecting it. And the fact that an idea is well protected may be evidence that it is, in fact, a secret. Nonetheless, the requirements are conceptually distinct. Information in the public domain cannot be turned into a secret merely by treating it as a secret. This distinction is made clear in the UTSA, which defines a trade secret as information that is both "not generally known" *and* the subject of reasonable efforts to maintain secrecy. UTSA §1(4).

Consider whether the opinion in *Rockwell* conflates these two into a single requirement. The court seems to emphasize the evidentiary significance of the precautions Rockwell took in proving misappropriation. Since it was clear (to the court, at least) that the DEV employees did, in fact, take the information from Rockwell, the court did not consider the precautions to be that important.

3. In Rockwell, the court apparently assumed that the manufacturer was in a confidential relationship with the subcontractors to which it sent drawings. Is it reasonable to assume that there was an implied confidential relationship in the absence of an express agreement? *Cf. Pauwels v. Deloitte LLP*, 83 F.4th 171, 182-83 (2d Cir. 2023) (finding that oral confidentiality agreements with some recipients of alleged trade secrets were insufficient to protect secrets where the information was disclosed to others without similar assurances, where the scope of the oral agreements was unclear, and where the disclosures were not password protected).

4. How much effort should be required of trade secret owners? Obviously, the best way to protect a secret is not to tell anyone at all. In the modern commercial world, however, this is normally impractical. Companies with trade secrets must tell the secret to their employees, their business partners, and often their distributors and customers as well. But the risk of *inadvertent* use or disclosure can be reduced in a number of ways: for example, by requiring employees, licensees, and even customers to sign confidentiality agreements; by investing in physical security measures against theft, such as fences, safes, and guards; and by designing products themselves so that they do not reveal their secrets upon casual (or even detailed) inspection. The First Circuit has held that "affirmative steps" to protect secrecy, not merely "ordinary discretion," are required. *See Incase Inc. v. Timex Corp.*, 488 F.3d 46 (1st Cir. 2007).

5. *Rationale/Justification for Reasonable Precautions*. If the idea is to encourage investment in trade secrets, why require any degree of "reasonable precautions" at all? One sometimes hears in this regard that all "fencing" expenditures are inefficient. *Cf.*

Edmund W. Kitch, *The Law and Economics of Rights in Valuable Information*, 9 J. LEGAL STUD. 683 (1980) (arguing that reasonable precautions make sense only as evidence of the existence of a trade secret). Why not simply require explicit notice—large neon signs, stamps on all documents, or publication of a secrecy policy—in place of physical precautions?

Are prospective trade secret thieves actually encouraged by the reasonable precautions argument to steal ideas when they observe a lapse in security, and does this rule give them an incentive to search out such lapses? Professor Kitch asks the related question of why these expenses should be required in addition to the expense of bringing a trade secret lawsuit. Some scholars contend that a trade secret cause of action which yields a legal remedy ought to be available when it is cheaper than the physical precautions that would be necessary to protect a piece of information. *See* David Friedman, William Landes & Richard Posner, *Some Economics of Trade Secret Law*, 5 J. ECON. PERSPECTIVES 61, 67 (1991). They note further that where "the social costs of enforcing secrecy through the legal system would be high, the benefits of shared information are likely to exceed the net benefits of legal protection."

What value is there in a legal rule that requires investment in precautions up to the level that would be rational in the absence of the legal rule? Should it be a defense to a trade secret action that the plaintiff could more easily have protected the secret through physical precautions?

Professor Kitch notes by way of analogy that we do not prohibit criminal complaints for larceny just because a property owner was careless. (On the other hand, many states reduce recovery in tort suits for "comparative negligence.") He also suggests that reasonable precautions are required only to put prospective infringers on notice about the existence of a right and to serve as evidence of the fact that the secret is worth protecting legally. The fencing thus serves a notice function, akin to "marking" products with patent numbers, copyright symbols, or trademark symbols. Kitch, *supra*, at 698.

The Court in *duPont & Co. v. Christopher*, 431 F.2d 1012 (5th Cir. 1970), pays significant attention to the role of fencing costs in trade secrets suits. We will return to that case when we consider misappropriation of trade secrets. *See* Section C.

The reasonable precautions requirement arguably serves to weed out frivolous trade secret claims by requiring evidence of investment by the plaintiff in protecting the secret.

6. Will general precautions suffice, or must the reasonable efforts be specific to the secrets in question? In *Taylor Made Express Inc. v. Kidd*, 2024 WL 197231 (N.D. Ill. Jan. 18, 2024), the court found that a broad and vague provision in an employee handbook prohibiting disclosure of confidential information was not sufficient effort where the plaintiffs took a "laissez-faire approach to data security" and did not call out the specific secrets that employees were to keep confidential.

Will reasonable precautions always be a question of fact? Or are certain activities (publishing a secret formula, for example) so inconsistent with trade secret protection

that they automatically preclude a successful trade secret suit? *See* Section II(B)(3) (discussing disclosure of trade secrets).

PROBLEMS

Problem II-6. Smith, a bar owner in rural Alabama, develops by accident one night the relatively simple formula for a new alcoholic beverage. The drink is simply a mixture of three common ingredients. Smith begins selling the drink, which he calls "Mobile Mud," in his bar. However, he instructs his bartenders not to reveal the formula to anyone and has them premix "Mud" in the back of the bar, out of sight of customers. Smith is outraged when he learns that Jimmy Dean, an international distributor of alcoholic beverages, has copied his formula and is marketing it under a different name. At trial, Dean employees and independent experts unanimously testify that it is possible for someone with experience in the beverage industry to determine the formula for Mud by looking at, smelling and tasting the drink.

Has Smith taken reasonable precautions? What more could he have done to protect the "secret formula" of Mobile Mud? Is the secret so obvious to consumers that selling the product on the open market destroys protection? Does your opinion of the case change if you learn that Dean's representative went to Smith's bar and bribed a bartender to disclose the formula?

Problem II-7. MidContinent is a small manufacturer of signs and decals. It has only five employees, two of whom are father and son and two more of whom are family friends. The company describes itself as having a "relaxed, congenial" working atmosphere. In order to avoid what the president considers excessive formality, the employees have never been required to sign confidentiality agreements, and documents kept within the company aren't stamped confidential. The company has never conducted "exit interviews" or instructed its employees about trade secrecy. According to the company president, "we trust our employees, and that trust has never been misplaced." On the other hand, the company does take certain steps to keep outsiders from accessing its customer lists and its adhesive manufacturing process. And there is little history of economic espionage in the decal-manufacturing business. Has MidContinent taken reasonable efforts to protect its secrets? Should it matter whether the party accused of stealing those secrets is an employee or an outsider?

3. Reasonable Efforts to Maintain Secrecy

It is axiomatic that public disclosure of a trade secret destroys the "secret," and therefore ends protection. The corollary to this rule is that as long as a trade secret remains secret, it is protectable. Thus, trade secrets do not last for a specific term of years but continue indefinitely until the occurrence of a particular event—the public disclosure of the secret. Disclosure of a once-protected trade secret can occur in several ways.

i. Voluntary Disclosure by the Trade Secret Owner

When a trade secret owner publishes the secret, whether in an academic journal or any other public forum, secrecy is lost so long as the publication is accessible to those interested in the subject matter. This loss might reasonably be considered a substantial disincentive to publication of scientific or technical advances. But publication of secret information regularly occurs, either because inventors have not thought through the consequences of their actions or because the value or prestige of first publication is deemed to outweigh the potential loss of commercial trade secret protection.

One common form of disclosure is the publication of an issued patent. Because (as we shall see) patent law requires the public disclosure of an invention with sufficient specificity to enable one of ordinary skill in the art to make it, obtaining a patent on an invention destroys trade secret protection. *See Tewari De-Ox Sys. v. Mountain States*, 637 F.3d 604 (5th Cir. 2011); *Ferroline Corp. v. General Aniline & Film Corp.*, 207 F.2d 912 (7th Cir. 1953). Thus, an inventor must "elect" either patent or trade secret protection, for the two cannot protect the same invention simultaneously.

The Federal Circuit applied a notable exception to this seemingly absolute rule in *Rhone-Poulenc Agro v. DeKalb Genetics Corp.*, 272 F.3d 1335 (Fed. Cir. 2001). In that case, the defendant had stolen the plaintiff's trade secrets and published them in its own patent application. The court concluded that the trade secret owner never had the opportunity to "elect" to give up trade secret protection, and so ruled that the publication of the defendant's patent had not disclosed plaintiff's trade secrets. This result seems equitable to the inventor. But does it really comport with the principle that information must be secret to be protected? For a contrary rule, see *Evans v. General Motors*, 125 F.3d 1448 (Fed. Cir. 1997) (holding that publication by a thief started the one-year clock running for patenting an invention, and reasoning that because the trade secret owner knew of the theft he could have acted to seek patent protection within a reasonable time period).

What about patent applications? Until 1999, patent applications were kept secret by the U.S. Patent Office unless and until the patent issued. If a patent application was not actively prosecuted, or if the patent did not issue, it was declared abandoned by the Patent Office. *See* 37 C.F.R. §1.114 (1995). Abandoned applications were not available to the public. In fact, the application itself was destroyed after 20 years.

In 1999, Congress changed U.S. law to require that some (but not all) patent applications be published after 18 months. *See* 35 U.S.C. §122. Since it takes approximately three years on average for a patent to issue, many applicants face an election not between patent and trade secret protection, but between the prospect of future patent protection and trade secret protection.

The notion of an "election" between trade secret and patent protection assumes that the patent application actually describes all the details of an invention. For more on this issue—known as the "enablement" requirement in patent law—*see* 35 U.S.C. §112, discussed in Chapter III(B)(4)(i). Some firms pursue patent protection in a way that withholds valuable know-how from the public. *See* Peter S. Menell & Michael J.

Meurer, *Notice Failure and Notice Externalities*, 5 J. LEGAL ANALYSIS 1, 32–34 (2013) (noting that the quality of patent disclosure varies widely); HENRY PETROSKI, THE PENCIL 114– 15 (1990) (describing how the family of Henry David Thoreau kept its pencil-making technology secret rather than disclose it by obtaining a patent). For example, in *Life Spine, Inc. v. Aegis Spine, Inc.*, 8 F.4th 531 (7th Cir. 2021), the court held that plaintiff had a protectable trade secret in the exact dimensions of a patented spinal implant device because the patent did not disclose those dimensions.

ii. Distributing a Product that Embodies the Trade Secret to the Public

Selling or distributing a product embodying a trade secret to the public may jeopardize the secret if the secret becomes readily accessible. As one court explained, both the RESTATEMENT OF TORTS and the UTSA "necessarily compel the conclusion that a trade secret is protectable only so long as it is kept secret by the party creating it. If a so-called trade secret is fully disclosed by the products produced by use of the secret then the right to protection is lost." *Vacco Indus. v. Van den Berg*, 6 Cal.Rptr.2d 602, 611 (Ct. App. 1992) (citations omitted). Further, disclosure may occur even without sale of the product itself, if the secret is disclosed freely and without restriction during the manufacturing or development processes.

However, sales of a product to the public do not necessarily disclose a trade secret simply because the product embodies the trade secret. Rather, the question is whether the secret is apparent from the product. Secrets that are apparent to the buyers of a product are disclosed by the product, but secrets contained in undecipherable form within the product (such as object code in a computer program) are considered secret even when the product is sold.

In *Data General Corp. v. Digital Computer Controls, Inc.*, 297 A.2d 433 (Del. Ct. Ch. 1971), *aff'd*, 297 A.2d 437 (Del. S. Ct. 1972), Data General sold mainframe computers (the Nova 1200) to sophisticated business customers. Data General supplied logic drawings along with the computer to any customers who requested this information so as to enable them to repair or customize them. Digital Computer Controls acquired a Nova 1200 on the open market along with the design drawings. When it launched a business repairing and maintaining Data General Nova 1200 computers, Data General sued for misappropriation of the secrets reflected in the design drawings. The court held that Data General had not forfeited secrecy merely by selling the computers:

> Defendants insist, however, that plaintiff has not maintained the degree of secrecy which will preserve its right to relief, either by publicly selling an article alleged to contain a trade secret, or by failing to restrict access to the design drawings for its device, arguing that matters of common knowledge in an industry may not be claimed as trade secrets.
>
> It has been recognized in similar cases that even though an unpatented article, device or machine has been sold to the public, and is therefore subject to examination and copying by anyone, the manner of making the article, device or machine may yet constitute a trade secret until such a copy has in fact been

made, *Schulenburg v. Signatrol, Inc.*, 33 Ill. 2d 379, 212 N.E.2d 865, and *Tabor v. Hoffman*, N.Y., 118 N.Y. 30, 23 N.E. 12.

Defendants contend, however, that the issuance by plaintiff of copies of design drawings to its customers was made without safeguards designed properly to maintain the secrecy requisite to the existence of a trade secret. In other words, it is contended that plaintiff's attempts to maintain secrecy merely consisted of (1) not giving copies of the design drawings to those customers who did not need them for maintenance of their computer, (2) obtaining agreements not to disclose the information from those customers who were given copies of the drawings, and (3) printing a legend on the drawings which contained the allegedly confidential information which identified the drawing as proprietary information, the use of which was restricted. Plaintiff argues, however, that disclosure of the design drawings to purchasers of the computer is necessary properly to maintain its device, that such disclosure was required by the very nature of the machine, and that reasonable steps were taken to preserve the secrecy of the material released. I conclude at this preliminary stage of the case that it cannot be held as a matter of law that such precautions were inadequate, a factual dispute as to the adequacy of such precautions having clearly been raised. Defendants' motion for summary judgment must accordingly be denied.

Id.

Selling products that embody a secret may or may not disclose the secret. Whether it does so depends on how easy it is to discern the secret from the product. Coca-Cola can protect its secret formula even while selling millions of cans of Coke so long as buyers cannot tell what's in it. *See Data General Corp. v. Grumman Systems Support Corp.*, 825 F.Supp. 340, 359 (D. Mass. 1993) ("Even those who obtained MV/ADEX and were able to use MV/ADEX were unable to discover its trade secrets because MV/ADEX was distributed only in its object code form, which is essentially unintelligible to humans."). By contrast, the inventor of the wheel can't protect the idea that it is round once the world can see that for themselves. As we shall see, however, customers who buy a product on the open market are entitled to break it apart to see how it works. This process is called "reverse engineering" the product. Trade secret law does not protect owners against legitimate purchasers who discover the secret through reverse engineering, absent a valid nondisclosure agreement. But while the person who does the reverse engineering is free to do what they want with the secret they discovered, the possibility that a product might be reverse engineered does not automatically foreclose any trade secret protection, even against people who have not actually reverse engineered the product.

Of what relevance is the motivation behind the disclosure of a secret? Recall that in *Metallurgical Industries*, the court found the fact that Metallurgical had disclosed its secrets only for profit to weigh in favor of trade secret status. Why should this be the case? On the one hand, licensing is evidence that a secret has value and is worth protecting. On the other hand, one could argue that the fact that a secret holder has sold

its information for profit suggests that it is not trying to keep this information secret at all but rather is attempting to profit from its disclosure. Which of these arguments you find persuasive may depend on your view of the reasons for trade secret protection.

iii. Public Disclosure by a Third Party

Trade secrets may be publicly disclosed (through publication or the sale of a product) by someone other than the trade secret owner. Commonly, this occurs when someone other than the trade secret owner has independently developed or discovered the secret. Call the first trade secret "owner" A, and the independent developer B. A has no control over what B does with her independent discovery; if she chooses to publish the secret, she defeats not only her rights to trade secret protection, but A's rights as well. Suppose B did not develop the secret independently of A but in fact stole it from A. What happens if B publishes the secret? Can A still protect it? If so, what happens to C, who began using the secret after reading B's publication? This issue was addressed in *Religious Technology Center v. Lerma*, 908 F.Supp. 1362 (E.D. Va. 1995). In that case, the Church of Scientology sued (among others) the Washington Post, which had quoted from part of its confidential scriptures. The court concluded that the fact that the scriptures were posted on a Usenet newsgroup for ten days defeated any claim of trade secrecy:

> [For ten days, the documents] remained potentially available to the millions of Internet users around the world.
>
> As other courts who have dealt with similar issues have observed, "posting works to the Internet makes them generally known" at least to the relevant people interested in the newsgroup. Once a trade secret is posted on the Internet, it is effectively part of the public domain, impossible to retrieve. Although the person who originally posted a trade secret on the Internet may be liable for trade secret misappropriation, the party who merely downloads Internet information cannot be liable for misappropriation because there is no misconduct involved in interacting with the Internet.

908 F.Supp. at 1368; *accord American Red Cross v. Palm Beach Blood Bank Inc.*, 143 F.3d 1407 (11th Cir. 1998) (Red Cross donor list lost trade secret status because it was posted on a publicly accessible computer bulletin board). *But see Silicon Image Inc. v. Analogix Semiconductor Inc.*, 2008 WL 166950 (N.D. Cal. Jan. 17, 2008) (presence of information on the Internet does not destroy secrecy absent evidence that competitors knew about it).

Should the obscurity of the Web site matter? What if it is not indexed in a search engine? In *DVD Copy Control Ass'n v. Bunner*, 116 Cal.App.4th 241, 10 Cal.Rptr.3d 185 (Ct. App. 2004), the court found disclosure of a secret on the Internet only because it was "quickly and widely republished to an eager audience," and cautioned that it did not assume that the secrets were lost merely because they were put on the Internet.

Because of the risk of loss of trade secrecy through Internet posting, companies have been more aggressive in suing individuals who post information they consider confidential. *See O'Grady v. Superior Court*, 44 Cal.Rptr.3d 72 (Ct. App. 2006); *Ford*

v. Lane, 67 F.Supp.2d 745 (E.D. Mich. 1999). In some of these cases, notably O'Grady, the company knows only that the information has been disclosed, and not who has done so. Do such lawsuits present First Amendment issues? Several defendants have asserted that they were reporting legitimate news. *See* Franklin B. Goldberg, *Ford Motor Co. v. Lane*, 16 BERKELEY TECH. L.J. 271 (2001). And O'Grady held that bloggers who disclosed Apple's trade secrets were entitled to First Amendment protection as reporters, so their identity could not be disclosed by subpoena.

For an argument that disclosure on the Internet should not destroy a secret irrevocably, see Elizabeth A. Rowe, *Introducing a Takedown for Trade Secrets on the Internet*, 2007 WIS. L. REV. 1042; Elizabeth A. Rowe, *Saving Trade Secret Disclosures on the Internet Through Sequential Preservation*, 42 WAKE FOREST L. REV. 1 (2007).

iv. Inadvertent Disclosure

Trade secrets may be disclosed inadvertently (for example, by being left on a train or elsewhere in public view). While the case law on this issue is sparse, it seems reasonable to argue that a truly accidental disclosure should not defeat trade secret protection if reasonable precautions have been taken. On the other hand, if the inadvertent disclosure is widespread, it would seem unfair (as well as impracticable) to require the public as a whole to "give back" the secret. Note that §1(2)(ii)(C) of the UNIFORM TRADE SECRETS ACT provides that it is misappropriation for someone to disclose a secret that they have reason to know has been acquired "by accident or mistake." THE RESTATEMENT (THIRD) OF UNFAIR COMPETITION §40(b)(4) takes the same position, "unless the [accidental] acquisition was the result of the [trade secret owner]'s failure to take reasonable precautions to maintain the secrecy of the information." *See also Williams v. Curtis-Wright Corp.*, 681 F.2d 161 (3d Cir. 1982) (user of secrets disclosed by mistake was liable for misappropriation because he had constructive notice of the secrecy of the information). But in *DVD Copy Control Ass'n v. Bunner*, 116 Cal.App. 4th 241, 10 Cal.Rptr.3d 185 (Ct. App. 2004), the court rejected the idea that "once the information became publicly available everyone else would be liable under the trade secret laws simply because they knew about its unethical origins." "This," the court said, "is not what trade secret law is designed to do."

v. Government Disclosure

Government agencies sometimes require the disclosure of trade secrets by private parties in order to serve some other social purpose. See Corn Products Refining Co. v. Eddy, 249 U.S. 427 (1919) (requiring a food manufacturer to label its product with an accurate list of ingredients). Health and environmental concerns are a very common reason for the government to require disclosure of product contents. For example, the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), 7 U.S.C. §§136 et seq., requires disclosure of the contents of pesticides as well as a great deal of other information. FIFRA makes two concessions to trade secret protection, however. First, it limits public disclosure of information concerning manufacturing processes and inert (as opposed to active) contents. Second, it provides for compensation to be paid to the inventors of trade secrets which the government appropriates by public disclosure. *See*

also Ruckelshaus v. Monsanto Co., 467 U.S. 986 (1984) (holding that a federal requirement that private parties disclose trade secrets may constitute a taking under the Fifth Amendment); *Philip Morris Inc. v. Reilly*, 312 F.3d 24 (1st Cir. 2002) (en banc) (holding that a Massachusetts law requiring labeling of cigarette ingredients was a taking of tobacco companies' trade secrets); *but see* Amy Kapczynski, *The Public History of Trade Secrets*, 55 U.C. DAVIS L. REV. 1367, 1431–35 (2022) (discussing "forgotten" cases upholding state statutes requiring the disclosure of the ingredients of "patent medicines"—proprietary nonprescription elixirs that were not the subject of utility patents and often had questionable medical benefits—and fertilizers); *cf. Lyft, Inc. v. City of Seattle*, 418 P.3d 102, 105 (Wash. 2018) (finding plaintiffs' zip code information likely a trade secret, but determining that it should be disclosed to the public under state Public Records Act; court did not consider the takings issue).

COMMENTS AND QUESTIONS

1. The plaintiff in Data General sold over 500 Nova computers to the general public. Data General provided any buyer who requested the "confidential" design drawings with a copy. Why are these drawings still considered secret? Does widespread disclosure compromise the secrecy claim at some point, even though all disclosures are made under an agreement of confidentiality? This issue often arises in the software industry. As computers have become ubiquitous, the numbers of "secret" programs in circulation may be counted in the millions rather than the hundreds. Data General implicitly concludes that even a relatively widespread disclosure to customers does not compromise the secrecy of the computer design. For cases addressing this issue in the context of computer software, compare *Management Science of America v. Cyborg Sys., Inc.*, 1977-1 Trade Cas. (CCH) ¶61,472 (N.D. Ill. 1977) (holding that distribution of 600 copies of a program under a confidentiality agreement did not destroy secrecy) with *Young Dental Mfg. Co. v. Q3 Special Prods., Inc.*, 891 F.Supp. 1345 (E.D. Mo. 1995) (characterizing as "completely frivolous" plaintiff's claim that its publicly sold software was a trade secret).

A closely related question involves attempts by the owners of information to "contract around" the requirement of secrecy. If the parties agree to treat a piece of information as secret, is the licensee bound not to use or disclose the information under contract principles regardless of whether or not it is in fact in the public domain? This issue is a recurring one in intellectual property law, and a problem that has never adequately been addressed. Under what circumstances does the sale of a commercial product embodying a trade secret destroy the secret? Is the answer different for a commercially available product produced by a secret manufacturing process? In this regard, computer software may present a special case. While a particular computer program may be widely distributed, in fact all that is sold to the consumer is a disk containing object code. Object code is virtually impossible for humans to read without

machine assistance.[5] Because of this, computer software is in some sense unlike a physical product whose design is evident to the casual observer. Even after it is publicly distributed, object code is meaningless to the casual observer. Only a complex process of reverse engineering (sometimes called "disassembly" or "decompilation") can enable the user to decipher the source code that was originally written for the program.

Should it matter that a computer program is distributed only in object code form? Consider the following case, in which the defendant was accused of misappropriating a computer program in object code form:

> The source code can and does qualify as a trade secret. . . .
>
> Whether the object code is a trade secret is a more difficult question.[7] Atkinson first contends that the object code cannot be a trade secret because it does not derive independent economic value from its secrecy, and therefore fails the first definitional requirement of a trade secret. This argument has no merit. Trandes generates most of its revenues by providing computer services. . . . Armed with a copy of the object code, an individual would have the means to offer much the same engineering services as Trandes. . . .
>
> Atkinson next argues that the object code cannot be a trade secret because Trandes did not keep it secret . . . Atkinson asserts that the Tunnel System has been widely disclosed as a mass-marketed product and that its existence and its abilities are not secret. [The court concluded that the object code remained secret because it had only been distributed to two customers, and both of them signed licenses agreeing to keep the program a secret.]

Trandes Corp. v. Guy F. Atkinson Co., 996 F.2d 655, 663–64 (4th Cir. 1993). Consider the court's footnote. Can object code be a trade secret if it can easily be duplicated (whether or not the copier understands what he is copying)? Is the plaintiff in this case really trying to leverage copyright protection out of a trade secret claim? In many cases, the alleged trade secret at issue is not the source or object code of the computer program itself but certain high-level design features of the program (its "architecture"). *See Integrated Cash Management Services, Inc. v. Digital Transactions, Inc.*, 920 F.2d 171, 173 (2d Cir. 1990). Suppose that, rather than using what they had learned of the architecture of the program while employed by the company, ICM's former employees had copied the object code of the program altogether. (Leave aside for a moment questions of copyright infringement, and consider only the trade secret issue.) Would they be liable for misappropriating the trade secrets contained in the program

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[5] It is possible to "reverse engineer" object code in some cases to create a kind of rough estimate of what must have been in the original source code. The process, however, is demanding and time consuming even for expert programmers.

[7] This case presents an unusual set of facts. In the ordinary case, the owner of trade secret computer software will maintain the secrecy of the source code but freely distribute the object code. *See, e.g., Q-Co Indus. v. Hoffman*, 625 F.Supp. 608, 617 (S.D.N.Y. 1985) (program secret where source code secret, even though object code not secret). In such cases, the owner of the software cannot claim trade secret protection for the object code because its disclosure to the public destroyed its secrecy. In this case, however, Trandes maintained the secrecy of the source code and the object code, as we explain below.

architecture on the grounds that copying the program in its entirety necessarily copied the architecture? Or would the fact that the object code was publicly disclosed protect them from liability? *See Silvaco Data Sys. v. Intel Corp.*, 109 Cal.Rptr. 3d 27 (Cal. Ct. App. 2010) (holding that one "does not, by executing machine-readable software, 'use' the underlying source code; nor does one acquire the requisite knowledge of any trade secrets embodied in that code."); *Beacon Wireless Solutions Inc. v. Garmin Int'l*, 894 F.Supp.2d 727 (W.D. Va. 2012). How would the courts in Trandes and the Data General cases answer this question? Does the answer suggest a problem with relying on trade secrecy to protect computer programs?

2. To what extent does the incorporation of a secret in a public governmental record preclude trade secret protection? *See Frazee v. U.S. Forest Service*, 97 F.3d 367 (9th Cir. 1996) (information was not a trade secret because it could be obtained from the government under the Freedom of Information Act); *Weygand v. CBS, Inc.*, 43 U.S.P.Q.2d 1120 (C.D. Cal. 1997) (depositing a work with the U.S. Copyright Office destroys trade secrecy).

3. Can a trade secret ever be abandoned by its owner through non-use? *See* Camilla Hrdy & Mark A. Lemley, *Abandoning Trade Secrets*, 73 STAN. L. REV. 1 (2021) (arguing that unused secrets should be treated as abandoned, allowing others to use them).

C. MISAPPROPRIATION OF TRADE SECRETS

Not all uses of another's trade secrets constitute misappropriation. Acquisition or use of a trade secret is illegal only in two basic situations: where it is done through improper means, or where it involves a breach of confidence. UTSA §1; RESTATEMENT (THIRD) OF UNFAIR COMPETITION §40.

1. Improper Means

E. I. du Pont deNemours & Co. v. Christopher
United States Court of Appeals for the Fifth Circuit
431 F.2d 1012 (5th Cir. 1970)

GOLDBERG, CIRCUIT JUDGE:

This is a case of industrial espionage in which an airplane is the cloak and a camera the dagger. The defendants-appellants, Rolfe and Gary Christopher, are photographers in Beaumont, Texas. The Christophers were hired by an unknown third party to take aerial photographs of new construction at the Beaumont plant of E.I. duPont deNemours & Company, Inc. Sixteen photographs of the DuPont facility were taken from the air on March 19, 1969, and these photographs were later developed and delivered to the third party.

DuPont employees apparently noticed the airplane on March 19 and immediately began an investigation to determine why the craft was circling over the plant. By that afternoon the investigation had disclosed that the craft was involved in a photographic expedition and that the Christophers were the photographers. DuPont contacted the

Christophers that same afternoon and asked them to reveal the name of the person or corporation requesting the photographs. The Christophers refused to disclose this information, giving as their reason the client's desire to remain anonymous.

Having reached a dead end in the investigation, DuPont subsequently filed suit against the Christophers, alleging that the Christophers had wrongfully obtained photographs revealing DuPont's trade secrets which they then sold to the undisclosed third party. DuPont contended that it had developed a highly secret but unpatented process for producing methanol, a process which gave DuPont a competitive advantage over other producers. This process, DuPont alleged, was a trade secret developed after much expensive and time-consuming research, and a secret which the company had taken special precautions to safeguard. The area photographed by the Christophers was the plant designed to produce methanol by this secret process, and because the plant was still under construction parts of the process were exposed to view from directly above the construction area. Photographs of that area, DuPont alleged, would enable a skilled person to deduce the secret process for making methanol. DuPont thus contended that the Christophers had wrongfully appropriated DuPont trade secrets by taking the photographs and delivering them to the undisclosed third party. In its suit DuPont asked for damages to cover the loss it had already sustained as a result of the wrongful disclosure of the trade secret and sought temporary and permanent injunctions prohibiting any further circulation of the photographs already taken and prohibiting any additional photographing of the methanol plant. . . .

. . . [T]he Christophers argue that for an appropriation of trade secrets to be wrongful there must be a trespass, other illegal conduct, or breach of a confidential relationship. We disagree.

It is true, as the Christophers assert, that the previous trade secret cases have contained one or more of these elements. However, we do not think that the Texas courts would limit the trade secret protection exclusively to these elements. On the contrary, in *Hyde Corporation v. Huffines*, 1958, 158 Tex. 566, 314 S.W.2d 763, the Texas Supreme Court specifically adopted the rule found in the Restatement of Torts which provides:

> One who discloses or uses another's trade secret, without a privilege to do so, is liable to the other if
>
> (a) he discovered the secret by improper means, or
>
> (b) his disclosure or use constitutes a breach of confidence reposed in him by the other in disclosing the secret to him. . . .

RESTATEMENT OF TORTS §757 (1939). Thus, although the previous cases have dealt with a breach of a confidential relationship, a trespass, or other illegal conduct, the rule is much broader than the cases heretofore encountered. Not limiting itself to specific wrongs, Texas adopted subsection (a) of the RESTATEMENT which recognizes a cause of action for the discovery of a trade secret by any "improper" means. . . .

The question remaining, therefore, is whether aerial photography of plant construction is an improper means of obtaining another's trade secret. We conclude that

it is and that the Texas courts would so hold. The Supreme Court of that state has declared that "the undoubted tendency of the law has been to recognize and enforce higher standards of commercial morality in the business world." *Hyde Corporation v. Huffines*, *supra*, 314 S.W.2d at 773. That court has quoted with approval articles indicating that the proper means of gaining possession of a competitor's secret process is "through inspection and analysis" of the product in order to create a duplicate. *K & G Tool & Service Co. v. G & G Fishing Tool Service*, 1958, 158 Tex. 594, 314 S.W.2d 782, 783, 788. Later another Texas court explained:

> The means by which the discovery is made may be obvious, and the experimentation leading from known factors to presently unknown results may be simple and lying in the public domain. But these facts do not destroy the value of the discovery and will not advantage a competitor who by unfair means obtains the knowledge without paying the price expended by the discoverer.

Brown v. Fowler, Tex. Civ. App. 1958, 316 S.W.2d 111, 114, *writ ref'd n.r.e.*

We think, therefore, that the Texas rule is clear. One may use his competitor's secret process if he discovers the process by reverse engineering applied to the finished product; one may use a competitor's process if he discovers it by his own independent research; but one may not avoid these labors by taking the process from the discoverer without his permission at a time when he is taking reasonable precautions to maintain its secrecy. To obtain knowledge of a process without spending the time and money to discover it independently is improper unless the holder voluntarily discloses it or fails to take reasonable precautions to ensure its secrecy.

In the instant case the Christophers deliberately flew over the DuPont plant to get pictures of a process which DuPont had attempted to keep secret. The Christophers delivered their pictures to a third party who was certainly aware of the means by which they had been acquired and who may be planning to use the information contained therein to manufacture methanol by the DuPont process. The third party has a right to use this process only if he obtains this knowledge through his own research efforts, but thus far all information indicates that the third party has gained this knowledge solely by taking it from DuPont at a time when DuPont was making reasonable efforts to preserve its secrecy. In such a situation DuPont has a valid cause of action to prohibit the Christophers from improperly discovering its trade secret and to prohibit the undisclosed third party from using the improperly obtained information.

We note that this view is in perfect accord with the position taken by the authors of the RESTATEMENT. In commenting on improper means of discovery the savants of the RESTATEMENT said:

> *f. Improper means of discovery*. The discovery of another's trade secret by improper means subjects the actor to liability independently of the harm to the interest in the secret. Thus, if one uses physical force to take a secret formula from another's pocket, or breaks into another's office to steal the formula, his conduct is wrongful and subjects him to liability apart from the rule stated in this Section. Such conduct is also an improper means of procuring the secret

> under this rule. But means may be improper under this rule even though they do not cause any other harm than that to the interest in the trade secret. Examples of such means are fraudulent misrepresentations to induce disclosure, tapping of telephone wires, eavesdropping or other espionage. A complete catalogue of improper means is not possible. In general they are means which fall below the generally accepted standards of commercial morality and reasonable conduct.

RESTATEMENT OF TORTS §757, *Comment f* at 10 (1939).

In taking this position we realize that industrial espionage of the sort here perpetrated has become a popular sport in some segments of our industrial community. However, our devotion to free-wheeling industrial competition must not force us into accepting the law of the jungle as the standard of morality expected in our commercial relations. Our tolerance of the espionage game must cease when the protections required to prevent another's spying cost so much that the spirit of inventiveness is dampened. Commercial privacy must be protected from espionage which could not have been reasonably anticipated or prevented. We do not mean to imply, however, that everything not in plain view is within the protected vale, nor that all information obtained through every extra optical extension is forbidden. Indeed, for our industrial competition to remain healthy there must be breathing room for observing a competing industrialist. A competitor can and must shop his competition for pricing and examine his products for quality, components, and methods of manufacture. Perhaps ordinary fences and roofs must be built to shut out incursive eyes, but we need not require the discoverer of a trade secret to guard against the unanticipated, the undetectable, or the unpreventable methods of espionage now available.

In the instant case DuPont was in the midst of constructing a plant. Although after construction the finished plant would have protected much of the process from view, during the period of construction the trade secret was exposed to view from the air. To require DuPont to put a roof over the unfinished plant to guard its secret would impose an enormous expense to prevent nothing more than a school boy's trick. We introduce here no new or radical ethic since our ethos has never given moral sanction to piracy. The market place must not deviate far from our mores. We should not require a person or corporation to take unreasonable precautions to prevent another from doing that which he ought not do in the first place. Reasonable precautions against predatory eyes we may require, but an impenetrable fortress is an unreasonable requirement, and we are not disposed to burden industrial inventors with such a duty in order to protect the fruits of their efforts. "Improper" will always be a word of many nuances, determined by time, place, and circumstances. We therefore need not proclaim a catalogue of commercial improprieties. Clearly, however, one of its commandments does say "thou shall not appropriate a trade secret through deviousness under circumstances in which countervailing defenses are not reasonably available." . . .

COMMENTS AND QUESTIONS

1. Improper means has a substantial basis in other torts. *See Comment f* to RESTATEMENT OF TORTS, cited in *duPont*, and the RESTATEMENT (THIRD) OF UNFAIR COMPETITION §43 (defining improper means as including "theft, fraud, unauthorized interception of communications, inducement of or knowing participation in a breach of confidence, and other means either wrongful in themselves or wrongful under the circumstances of the case.").

DuPont provides an example of conduct prohibited by trade secret law that is probably not otherwise tortious. Should otherwise legitimate conduct be prohibited because it will disclose a trade secret? As Judge Posner noted in *Rockwell*, misappropriation of trade secrets is largely redundant if it does not reach any further than other torts. Nonetheless, the reach of the case is troubling. Consider the last sentence of the *duPont* opinion. What is wrong with "deviousness"? And why should "countervailing defenses" enter the picture?

2. There is general agreement that "reverse engineering"—that is, legally obtaining a product and taking it apart to see how it works—is not a misappropriation of a trade secret. Is reverse engineering (which is legal) any less devious than aerial photography? While it may be easy to reverse engineer a product, reverse engineering manufacturing processes can be especially difficult. Are there realistic alternatives to the sort of espionage condemned in duPont for those who seek to understand a process? Should there be some legally protected way of discovering a competitor's process?

3. Note how *duPont* dovetails with the discussion of precautions in Section B(2). DuPont could have protected itself against aerial photography by building a roof over its plant area before beginning internal construction. The Fifth Circuit rejected this alternative because it would "impose an enormous expense to prevent nothing more than a school boy's trick." On the other hand, the courts are clearly willing to put duPont to some expense to protect its secrets from prying eyes. If duPont had allowed its engineers to leave copies of the plant blueprints on subways, the result of the case might be very different.

How much expense is duPont required to incur to protect itself? The uniform answer of the courts is that only "reasonable" precautions must be taken. While this is not a terribly helpful answer, it may be a fairly practical one in any given industry, where companies can protect themselves by taking those precautions that are customary in that industry.

On the other hand, consider the Second Circuit's statement in *Franke v. Wiltschek*, 209 F.2d 493, 495 (2d Cir. 1953):

> It matters not that the defendants could have gained their knowledge from a study of the expired patent and plaintiff's publicly marketed product. The fact is they did not. Instead they gained it from plaintiffs via their confidential relationship, and in doing so incurred a duty not to use it to plaintiff's detriment. This duty they have breached.

Is this consistent with the UTSA?

4. An interesting case involving only circumstantial evidence of misappropriation is *Pioneer Hi-Bred International v. Holden Foundation Seeds, Inc.*, 35 F.3d 1226, 31 U.S.P.Q.2d 1385 (8th Cir. 1994). Plaintiff Pioneer could not establish a specific act of misappropriation, but it did show (through the use of three sophisticated scientific tests) that it was highly unlikely that defendant's hybrid seeds had been developed independently of plaintiff's seeds. Instead, due to genetic similarities, Pioneer showed that it was much more likely that those seeds were "derived from" a popular Pioneer hybrid. Pioneer was found to have maintained reasonable measures to guard against disclosure, including putting experimental seeds in bags marked with a secret code, allowing seeds to be grown only under strict nondisclosure arrangements, and leaving unmarked the fields in which the seeds had been planted. Pioneer was awarded $46.7 million in damages.

By contrast, the Fourth Circuit in *Othentec Ltd. v. Phelan*, 526 F.3d 135 (4th Cir. 2008), made it clear that speculation of theft based on the defendant's speed in entering the market was not enough. The court required "actual objective evidence" of misappropriation.

5. When does someone "acquire" a trade secret? The issue sometimes arises when an employee leaves an employer with trade secrets in its possession and starts work at a new company. The employee obtained the secrets lawfully. Is continuing to possess them a misappropriation? Has the new employer acquired the secrets by hiring the employee? *See Six Dimensions, Inc. v. Perficient, Inc.*, 969 F.3d 219 (5th Cir. 2020) (company never acquired trade secrets where new employee possessed the secrets but never communicated them to the new employer). Using or disclosing the secrets, by contrast, would be unlawful, as we will see in the next section.

6. Can it ever be improper to obtain information in public view? In *Compulife Software, Inc. v. Newman*, 959 F.3d 1288 (11th Cir. 2020), the Eleventh Circuit held that the defendant could be liable for using a bot to scrape the data from plaintiff's website for price information, sending millions of queries to receive price quotes. While the public was free to access the site to get price quotes, the court nonetheless concluded that the aggregation of the price information on the site was still a secret and that sending automated requests was improper.

PROBLEMS

Problem II-8. Suppose that, at trial in the duPont case, the Christophers proved that they could have discovered the secrets contained in the layout of the duPont plant by careful viewing of images available on Google Earth. Are the Christophers then relieved from liability for misappropriation of trade secrets? Would your answer change if they had in fact obtained the photos by sneaking onto the duPont property on the ground?

Problem II-9. Prior to baseball games, catchers and pitchers agree on a set of hand signal codes that the catcher will use to coordinate pitch type—e.g., fast ball, curve ball, slider, change up—and location. During the game, catchers propose pitches using these signals. Pitchers nod in the affirmative when then agree, and then deliver the pitches.

With the advent of replay and other video technologies, Major League Baseball issued a series of memoranda warning teams that they may not use electronic equipment to communicate with each other during games, especially for the purpose of stealing signs.

During the 2017 season, the Houston Astros implemented video surveillance equipment to learn competing teams' signs. The technology quite possibly contributed to the Astros success in beating the Los Angeles Dodgers in the World Series.

2. Confidential Relationship

The most common allegation of trade secret misappropriation involves breach of a confidential relationship. *See* David S. Almeling et al., *A Statistical Analysis of Trade Secret Litigation in State Courts*, 46 GONZ. L. REV. 57, 59 (2011) (reporting that 93 percent of all trade secret cases are between parties who know each other). The RESTATEMENT (THIRD) OF UNFAIR COMPETITION §41 explains that a confidential relationship is established in the following circumstances:

> (a) the person made an express promise of confidentiality prior to the disclosure of the trade secret; or
>
> (b) the trade secret was disclosed to the person under circumstances in which the relationship between the parties to the disclosure or the other facts surrounding the disclosure justify the conclusions that, at the time of the disclosure,
>
> > (1) the person knew or had reason to know that the disclosure was intended to be in confidence, and
> >
> > (2) the other party to the disclosure was reasonable in inferring that the person consented to an obligation of confidentiality.

Smith v. Dravo Corp.
United States Court of Appeals for the Seventh Circuit
203 F.2d 369 (7th Cir. 1953)

LINDLEY, CIRCUIT JUDGE:

Plaintiffs appeal from a judgment for defendant entered at the close of a trial by the court without a jury. The complaint is in four counts: 1 and 2 charge an unlawful appropriation by defendant of plaintiffs' trade secrets relating to the design and construction and selling and leasing of freight containers; 3 and 4 aver infringement of plaintiffs' patents Nos. 2,457,841 and 2,457,842. . . .

In the early 1940s Leathem D. Smith, now deceased, began toying with an idea which, he believed, would greatly facilitate the ship and shore handling and transportation of cargoes. As he was primarily engaged in the shipbuilding business, it was quite natural that his thinking was chiefly concerned with water transportation and dock handling. Nevertheless his overall plan encompassed rail shipping as well. He envisioned construction of ships especially designed to carry their cargo in uniformly sized steel freight containers. These devices (which, it appears, were the crux of his

idea) were: equipped with high doors at one end; large enough for a man to enter easily; weather and pilfer proof; and bore collapsible legs, which (1) served to lock them (a) to the deckof the ship by fitting into recesses in the deck, or (b) to each other, when stacked, by reason of receiving sockets located in the upper four corners of each container, and (2) allowed sufficient clearance between deck and container or container and container for the facile insertion of a fork of a lift tractor, and (3) were equipped with lifting eyelets, which, together with a specially designed hoist, made possible placement of the containers upon or removal from a ship, railroad car or truck, while filled with cargo. The outer dimensions of the devices were such that they would fit compactly in standard gauge North American railroad cars, or narrow gauge South American trains, and in the holds of most water vessels.

[At the end of World War II, Smith's company—Safeway Containers—had some success building and selling such containers.]

On June 23, 1946, Smith died in a sailing accident. The need for cash for inheritance tax purposes prompted his estate to survey his holdings for disposable assets. It was decided that the container business should be sold. Devices in process were completed but no work on new ones was started.

Defendant was interested in the Safeway container, primarily, it appears, for use by its subsidiary, the Union Barge Lines. In October 1946 it contacted Agwilines [one of Smith's customers] seeking information. It watched a loading operation in which Agwilines used the box. At approximately the same time, defendant approached the shipbuilding company and inquired as to the possibility of purchase of a number of the containers. It was told to communicate with Cowan, plaintiffs' eastern representative. This it did, and, on October 29, 1946, in Pittsburgh, Cowan met with defendant's officials to discuss the proposed sale of [containers]. But, as negotiations progressed, defendant demonstrated an interest in the entire container development. Thus, what started as a meeting to discuss the purchase of individual containers ended in the possible foundation for a sale of the entire business.

Based upon this display of interest, Cowan sent detailed information to defendant concerning the business. This included: (1) patent applications for both the "knockdown" and "rigid" crates; (2) blue prints of both designs; (3) a miniature Safeway container; (4) letters of inquiry from possible users; (5) further correspondence with prospective users. In addition, defendant's representatives journeyed to Sturgeon Bay, Wisconsin, the home of the shipbuilding company, and viewed the physical plant, inventory and manufacturing operation.

Plaintiffs quoted a price of $150,000 plus a royalty of $10 per unit. This was rejected. Subsequent offers of $100,000 and $75,000 with royalties of $10 per container were also rejected. Negotiations continued until January 30, 1947, at which time defendant finally rejected plaintiffs' offer.

On January 31, 1947 defendant announced to Agwilines that it "intended to design and produce a shipping container of the widest possible utility" for "coastal steamship application . . . [and] use . . . on the inland rivers and . . . connecting highway and rail

carriers." Development of the project moved rapidly, so that by February 5, 1947 defendant had set up a stock order for a freight container which was designed, by use of plaintiffs' patent applications, so as to avoid any claim of infringement. One differing feature was the use of skids and recesses running the length of the container, rather than legs and sockets as employed in plaintiffs' design. However, Agwilines rejected this design, insisting on an adaptation of plaintiffs' idea. In short defendant's final product incorporated many, if not all, of the features of plaintiffs' design. So conceived, it was accepted by the trade to the extent that, by March 1948, defendant had sold some 500 containers. Many of these sales were made to firms who had shown considerable prior interest in plaintiffs' design and had been included in the prospective users disclosed to defendant.

One particular feature of defendant's container differed from plaintiffs: its width was four inches less. As a result plaintiffs' product became obsolete. Their container could not be used interchangeably with defendant's; they ceased production. Consequently the prospects of disposing of the entire operation vanished.

The foregoing is the essence of plaintiffs' cause of action. Stripped of surplusage, the averment is that defendant obtained, through a confidential relationship, knowledge of plaintiffs' secret designs, plans and prospective customers, and then wrongfully breached that confidence by using the information to its own advantage and plaintiffs' detriment.

[The court found that, notwithstanding certain disclosures of information during the operation of Safeway, plaintiffs' information about how to design its containers remained a trade secret.]

(1) Was Defendant in a Position of Trust and Confidence at the Time of the Disclosure?

Mr. Justice Holmes once said that the existence of the confidential relationship is the "starting point" in a cause of action such as this. E.I. DuPont de Nemours Powder Co. v. Masland, 244 U.S. 100, 102 [1917]. While we take a slightly different tack, there is no doubt as to the importance of this element of plaintiffs' case.

Certain it is that a non-confidential disclosure will not supply the basis for a law suit. Plaintiffs' information is afforded protection because it is secret. Promiscuous disclosures quite naturally destroy the secrecy and the corresponding protection. But this is not true where a confidence has been reposed carrying with it communication of an idea.

It is clear that no express promise of trust was exacted from defendant. There is, however, the further question of whether one was implied from the relationship of the parties. Pennsylvania has not provided us with a decision precisely in point but Pressed *Steel Car Co. v. Standard Car Co.*, 210 Pa. 464, 60 A. 4, furnishes abundant guideposts. There plaintiff delivered its blue prints to customers in order that they might acquaint themselves more thoroughly with the railroad cars they were purchasing; from these customers, defendant obtained the drawings. In holding that the customers held the plans as a result of a confidence reposed in them by plaintiff, and that the confidence was

breached by delivery of the blue prints to defendant, the court said, 60 A. at page 10: "While there was no expressed restriction placed on the ownership of the prints, or any expressed limitation as to the use to which they were to be put, it is clear . . . that the purpose for which they were delivered by the plaintiff was understood by all parties."

The quoted language is applicable and determinative. Here plaintiffs disclosed their design for one purpose, to enable defendant to appraise it with a view in mind of purchasing the business. There can be no question that defendant knew and understood this limited purpose. Trust was reposed in it by plaintiffs that the information thus transmitted would be accepted subject to that limitation. "[T]he 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." *E.I. DuPont de Nemours Powder Co. v. Masland*, 244 U.S. 100,102.

Nor is it an adequate answer for defendant to say that the transactions with plaintiffs were at arm's length. So, too, were the overall dealings between plaintiffs and defendants in *Booth v. Stutz Motor Car Co.*, 7 Cir., 56 F.2d 962; *Allen-Qualley Co. v. Shellmar Products Co.*, D.C., 31 F.2d 293, *affirmed*, 7 Cir., 36 F.2d 623 and *Schavoir v. American Rebonded Leather Co.*, 104 Conn. 472, 133 A. 582. That fact does not detract from the conclusion that but for those very transactions defendant would not have learned, from plaintiffs, of the container design. The implied limitation on the use to be made of the information had its roots in the "arms-length" transaction.

(2) The Improper Use by Defendant of the Secret Information

Defendant's own evidence discloses that it did not begin to design its container until after it had access to plaintiffs' plans. Defendant's engineers admittedly referred to plaintiffs' patent applications, as they said, to avoid infringement. It is not disputed that, at the urging of Agwilines, defendant revised its proposed design to incorporate the folding leg and socket principles of plaintiffs' containers. These evidentiary facts, together with the striking similarity between defendant's and plaintiffs' finished product, were more than enough to convict defendant of the improper use of the structural information obtained from plaintiffs.

COMMENTS AND QUESTIONS

1. Since the shipping containers were available on the open market, couldn't Dravo have argued that they were not a trade secret? Did Smith's agent, Cowan, disclose any thing that was not readily apparent from inspection of the containers? For more on the history of containerization, see MARC LEVINSON, THE BOX: HOW THE SHIPPING CONTAINER MADE THE WORLD SMALLER AND THE WORLD ECONOMY BIGGER (2008) (mentioning Dravo Corporation container as early precursor of containerization).

2. In *Van Prods. Co. v. General Welding & Fabricating Co.*, 213 A.2d 769, 779–80 (Pa. 1965), the Pennsylvania Supreme Court criticized Smith for focusing on the existence of a confidential relationship to the exclusion of whether there was a trade secret at all. The court said: "The starting point in every case of this sort is not whether there was a confidential relationship, but whether, in fact, there was a trade secret to be

misappropriated." But where there is a secret, a company that receives the secret in a business negotiation and then uses it without paying can be guilty of misappropriating that secret. *See Altavion Inc. v. Konica Minolta Sys. Lab. Inc.*, 171 Cal.Rptr.3d 714 (Cal. Ct. App. 2014).

3. Compare *Smith v. Dravo* with *Omnitech Int'l v. Clorox Co.*, 29 U.S.P.Q.2d 1665 (5th Cir. 1994), where the court held that it was not an actionable "use" of a trade secret for the defendant to evaluate it in the course of trying to decide whether to (a) acquire the company or (b) take a license to use the trade secret. A finding of no liability here makes sense, because it allows the potential licensee to make an informed judgment and therefore promotes efficient licensing. But how far does it extend? Is the potential licensee entitled to replicate the research or build models in an effort to evaluate it? Are there special limits that should be placed on companies engaged in a "make or buy" decision—that is, who are considering either licensing the plaintiff's technology or entering the market themselves?

Smith and *Omnitech* both involved disclosures in the course of licensing negotiations. Cases such as these form part of the amorphous law of "precontractual liability." *See* E. Allen Farnsworth, *Precontractual Liability and Preliminary Agreements: Fair Dealing and Failed Negotiations*, 87 COLUM. L. REV. 217 (1987). Both the Smith and Omnitech cases present the problem of Arrow's Information Paradox. What the plaintiff has to sell to the defendant is information that is valuable only because it is secret. If there is no legal protection and if the plaintiff discloses the secret to the defendant, its value will be lost. But the defendant cannot be expected to pay for information unless it can see the information to determine its value. Thus, absent some form of legal protection for confidential disclosures, sale or licensing of trade secrets may not occur. Note that this problem does not arise in other areas of intellectual property, such as patent law, since the inventions being licensed are already publicly disclosed.

4. The court in *Bateman v. Mnemonics, Inc.*, 79 F.3d 1532 (11th Cir. 1996), indicated that it was "wary" of trade secret claims based on implied confidential relationships because such claims were subject to abuse. The court rejected Bateman's allegation that such a relationship existed because Bateman had not "made it clear to the parties involved that there was an expectation and obligation of confidentiality." Thus, the court seemed to create a standard of actual knowledge on the part of the recipient of confidential information that the discloser of such information intended the disclosure to be confidential. At the other extreme, the Fifth Circuit in *Phillips v. Frey*, 20 F.3d 623, 631–32 (5th Cir. 1994) found an implied confidential relationship to exist in the course of negotiations over the sale of a business despite the fact that the disclosing party never even requested that the information remain confidential.

Which approach makes more sense? Who is in the best position to clarify the question, the discloser or the recipient?

Is there any way for a potential licensee to prevent the formation of a confidential relationship in such a situation?

5. The defendant in Smith actually sold a device that was not identical to the plaintiff's. Under what circumstances can a defendant be liable for misappropriation without literally copying the trade secret? In *Mangren Res. & Dev. Corp. v. National Chem. Co.*, 87 F.3d 1339 (7th Cir. 1996), the court defined improper "use" broadly, stating that "the user of another's trade secret is liable even if he uses it with modifications or improvements upon it effected by his own efforts, so long as the substance of the process used by the actor is derived from the other's secret If trade secret law were not flexible enough to encompass modified or even new products that are substantially derived from the trade secrets of another, the protections that the law provides would be hollow indeed." To similar effect as *Mangren* is *Texas Tanks Inc. v. Owens-Corning Fiberglas Corp.*, 99 F.3d 740 (5th Cir. 1997). In *Texas Tanks*, the Fifth Circuit held that any improper "exercise of control and domination" over a secret constituted a commercial use of that secret. It rejected the defendant's argument that it could not be liable for taking a secret unless the secret was actually incorporated in a commercial product. The court noted that Owens Corning's awareness of the secret would likely influence the development of its own competing product, and that this was enough to demonstrate improper "use" of the secret. And in *Collelo v. Geographic Servs., Inc.*, 283 Va. 56 (2012), the Virginia Supreme Court held that a party could be liable for trade secret misappropriation even though it did not compete with the plaintiff so long as the plaintiff could show injury. *See* Mark A. Lemley, *The Fruit of the Poisonous Tree in IP Law*, 103 IOWA L. REV. 245, 250–53 (2017).

6. *Use of a Trade Secret Without Consent*. There are three ways to establish misappropriation under the DTSA: improper acquisition, disclosure, or use of a trade secret without consent. 18 U.S.C. §1839(5). In *Oakwood Laboratories LLC v. Thanoo*, 999 F.3d 892 (3d Cir. 2021), the Third Circuit construed the DTSA expansively, as covering any exploitation of the trade secret that is likely to result in injury to the trade secret owner or enrichment to the defendant[.] . . . Thus, marketing goods that embody the trade secret, employing the trade secret in manufacturing or production, relying on the trade secret to assist or accelerate research or development, or soliciting customers through the use of information that is a trade secret . . . all constitute 'use.'"

Based on this broad definition, the court overturned the district court's dismissal of a trade secret complaint for failure to state a cause of action on the ground that the plaintiff had not sufficiently alleged use of a trade secret. The Third Circuit faulted the district court for requiring that Oakwood explain how defendants used the trade secrets and equating "use" of a trade secret with "replication" of the trade secret process or technology. It was sufficient for Oakwood to allege that Dr. Thanoo—who had served for an extensive period as the Oakwood's Vice President of Product Development during the time that it developed a costly, labor-intensive, two-decade long bioequivalent research project—joined a company that developed a comparable project in just a few years. While there was no direct allegation that the defendants used any of plaintiff's secrets, the court held that use could be inferred from the circumstances. Taking the allegations of the complaint as true, the Third Circuit noted that "use" of Oakwood's trade secret information could readily be understood from the timing of Dr.

Thanoo's employment with the competitor Aurobindo, Dr. Thanoo's deception in informing Oakwood about the work he would engage in at Aurobindo, Aurobindo's lack of experience in the highly specialized field of microsphere technology, Aurobindo's access to Oakwood's trade secret information, its rapid success in developing four microsphere products, and the comparatively insignificant financial investment Aurobindo put into that development.

The Third Circuit also faulted the district court for holding that Oakwood had not adequately pled harm: "Defendants have not launched any products . . . Oakwood has not yet suffered any harm from missed partnerships or investment opportunities." The Third Circuit ruled that "trade secret misappropriation is harm. See 18 U.S.C. §1839(3), (5)."

7. *Accident or Mistake*. In a high-profile incident, an Apple employee left an early prototype of the new iPhone in a bar, where it was found by a reporter. Is the reporter free to write about the new prototype? Would it matter if it was found by a competitor? See Greg Sandoval & Declan McCullagh, *Apple Loses Another Unreleased iPhone* (exclusive), CNET (Aug, 31, 2011) (noting that California imposes liability for theft upon any person who finds lost and appropriates property if the person knows who the owner is likely to be).

The UTSA extends liability to anyone who uses or discloses a trade secret that they knew or should have known was acquired by "accident or mistake." That same mental standard—negligence—applies to trade secret misappropriation more generally. *See* Charles Tait Graves, *Intentionality in Trade Secret Law*, 39 BERKELEY TECH. L.J. 731 (2024).

PROBLEMS

Problem II-10. Solomon, a regular customer of ToolCo's products, comes up with an idea for a new tool. He sends the idea to ToolCo, suggesting that they manufacture it. ToolCo does in fact produce and sell the new tool. Is Solomon entitled to compensation for ToolCo's use of his idea? Does it make any difference if (1) ToolCo actively solicited the idea from Solomon? (2) Solomon sent the suggestion to ToolCo along with a letter saying he wanted to open negotiations over a possible licensing arrangement to use the idea? (3) ToolCo has in the past had an informal, unwritten policy of compensating inventors who submit good ideas?

Problem II-11. VenCo, a venture capitalist in the business of financing start-up companies, investigates TechCo in an effort to decide whether or not to finance it. To aid in its investigation, VenCo asks for and receives confidential information about TechCo's products and market position. VenCo eventually decides not to finance TechCo because of concerns about its management, but it does finance a start-up competitor of TechCo in the same field. Are VenCo or the start-up liable to TechCo? What obligations, if any, does VenCo undertake as a result of its exposure to TechCo's secrets?

Problem II-12. Falcon Systems employs Kotva as a sales representative. In the course of her work for Falcon, Kotva comes into contact with a large number of actual and potential customers. Some are leads provided by Falcon, while others she develops on her own. To manage her connections, she uses LinkedIn, which allows people to record and build business connections. Kotva uses LinkedIn for all her connections, business as well as personal.

When Kotva leaves Falcon to take a job with a competitor, Falcon argues that her LinkedIn "connections" are effectively a customer list and belong to the company. They insist that she delete her LinkedIn account, or alternatively eliminate any job-related contacts from the site. How should the court rule?

D. PROPER MEANS AND IMMUNITY

Although the UTSA does not contain any express exceptions to trade secret liability, the definition of misappropriation requires the trade secret owner to prove that the defendant acquired the trade secret by improper means. Independent discovery or reverse engineering are not improper. Thus, to the extent that a defendant can show that it reverse engineered or independently developed trade secret information, it can avoid liability. *See Raytheon Co. v. Indigo Sys. Corp.*, 895 F.3d 1333 (Fed. Cir. 2018) (crediting evidence of independent invention by a former employee after he left plaintiff's employ). The DTSA expressly provides that reverse engineering and independent invention are not improper means of acquiring a trade secret. DTSA 18 U.S.C. §1839(6)(B).

Furthermore, courts have long recognized that trade secret protection can "implicate the interest in freedom of expression or advance another significant public interest." *See* RESTATEMENT (THIRD) OF UNFAIR COMPETITION, §40, comment c. The DTSA expressly immunizes whistleblowers—those who disclose trade secrets to the government or an attorney for purposes of reporting or investigating suspected illegal activity—from trade secret liability.

1. Independent Discovery and Reverse Engineering

Not all use or disclosure of a trade secret is actionable misappropriation. Rather, as the commissioners who drafted the Uniform Trade Secrets Act noted, there are several categories of "proper means" of obtaining a trade secret. These "proper means" do not directly deny the existence of a trade secret or the defendant's use of that secret. Rather, they are legitimate uses of trade secrets by a competitor.

UTSA Comment to §1 explains that:

> One of the broadly stated policies behind trade secret law is "the maintenance of standards of commercial ethics." RESTATEMENT OF TORTS, Section 757,

Comment (f), notes: "A complete catalogue of improper means is not possible," but Section 1(1) includes a partial listing.

Proper means include:

1. Discovery by independent invention;

2. Discovery by "reverse engineering," that is, by starting with the known product and working backward to find the method by which it was developed. The acquisition of the known product must, of course, also be by a fair and honest means, such as purchase of the item on the open market, for reverse engineering to be lawful;

3. Discovery under a license from the owner of the trade secret;

4. Observation of the item in public use or on public display;

5. Obtaining the trade secret from published literature.

See also RESTATEMENT (THIRD) OF UNFAIR COMPETITION §43 ("Independent discovery and analysis of publicly available products or information are not improper means of acquisition.").

Kadant, Inc. v. Seeley Machine, Inc.
United States District Court for the Northern District of New York
244 F.Supp.2d 19 (N.D.N.Y. 2003)

HURD, DISTRICT JUDGE:

. . .

II. Facts

Kadant is a publicly traded corporation with yearly sales eclipsing $100 million. Kadant AES ("AES") is a division of Kadant located in Queensbury, New York. For twenty-eight years, AES has manufactured and sold to customers worldwide products that clean and condition papermaking machines and filter water used in the papermaking process. "There are three main products areas of the business of AES: shower and spray devices and nozzles; foil blades to remove water from the paper during the papermaking process; and structures that hold foils and filters for straining water utilized in the papermaking process so that it can be reused." . . . Plaintiff occupies a dominant place in the national papermaking market.

Corlew was hired by AES in July of 1995 as a machinist. Nearly three years later, in April of 1998, he was promoted to a position in the engineering department. In that capacity, Corlew would be provided with a refined customer order, made by an AES engineer and a customer, and it was his job to create a "manufacturing drawing (with instructions and a bill of materials—i.e., the 'recipe') for the order." In order to create such a drawing, Corlew used a computer assisted drawing machine. The computer assisted drawing machine contained "the recipes for the AES products and generate[d] drawings and bills of materials." Plaintiff contends that AES took steps to protect the secrecy of the information contained in the computer assisted drawing machine. In June of 1999, Corlew was promoted again and now had the responsibility to assist the engineers in designing customer orders. Corlew was terminated in the summer of 2001.

During his tenure at AES, Corlew had access to plaintiff's "recipes" ("design specifications") for its products and to plaintiff's computerized database of prospective customers, which includes "names, addresses, and e-mails for all potential customers in

the papermaking industry, including the names of individuals key to these companies' purchasing orders." Plaintiff contends that one of Corlew's final assignments while at AES was to coordinate this database with the database containing information on all current AES customers and their purchasing histories. Corlew had access to AES's entire computer system, which apparently included both databases as well as the computer assisted drawing machine containing the design specifications. At the end of his employment, Corlew's access to AES's computer system was terminated, and his laptop was wiped clean of AES information, and/or access thereto. Throughout his employment with AES, Corlew was subject to a signed confidentiality agreement, in which he agreed not to disclose or use to his benefit any confidential information, including information about AES customers. . . .

Near the end of April of 2002, Corlew began working for Seeley, "developing and marketing a new line of Seeley products for sale to the pulp and papermaking industry." According to defendants, "[t]he products comprising this new line were reverse-engineered from existing products, freely available in the public domain and unprotected by published patent applications, in-force patents or trade secrets." According to plaintiff, the only way defendants could have developed and put out for sale this new line of products in so short of time is not by reverse engineering, which it alleges is time consuming, expensive, and requiring technical skill, but by Corlew's theft of AES's trade secrets—its design specifications and the customer databases—and infringement of its trademark.

Specifically, claims plaintiff, using as a frame of reference defendants' own expert, it would take defendants 1.7 years to reverse engineer all of plaintiff's nozzles. Defendants maintain, however, that only a small fraction, not all, of plaintiff's products were reverse engineered. The parties also dispute how much time would be associated with the manufacturing process. . . .

III. Discussion

Plaintiff has moved for preliminary injunctive relief pursuant to FED. R. CIV. P. 52(a). . . .

In order for plaintiff to successfully move for a preliminary injunction, it must demonstrate: 1) a likelihood of irreparable harm if the injunction is not granted; and 2) either a likelihood of success on the merits of its claims, or the existence of serious questions going to the merits of its claims plus a balance of the hardships tipping decidedly in its favor. Bery v. City of New York, 97 F.3d 689, 693–94 (2d Cir. 1996). Because the issuance of a preliminary injunction is a drastic remedy, plaintiff is required to make a "clear showing" of these requirements. See Mazurek v. Armstrong, 520 U.S. 968, 972 (1997). . . .

B. TRADE SECRET THEFT/MISAPPROPRIATION

. . .

1. Likelihood of Success on the Merits

To establish misappropriation of a trade secret, a plaintiff must prove: 1) that "it possessed a trade secret; and 2) that defendants are using that trade secret in breach of

an agreement, confidence, or duty, or as a result of discovery by improper means." *Integrated Cash Management Services, Inc. v. Digital Transactions, Inc.*, 920 F.2d 171, 173 (2d Cir. 1990); *see also Carpetmaster of Latham v. Dupont Flooring Systems*, 12 F.Supp.2d 257, 261 (N.D.N.Y. 1998). . . .

b. Design Specifications

Secrecy again takes center stage and is dispositive when determining whether plaintiff's product design specifications are entitled to trade secret protection for the purposes of obtaining preliminary injunctive relief. If secrecy is lost when a product is placed on the market, there is no trade secret protection. See LinkCo, 230 F.Supp.2d at 498–99 (collecting cases). The primary issue with respect to this alleged trade secret is whether plaintiff's products could be reverse engineered in the time span between Corlew's hiring at Seeley and defendants' marketing and putting out their products for sale.[11] As will be shown, infra, the parties disagree about every material fact that goes toward resolving this debate."

Trade secret law . . . does not offer protection against discovery by . . . so-called reverse engineering[.]" *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 476 (1974). However, "the term 'reverse engineering' is not a talisman that may immunize the theft of trade secrets." *Telerate Systems, Inc. v. Caro*, 689 F.Supp. 221, 233 (S.D.N.Y. 1988). The relevant inquiry is whether the means to obtain the alleged trade secret were proper or "honest," as opposed to being obtained by virtue of a confidential relationship with an employer. *See Franke v. Wiltschek*, 209 F.2d 493, 495 (2d Cir. 1953); *Telerate*, 689 F.Supp. at 233. Reverse engineering a product to determine its design specifications is, therefore, permissible so long as the means used to get the information necessary to reverse engineer is in the public domain, and not through the confidential relationship established with the maker or owner of the product.

One court, not satisfied with this distinction, has held that even where a product is out in the public domain, and was thus subject to being reverse engineered by a purchaser, trade secret status remains intact because the defendant's former employment with the plaintiff was the only basis for the defendants being "able to select particular items from a vast sea of public information." *See Monovis, Inc. v. Aquino*, 905 F.Supp. 1205, 1228 (W.D.N.Y. 1994). This view of the law would effectively eviscerate any benefit reverse engineering would provide in the preliminary injunction analysis as applied to trade secrets, forestall healthy notions of commercial competitiveness, and heavily contribute to an inert marketplace where products can only be developed and sold under an impenetrable cloak of originality. It is therefore rejected.

Plaintiff has presented no evidence that the means used by defendants to obtain the alleged trade secret were improper or dishonest. In short, it has no evidence Corlew actually stole the design specifications. It instead necessarily relies upon an inference—that the only way defendants could develop, market, and sell their products in so short

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[11] Reverse engineering is the process by which an engineer takes an already existing product and works backward to re-create its design and/or manufacturing process." *United Technologies Corp. by Pratt & Whitney v. F.A.A.*, 102 F.3d 688, 690 n.1 (2d Cir. 1996).

of time is if Corlew stole the design specification information—that is, as far as the evidence to this point shows, is [sic] unjustified. Plaintiff does not seem to argue that reverse engineering is impossible, just that it would take a great deal of time, skill, and expense, and that the lack thereof demonstrates that the design specifications must have been stolen. Defendants have argued that the plaintiff's products were simple, consisting of non-technical and few parts, that reverse engineering would take little time, and that, in any event, they only reverse engineered a small fraction, not all, of plaintiff's products. Plaintiff has not sufficiently rebutted these contentions. Thus, because plaintiff has failed to make a clear showing that defendants improperly obtained and reverse engineered its products, trade secret protection at this stage of the litigation is improper. *See, e.g., Bridge C.A.T. Scan Associates v. Technicare Corp.*, 710 F.2d 940, 946–47 (2d Cir. 1983) (lack of evidence that means to receive information that plaintiff claimed was trade secret were improper mandated denying preliminary injunctive relief).

COMMENTS AND QUESTIONS

1. Why is reverse engineering lawful? If, as the UTSA Commissioners suggested, one purpose of trade secret law is to promote standards of commercial ethics, doesn't there seem to be something wrong with taking apart a competitor's product in order to figure out how to copy it? Does reverse engineering benefit only those competitors who are not smart enough to develop ideas or products for themselves?

In *Chicago Lock Co. v. Fanberg*, 676 F.2d 400 (9th Cir. 1982), the manufacturer of cylindrical locks sued a locksmith who compiled a list of master key codes for the plaintiff's locks by soliciting information from those who had picked the locks on behalf of their clients. The court rejected the claim, holding that the owners of the individual locks had the right to open them, and therefore to authorize others to reverse engineer the key codes:

> A lock purchaser's own reverse-engineering of his own lock, and subsequent publication of the serial number-key code correlation, is an example of the independent invention and reverse engineering expressly allowed by trade secret doctrine.[4] Imposing an obligation of nondisclosure on lock owners here would frustrate the intent of California courts to disallow protection to trade secrets discovered through "fair and honest means." See id. Further, such an implied obligation upon the lock owners in this case would, in effect, convert the Company's trade secret into a state-conferred monopoly akin to the absolute protection that a federal patent affords. Such an extension of California trade secrets law would certainly be preempted by the federal scheme of patent regulation.

[4] If a group of lock owners, for their own convenience, together published a listing of their own key codes for use by locksmiths, the owners would not have breached any duty owed to the Company. Indeed, the Company concedes that a lock owner's reverse engineering of his own lock is not "improper means."

> Appellants, therefore, cannot be said to have procured the individual locksmiths to breach a duty of nondisclosure they owed to the Company, for the locksmiths owed no such duty.

Isn't protection of lock codes often in the public interest? As we will see in Chapter IV(D)(1)(iv)(b), the Digital Millennium Copyright Act prohibits circumvention of digital locks (and "trafficking" in lock codes) to protect copyrighted works from unauthorized distribution.

2. Consider the recurring question of whether the parties can agree to override trade secret law. Suppose that the owner of a trade secret includes in a license or sale contract a provision prohibiting the buyer from reverse engineering the product. Is that contractual provision enforceable? The courts are split. *Compare SAS Institute v. World Programming Ltd.*, 874 F.3d 370 (4th Cir. 2017) (enforcing contract that barred reverse engineering, albeit between sophisticated businesses), *and K & G Oil Tool & Serv. Co. v. G & G Fishing Tool Serv.*, 158 Tex. 94, 314 S.W.2d 782, 785–86 (1958) (contract preventing disassembly of tools to protect trade secrets was enforceable), *with Vault Corp. v. Quaid Software Ltd.*, 847 F.2d 255, 265–67 (5th Cir. 1988) (contract provision prohibiting reverse engineering of software void as against public policy); *Aqua Connect, Inc. v. Code Rebel, Inc.*, 2012 WL 469737 (C.D. Cal. Feb. 13, 2012) ("the mere presence of the EULA does not convert reverse engineering into an 'improper means' within the definition of California trade secret law.").

3. Trade secret law does not protect owners against legitimate purchasers who discover the secret through reverse engineering. But does the possibility that a product might be reverse engineered foreclose any trade secret protection? Recall *Data General Corp. v. Grumman Systems Support Corp.*, 825 F.Supp. 340 (D. Mass. 1993), where the court upheld a jury's verdict that Grumman had misappropriated trade secrets contained in object code form in Data General's computer program, despite the fact that many copies of the program had been sold on the open market. The court reasoned:

> With the exception of those who lawfully licensed or unlawfully misappropriated MV/ADEX, Data General enjoyed the exclusive use of MV/ADEX. Even those who obtained MV/ADEX and were able to use MV/ADEX were unable to discover its trade secrets because MV/ADEX was distributed only in its object code form, which is essentially unintelligible to humans.

Id. at 359 (emphasis in original). The court noted that Data General took significant steps to preserve the secrecy of MV/ADEX, requiring that all users of the program sign licenses agreeing not to disclose the program to third parties. Under this decision, a defendant may have to prove that they had some sort of legitimate access to the plaintiff's information—for example, by demonstrating that they reverse engineered it from a publicly available product—even though the product containing the secret is widely distributed.

Similarly, in *Reingold v. Swiftships*, 126 F.3d 645 (5th Cir. 1997), the court rejected a claim that a boat hull mold could not be a trade secret because it could readily be

reverse engineered. While reverse engineering may protect one who engages in it, the court held, it does not protect those who actually acquire the secret by improper means. Should ease of reverse engineering be a measure of whether information is "readily ascertainable"? Should it matter whether the reverse engineering is very difficult or easy enough that any competitor could do it? how many firms have actually reverse engineered the product? If reverse engineering is sufficiently easy, it may be that there is simply no secret to protect. In that case, not only the reverse engineer but anyone who obtains the secret would not face trade secret liability, even if they obtained it by improper means.

The *Data General* cases suggest that reasonable efforts to protect the secrecy of an idea contained in a commercial product—such as locks, black boxes, or the use of unreadable code—may suffice to maintain trade secret protection even after the product itself is widely circulated. Does this result make sense? For a different approach, *see Videotronics v. Bend Electronics*, 564 F.Supp. 1471, 1476 (D. Nev. 1983) (holding that software cannot be a trade secret if it is publicly distributed and can be readily copied).

4. If a company is looking for a piece of information—say, the solution to a given technical problem—the company should be allowed free access to information in the public domain. The reason is that minimizing the search costs of the company is a social good, consistent with some level of protection for the prior investment of others. In a similar vein, suppose the costs of obtaining that information from the public domain are very high, but the costs (to the company) of stealing it from a competitor are very low. Should society punish—and therefore deter—the theft? Wouldn't that simply create an inefficiency, since the company could get the information but would have to incur greater search costs? *Cf.* David Friedman, William Landes & Richard Posner, *Some Economics of Trade Secret Law*, 5 J. ECON. PERSPECTIVES 61, 62 (1991) (arguing that trade secret law prohibits only costly means of obtaining competitors' information, while encouraging cheaper forms of obtaining information such as reverse engineering). Are there other considerations that militate in favor of requiring such a search?

5. *Clean Rooms and Independent Creation*. In *Snapkeys Ltd. v. Google LLC*, 539 F.Supp.3d 1040, 1052 (N.D. Cal. 2021), the court rejected a claim that Google took the plaintiff's code for a smartwatch keyboard. The court found that Google "presents undisputed evidence of independent creation. Google engineers who worked on the code for Google's keyboard application for smartwatches never saw the two smartwatches." *See also Mann v. Columbia Pictures*, 128 Cal.App.3d 628, 650 (1982) (independent creation was a defense because there was no evidence defendant screenwriters had seen the plaintiff's script).

PROBLEMS

Problem II-13. Atech and Alpha both manufacture complex medical devices used in diagnosing a variety of ailments. These devices are sold almost exclusively to hospitals since they cost in excess of $100,000 each. There are several hundred Atech devices currently in use in hospitals throughout the country. Atech, which claims a trade

secret in the internal workings of its device, carefully monitors the purchasers of its device. Alpha pays a third party to buy a device from Atech without disclosing that it will be given to Alpha. Once it has obtained the device, Alpha disassembles it and studies it in order to compare it to Alpha's own device. In the course of opening it up, Alpha's engineers pick two internal padlocks on the Atech device. When Atech discovers that Alpha has obtained the device, it demands the unit's return, offering to refund the purchase price. Alpha refuses, and Atech sues for misappropriation of trade secrets.

a) Assume that Atech's trade secrets were worth $5 million. Assume further that the padlocks cost $5 each, and that it costs $100 per lock to pick these padlocks. Has Atech taken reasonable precautions to preserve its secrets? What other security measures must Atech take—and at what cost—both to deter Alpha (and others) from reverse engineering and to preserve its secrecy? Does Atech's sale of the products on the open market automatically preclude a finding of secrecy?

b) Assume Atech has presented the buyer of the machine with a contract that licenses (rather than sells) the machine, subject to the following restrictions: (i) the buyer is prohibited from disclosing anything she learns during the course of using the machine; (ii) the buyer is prohibited from reselling the machine; and (iii) the buyer is liable for Atech's damages in the event that any third party learns of Atech's secrets from the buyer or the buyer's machine. Is such an agreement enforceable? Would you advise a client thinking of licensing an Atech machine to sign this contract? How would you redraft the agreement to protect the buyer?

c) Assume that after Alpha's engineers picked the padlocks, they gained access to the inner workings of the machine. Assume further that they discovered numerous flaws in the imaging mechanism that caused potentially serious defects in the images (and hence the diagnoses) stemming from the Atech machine. Finally, assume that Alpha's engineers not only fixed these problems but significantly improved on Atech's design and hence the reliability of the machine. Should these facts affect Alpha's liability? Atech's remedy?

Problem II-14. Bonnie Bluenote, a world-famous blues guitarist, is noted for her distinctive sound, which she gets by tuning her guitar specially every time before she plays. Although the guitar itself is a standard professional model, Bonnie's adjustments of settings on the guitar, amplifier, and sound system combine to produce a distinctive sound. Because the sound is so important to her image, Bonnie guards it carefully. While she is tuning her guitar, only band members and close associates are allowed in the room. When she records in a new studio, she has the sound engineers sign nondisclosure agreements.

One day Freddie Fender-Rhodes, a big fan of Bonnie's and a budding bluesman himself, is hanging around outside the studio where Bonnie is recording her newest album. He happens to see an ID tag, worn by all guests in the studio, in the wastebasket. He fills in his name and walks into the studio. The band members and recording

engineers, seeing the tag, let Freddie stay. He observes how Bonnie tunes her guitar, sees the soundboard settings, and makes extensive mental notes.

Five months later, Bonnie is shocked to see in a record store a CD by Freddie titled "The Bonnie Bluenote Sound." Then she discovers that Freddie is planning to publish an article in Blues Guitar magazine revealing the secrets to Bonnie's sound. Does she have any recourse against Freddie? What additional precautions should she have taken?

2. Public Policy Limitation

Courts have long recognized that trade secret protection can "implicate the interest in freedom of expression or advance another significant public interest," RESTATEMENT (THIRD) OF UNFAIR COMPETITION, §40, comment c, and recognized a limited privilege to disclose trade secrets. *See* DAVID W. QUINTO & STUART H. SINGER, 1 TRADE SECRETS: LAW AND PRACTICE §3.02; 1 MELVIN JAGER, TRADE SECRETS LAW §3:14.

The Restatement provides that the exception

> depends upon the circumstances of the particular case, including the nature of the information, the purpose of the disclosure, and the means by which the actor acquired the information. A privilege is likely to be recognized, for example, in connection with the disclosure of information that is relevant to public health or safety, or to the commission of a crime or tort, or to other matters of substantial public concern.

§40, comment c.

This framing of a public policy exception, however, offers relatively little clarity or solace to those who seek to report corporate wrongdoing. *See* Peter S. Menell, *Tailoring a Public Policy Exception to Trade Secret Protection*, 105 CAL. L. REV. 1, 31–36 (2017). Nearly all businesses require their employees to sign NDAs as a condition of employment. Such agreements are essential to being able to establish the reasonable precautions necessary to secure trade secret protection. They are also broad and strict. What if an employee uncovers evidence of regulatory violations, fraud, or even criminal violations at their company? Do they violate their NDA by consulting an attorney or disclosing documents revealing the illegal activity to the government?

At first blush, RESTATEMENT (THIRD) OF UNFAIR COMPETITION, §40, comment c, appears to provide some leeway to report the illegal activity. The murky contours of the public policy limitation, however, would give a potential whistleblower pause. How can the employee evaluate "the circumstances of the particular case, including the nature of the information, the purpose of the disclosure, and the means by which the actor acquired the information" without consulting an attorney? At a minimum, its characterization as a defense that turns on a case-by-case balancing of potentially subjective factors means that an employee or contractor who divulges proprietary information to the government could be sued for their breach of an NDA. The prospective whistleblower would likely have to consult an attorney, with the attendant costs, and the very act of discussing the allegedly illegal activity with the lawyer could

create exposure for violating the NDA. More generally, many prospective whistleblowers might not even be aware of the public policy exception to their NDA.

Cafasso v. Gen. Dynamics C4 Sys., 637 F.3d 1047 (9th Cir. 2011), illustrates the Catch-22 that existed for whistleblowers prior to enactment of the DTSA. While working as a Chief Scientist at a government aerospace contractor, Mary Cafasso became aware of corporate decisions that she believed to be in violation of the company's obligations under its government contracts. Her reporting of these concerns internally went unheeded. Upon learning that her position was being eliminated, she hurriedly downloaded numerous confidential files that she believed could support her suspicion. She subsequently filed a False Claims Act action against her former employer. Her employer learned of Cafasso's removal of proprietary documents and filed suit against her in state court for breach of contract, misappropriation of trade secrets, and conversion. Notwithstanding that Cafasso never disclosed the confidential files to anyone other than her counsel and the government under seal, the court ultimately determined that Cafasso was not immunized by a public policy limitation and ordered her to pay $300,000 in attorneys' fees for the breach of contract action.

On appeal, the Ninth Circuit declined to adopt a public policy exception in a case involving "vast and indiscriminate appropriation" of confidential files, even for the purpose of reporting allegedly illegal activity to her attorney and the government. The court emphasized the overbreadth of the document retrieval, notwithstanding that Cafasso was under substantial time pressure in gathering the documents. The court expressed concern about the sensitivity of the information, despite the facts that it was all information to which Cafasso was authorized to view and that she limited disclosure to her attorney (who was also duty-bound to protect the information) and the government through a sealed court filing.

Given the exigency surrounding whistleblower situations, how many employees are willing to run the risk and exposure of a trade secret suit? Whistleblowers jeopardize their career, financial security, emotional stability, health insurance, and social community. Many struggle to find other positions in their field. See Menell, 105 CAL. L. REV. at 36–44. As the authors of an empirical study examining corporate fraud at large U.S. companies note, "[t]he surprising part [of whistleblowing] is not that most employees do not talk; it is that some talk at all." Alexander Dyck, Adair Morse & Luigi Zingales, *Who Blows the Whistle on Corporate Fraud?*, 65 J. FIN. 2213, 2245 (2010).

Congress addressed these concerns as part of the DTSA. Section 7 expressly immunizes whistleblowers from trade secret liability so long as they limit disclosure to trusted intermediaries (attorneys and the government through confidential channels). The legislative history explains that the provision aims to counteract the concern that corporations can "bully" and deter potential whistleblowers through the mere threat of costly trade secret litigation. *See* 162 CONG. REC. S1636 (2016). Furthermore, Congress included a requirement that trade secret owners provide notice of this immunity in nondisclosure agreements with employees and contractors.

(b) Immunity from Liability for Confidential Disclosure of a Trade Secret to the Government or in a Court Filing

(1) IMMUNITY.—An individual shall not be held criminally or civilly liable under any Federal or State trade secret law for the disclosure of a trade secret that—

(A) is made—

(i) in confidence to a Federal, State, or local government official, either directly or indirectly, or to an attorney; and

(ii) solely for the purpose of reporting or investigating a suspected violation of law; or

(B) is made in a complaint or other document filed in a lawsuit or other proceeding, if such filing is made under seal.

(2) USE OF TRADE SECRET INFORMATION IN ANTI-RETALIATION LAWSUIT.—An individual who files a lawsuit for retaliation by an employer for reporting a suspected violation of law may disclose the trade secret to the attorney of the individual and use the trade secret information in the court proceeding, if the individual—

(A) files any document containing the trade secret under seal; and

(B) does not disclose the trade secret, except pursuant to court order.

(3) NOTICE.—

(A) IN GENERAL.—An employer shall provide notice of the immunity set forth in this subsection in any contract or agreement with an employee that governs the use of a trade secret or other confidential information.

(B) POLICY DOCUMENT.—An employer shall be considered to be in compliance with the notice requirement in subparagraph (A) if the employer provides a cross-reference to a policy document provided to the employee that sets forth the employer's reporting policy for a suspected violation of law.

(C) NON-COMPLIANCE.—If an employer does not comply with the notice requirement in subparagraph (A), the employer may not be awarded exemplary damages or attorney fees under subparagraph (C) or (D) of section 1836(b)(3) in an action against an employee to whom notice was not provided.

(D) APPLICABILITY.—This paragraph shall apply to contracts and agreements that are entered into or updated after the date of enactment of this subsection.

(4) EMPLOYEE DEFINED.—For purposes of this subsection, the term 'employee' includes any individual performing work as a contractor or consultant for an employer.

(5) RULE OF CONSTRUCTION.—Except as expressly provided for under this subsection, nothing in this subsection shall be construed to authorize, or limit liability for, an act that is otherwise prohibited by law, such as the unlawful access of material by unauthorized means.

DTSA §7, *codified at* 18 U.S.C. §1833.

COMMENTS AND QUESTIONS

1. Could someone who wishes to steal a trade secret abuse this protection? How?

2. The DTSA immunity provision is built upon the idea that lawyers and the government can serve as "trusted intermediaries." *See* Menell, *Tailoring a Public Policy Exception to Trade Secret Protection*, 105 CAL. L. REV. at 48–55. Federal law provides that

> Whoever, being an officer or employee of the United States or . . . any person acting [as an agent thereof including an employee of a private sector organization who is assigned to a government agency] publishes, divulges, discloses, or makes known in any manner or to any extent not authorized by law any . . . trade secrets . . . shall be fined under this title, or imprisoned not more than one year, or both; and shall be removed from office or employment.

18 U.S.C. §1905. This provision is essential to the operation of the federal courts and many agencies, such as the Food and Drug Administration and the Patent and Trademark Office, which routinely handle confidential information.

3. Would the DTSA immunity provision have assisted Edward Snowden in his effort to blow the whistle on the National Security Agency's surveillance activities? As Professor Menell cautions, the sealed disclosure/trusted intermediary safe harbor depends critically upon the trustworthiness of government officials to whom illegal activity is reported. Corrupting forces can influence government as well as private actors. President Nixon approved the bugging of his political rivals. Contractors can develop cozy relationships with the agencies with whom they work. The revolving door of hiring government officials as well as lobbying can undermine an agency's objectivity. Various anticorruption laws, such as the Ethics in Government Act of 1978, counteract those forces. *See generally* ROBERT G. VAUGHN, THE SUCCESSES AND FAILURES OF WHISTLE-BLOWER LAWS (2012). Nonetheless, a government agency can be the source of the misconduct. The sealed disclosure/trusted intermediary safe harbor is ill-equipped to address such challenges, although it contributes to general awareness of whistleblowing and anti-corruption policies.

4. *Construing Whistleblower Immunity*. The first court to apply the whistleblower immunity provision treated the safe harbor as an affirmative defense. *See Unum Corp. v. Loftus*, 220 F.Supp.3d 143 (D. Mass. 2016). Without providing any specific evidence that Loftus sought to use the trade secret information for any purpose other than to report or investigate a suspected violation of law, Unum Group challenged Loftus's invocation of immunity and propounded costly discovery into a wide range of issues. The court declined Loftus's motion to dismiss the trade secret misappropriation claim, holding that discovery was required to determine whether the information was taken only for permissible purposes. In so doing, the court exposed Loftus to the full discovery and other burdens and risks of trade secret litigation—the very precarious circumstance that Congress sought to avoid. *See Saucier v. Katz*, 533 U.S. 194 (2001) (stating that immunity is not a "mere defense" to liability but an "immunity from suit," and stressing that immunity issues must be resolved as early as possible based on the public policies

animating the grant of immunity). It also undermined government investigatory policies. The False Claims Act, for example, authorizes whistleblowers to file lawsuits in the name of the government under seal so as to enable the government to conduct its investigation of false claims without tipping off the targets of the investigation. as to protect the confidentiality of the government's investigation. *See* 31 U.S.C. §3730(b)(2); *State Farm Fire & Cas. Co. v. United States ex rel. Rigsby*, 580 U.S. 26, 34–35 (2016). *See* Peter S. Menell, *Misconstruing Whistleblower Immunity Under the Defend Trade Secrets Act*, 1 NEV. L. REV. F. 92, 97 (2017) (contending that where an employee asserts under oath that they disclosed company documents to government officials or an attorney in confidence solely for the purpose of reporting or investigating a suspected violation of law, the DTSA whistleblower regime requires the employer to come forward with concrete evidence that the employee has shared trade secret information outside of the protected categories or for an impermissible purpose; and that absent such evidence, the court should dismiss the trade secret case without prejudice).

5. Is there a risk that the mere assertion of whistleblowing could provide cover to an employee who actually intended to misuse trade secrets? Are there countervailing considerations that militate against this risk? How should the burden of proof be allocated where a defendant invokes the whistleblower immunity provision? In *First Energy Corp. v. Pircio*, 524 F.Supp.3d 732 (N.D. Ohio 2021), the court dismissed the trade secret suit where the pleadings showed that the defendant only shared confidential information with his counsel and a government agency. *See id*. at 738 (explaining that "discovery is not a fishing expedition, and Plaintiffs' speculation about what discovery may reveal does not suffice to raise the right to relief they claim above the speculative level," *citing Twombly*, 550 U.S. at 555, and *Iqbal*, 556 U.S. at 678–79). But how should courts handle situations where the defendant seeks to invoke the immunity provision without explaining the details? *See* PETER S. MENELL, ET AL., TRADE SECRET CASE MANAGEMENT JUDICIAL GUIDE §3.5.2.2 (2023).

6. Should the whistleblower immunity be broader, allowing for public disclosure of trade secrets in some circumstances? David Levine argues that some enterprises, like companies that make voting machines, are so important to the public that the way they work should be transparent. *See* David S. Levine, *Secrecy and Unaccountability: Trade Secrets in Our Public Infrastructure*, 59 FLA. L. REV. 135 (2007).

7. Professor Deepa Varadarajan argues for a broader right to make beneficial uses of a secret, for instance, to improve on the original product or to protect public health. *See* Deepa Varadarajan, *Trade Secret Fair Use*, 83 FORDHAM L. REV. 1401 (2014). Would such a regime be feasible?

8. *Breach of Non-Disclosure Agreement to Report Allegedly Illegal Activity and the Public Policy Bar on Contract Enforcement*. Notwithstanding the general enforceability of NDAs, a breach of NDA action against a person who reports allegedly illegal information to the government (or consults with an attorney regarding such matters) fits squarely within the public policy exception to contract enforcement. Courts generally bar enforcement of contracts and contract terms that are contrary to public policy and a growing list of statutes and agency rulings make the enforcement—or in some cases,

even the inclusion of such terms in contracts—unlawful. *See* RESTAT. (SECOND) CONTRACTS §178. The DTSA whistleblower immunity provision as well as whistleblower statutes (such as the False Claims Act) and state public policies provide a strong foundation for whistleblowers to defend breach of NDA cause of actions targeting reporting of suspected illegal activity on the ground that such lawsuits are against public policy. *See, e.g.*, CAL. LABOR CODE §1102.5(b) (forbidding retaliation against an employee who discloses "information to a government or law enforcement agency, where the employee has reasonable cause to believe that the information discloses a violation of state or federal statute, or a violation or noncompliance with a state or federal rule or regulation"); *See* PETER S. MENELL, ET AL., TRADE SECRET CASE MANAGEMENT JUDICIAL GUIDE §2.8.1.1 (2023).

PROBLEMS

Problem II-15. Amalia Garcia has worked over the past three years as a software engineer at AutoDrive, a software company based in Mountain View, California, that is developing artificial intelligence software for autonomous vehicles. When she joined the company in 2018, she signed the following employment agreement:

> ***Nondisclosure Agreement****: During the time of my employment by AutoDrive, I will not disclose or use any Confidential Information except to the extent I am required to disclose or use such Confidential Information in the performance of my assigned duties; and I will use my best efforts to safeguard the Confidential Information and protect it against disclosure, misuse, espionage, loss and theft. After the termination of my employment at AutoDrive, I will not use any Confidential Information or disclose any Confidential Information to any person or entity who is not specifically authorized by AutoDrive to receive it.*

AutoDrive employs strict controls over access to its facilities, servers, and software. As part of Amalia's work, she had access to AutoDrive's proprietary source code, database for developing its autonomous driving software, and testing data.

Soon after Amalia was hired, the U.S. Department of Defense entered into a contract with AutoDrive to develop software for military vehicles. The contract required that AutoDrive meet quarterly safety tests on a series of obstacle road tests intended to show the progression of AutoDrive's military vehicle autonomous driving software's performance. Amalia became aware that managers fabricated some of the testing data to inflate the efficacy of the software and to avoid the military withholding progress payments. She raised this concern with her bosses, who told her not to worry because the senior engineers on the team were confident that they could improve the software sufficiently to meet the final testing criteria at the conclusion of the contract. Her bosses instructed her to keep quiet about the problem.

Amalia became increasingly worried about AutoDrive's dishonesty and how it might reflect on her if this deception were revealed. She debated whether to report this problem to the government.

Her anxiety was somewhat alleviated last week when Tesla reached out to her and offered her a position on its autonomous driving team. She had interviewed with Tesla before she was hired by AutoDrive, but was not offered a job at that time. Amalia accepted the Tesla position and tendered her resignation from AutoDrive.

Before she exited AutoDrive, Amalia copied the AutoDrive software and testing data onto a memory storage device and has kept the device secure at her home. AutoDrive detected her copying of its source code and data just prior to her departure. The company filed a trade secret complaint against her alleging trade secret misappropriation and violation of her employment agreement. She comes to you for advice.

(a) Does Amalia's employment agreement comply with the Defend Trade Secrets Act? Why or why not? If not, what are the ramifications?

(b) Can AutoDrive succeed in a suit against her for trade secret misappropriation?

(c) What other advice would you provide her about minimizing her legal exposure and opposing AutoDrive's lawsuit?

Problem II-16. Sarah Kopple works at Complex Systems Inc. (CSI), a software forensics company that develops expert artificial intelligence software programs for law enforcement agencies. These tools, which purport to predict recidivism rates of criminal defendants, are routinely used in criminal sentencing recommendations and parole hearings. Sarah is concerned that this software is prone to disparate racial impacts due to the limitations of the demographic data and models used. CSI carefully guards this software and data as trade secrets. All CSI employees have signed nondisclosure agreements.

Sarah comes to you for legal advice about her concerns that CSI software might inadvertently produce disparate impacts in violation of civil rights laws. Can she share CSI's proprietary software and data with you and the government in an effort to determine whether these programs violate civil rights? What if you were defending a client being sentenced using the CSI software? Can she or you bring this information to the attention of newspaper reporters?

E. AGREEMENTS TO KEEP SECRETS

As we have seen, trade secret law imposes certain limitations on the owner of a trade secret. To qualify for trade secret protection, information must not be generally known, must be valuable, and must not be disclosed. But can an owner of information avoid those restrictions by requiring others to agree to keep the information secret, whether or not the information meets the requirements for protection? The question is fundamental in intellectual property law.

Licenses are generally considered good from an economic standpoint because they promote efficiency. The company (or individual) that develops a new product might not be in the best position to market it, particularly if the invention has uses in several different fields. Without the ability to license the technology, the inventor would either

have to sell the product directly, use it incompletely or inefficiently, enter a new field itself, or forgo commercializing the technology. Private contracting allows the market to reorder itself efficiently and still determine the appropriate reward for invention. But can or should a trade secret licensing agreement continue to be enforceable after the trade secret has become public through no fault of the licensee?

Warner-Lambert Pharmaceutical Co. v. John J. Reynolds, Inc.
United States District Court for the Southern District of New York
178 F.Supp. 655 (S.D.N.Y. 1959)

BRYAN, DISTRICT JUDGE.

Plaintiff sues under the Federal Declaratory Judgment Act, 28 U.S.C. §§2201 and 2202, for a judgment declaring that it is no longer obligated to make periodic payments to defendants based on its manufacture or sale of the well known product "Listerine," under agreements made between Dr. J. J. Lawrence and J. W. Lambert in 1881, and between Dr. Lawrence and Lambert Pharmacal Company in 1885. Plaintiff also seeks to recover the payments made to defendants pursuant to these agreements since the commencement of the action.

Plaintiff is a Delaware corporation which manufactures and sells Listerine, among other pharmaceutical products. It is the successor in interest to Lambert and LambertPharmacal Company which acquired the formula for Listerine from Dr. Lawrence under the agreements in question. Defendants are the successors in interest to Dr. Lawrence. . . .

For some seventy-five years plaintiff and its predecessors have been making the periodic payments based on the quantity of Listerine manufactured or sold which are called for by the agreements in suit. The payments have totaled more than twenty-two million dollars and are presently in excess of one million five hundred thousand dollars yearly. . . .

[J.J. Lawrence developed the formula for Listerine in 1880. He licensed the secret formula exclusively to Lambert (later Warner-Lambert) in 1881 under a contract which provided that]

> I, Jordan Lambert, hereby agree for myself, my heirs, executors and assigns to pay monthly to Dr. Lawrence, his heirs, executors or assigns, the sum of twenty dollars for each and every gross of said Listerine hereafter sold by myself, my heirs, executors or assigns.

[The amount was reduced by subsequent agreement to $6.00 per gross.]

The agreements between the parties contemplated, it is alleged, "the periodic payment of royalties to Lawrence for the use of a trade secret, to wit, the secret formula for" Listerine. After some modifications made with Lawrence's knowledge and approval, the formula was introduced on the market. The composition of the compound has remained the same since then and it is still being manufactured and sold by the plaintiff.

It is then alleged that the "trade secret" (the formula for Listerine) has gradually become a matter of public knowledge through the years following 1881 and prior to 1949, and has been published in the United States Pharmacopo[e]ia, the National Formulary and the Journal of the American Medical Association, and also as a result of proceedings brought against plaintiff's predecessor by the Federal Trade Commission. Such publications were not the fault of plaintiff or its predecessors. . . .

(1)

The plaintiff seems to feel that the 1881 and 1885 agreements are indefinite and unclear, at least as to the length of time during which they would continue in effect. I do not find them to be so. These agreements seem to me to be plain and unambiguous. . . .

The obligation to pay on each and every gross of Listerine continues as long as this preparation is manufactured or sold by Lambert and his successors. It comes to an end when they cease to manufacture or sell the preparation . . . The plain meaning of the language used in these agreements is simply that Lambert's obligation to pay is coextensive with manufacture or sale of Listerine by him and his successors. . . .

(3)

However, plaintiff urges with vigor that the agreement must be differently construed because it involved the conveyance of a secret formula. The main thrust of its argument is that despite the language which the parties used the court must imply a limitation upon Lambert's obligation to pay measured by the length of time that the Listerine formula remained secret.

To sustain this theory plaintiff relies upon a number of cases involving the obligations of licensees of copyrights or patents to make continuing payments to the owner or licensor, and argues that these cases are controlling here. . . .

. . . [A]ll [these cases hold] is that when parties agree upon a license under a patent or copyright the court will assume, in the absence of express language to the contrary, that their actual intention as to the term is measured by the definite term of the underly ing grant fixed by statute.

It is quite plain that were it not for the patent and copyright features of such license agreements the term would be measured by use. . . .

In the patent and copyright cases the parties are dealing with a fixed statutory term and the monopoly granted by that term. This monopoly, created by Congress, is designed to preserve exclusivity in the grantee during the statutory term and to release the patented or copyrighted material to the general public for general use thereafter. This is the public policy of the statutes in reference to which such contracts are made and it is against this background that the parties to patent and copyright license agreements contract.

Here, however, there is no such public policy. The parties are free to contract with respect to a secret formula or trade secret in any manner which they determine for their own best interests. A secret formula or trade secret may remain secret indefinitely. It

may be discovered by someone else almost immediately after the agreement is entered into. Whoever discovers it for himself by legitimate means is entitled to its use.

But that does not mean that one who acquires a secret formula or a trade secret through a valid and binding contract is then enabled to escape from an obligation to which he bound himself simply because the secret is discovered by a third party or by the general public. I see no reason why the court should imply such a term or condition in a contract providing on its face that payment shall be co-extensive with use. To do so here would be to rewrite the contract for the parties without any indication that they intended such a result. . . .

One who acquires a trade secret or secret formula takes it subject to the risk that there be a disclosure. The inventor makes no representation that the secret is non-discoverable. All the inventor does is to convey the knowledge of the formula or process which is unknown to the purchaser and which in so far as both parties then know is unknown to any one else. The terms upon which they contract with reference to this subject matter are purely up to them and are governed by what the contract they enter into provides.

If they desire the payments or royalties should continue only until the secret is disclosed to the public it is easy enough for them to say so. But there is no justification for implying such a provision if the parties do not include it in their contract, particularly where the language which they use by fair intendment provides otherwise. . . .

COMMENTS AND QUESTIONS

1. The term of trade secret protection is limited, not by a fixed term of years but by the length of time the information remains secret. Indeed, trade secrets become a part of the public domain once secrecy is lost, and their owner cannot prevent even direct copying. It seems odd that contract law would require royalty payments from Warner-Lambert for 80 years (or indeed 160 or more years, as Listerine is still sold commercially), while every other competitor can copy the formula for free.[6] Are there sound reasons for such a rule?

One such reason might be the economic value of freedom of contract. If a party agrees to pay based on something other than an IP right for as long as it uses a product, it is free to do so. *See Nova Chem., Inc. v. Sekisui Plastics Co.*, 579 F.3d 319, 329 (3d Cir. 2009) ("Here, in contrast [to Warner-Lambert], nothing in the License Agreement suggests that the parties intended any ongoing obligations with respect to trade secrets after the 1995 termination of NOVA's obligation to maintain the secrecy of Sekisui's technical information."). Presumably, the amount of the royalty payments as well as their duration will reflect the value of the secret to the buyer, discounted by the likelihood of public disclosure. But the obligation to pay for a patent or copyright expires with the IP right. That is not simply a default rule, as the court suggests. Rather, extending the payment obligation beyond expiration constitutes misuse. *See Meehan v.*

[6] In 2020, the right to continue to receive royalties under the contract sold for $561,000. *See* Ryan Davis, *Rare Listerine Royalty Auction Tied to 1881 Contract Flub*, LAW360 (Jul. 21, 2020) (noting that contract generated $32,000 in royalty payments for 2019).

PPG Indus., 802 F.2d 881, 886 (7th Cir. 1986); *Boggild v. Kenner Prods.*, 776 F.2d 15, 1320– 21 (6th Cir. 1985). Why does contract law allow a party to extend the duration of a trade secret beyond the loss of protection?

2. The *Warner-Lambert* result is controversial. The RESTATEMENT (THIRD) OF UNFAIR COMPETITION takes the position that "[a] promise to refrain from the use or disclosure of commercial information is ordinarily unenforceable unless the information is sufficiently secret to justify the restraint." *See* §41, Comment *d*. Further, the RESTATEMENT notes that "because of the public interest in preserving access to information that is in the public domain, such an agreement will not ordinarily estop a defendant from contesting the existence of a trade secret." §39, Comment *d*. A number of cases support this view, which seems at odds with Warner-Lambert. *See, e.g., Gary Van Zeeland Talent, Inc. v. Sandas*, 267 N.W.2d 242 (Wis. 1978); *Sarkes Tarzian, Inc. v. Audio Devices, Inc.*, 166 F.Supp. 250 (S.D. Cal. 1958), aff'd, 283 F.2d 695 (9th Cir. 1960).

On the other hand, the Federal Circuit has seemingly endorsed the Warner-Lambert approach, holding that the issuance of a patent did not extinguish the confidentiality obligation imposed by a nondisclosure agreement, even though the issuance of the patent destroyed the trade secret that was the basis for the agreement. *See Celleritas Technologies v. Rockwell Int'l Corp.*, 150 F.3d 1354 (Fed. Cir. 1998). The equities in that case might be thought to favor the plaintiff: the patent was held invalid, and so offered the plaintiff no relief against a theft of its technology. *Cf. Aronson v. Quick Point Pencil Co.*, 440 U.S. 257 (1979) (holding that the contract obligated licensee to continue paying (reduced) royalties on an invention even though licensor's patent application had been rejected). But isn't that the risk a trade secret owner takes in deciding to patent (and therefore disclose) her invention? The Seventh Circuit has held that courts had no power to review business nondisclosure agreements for reasonableness, even though employee agreements were subject to a reasonableness requirement. *See IDX Systems v. Epic Systems*, 285 F.3d 581 (7th Cir. 2002). And in *Bernier v. Merrill Air Engineers*, 770 A.2d 97 (Me. 2001), the Maine Supreme Court held that an employee violated a nondisclosure agreement by disclosing information that did not qualify as a trade secret.

3. Should such restrictions be governed by intellectual property law—making them unenforceable—or by contract law, which presumably would enforce them? The answer to that question will determine whether intellectual property laws (including trade secret laws) constitute binding governmental rules balancing competing interests or merely "default" rules that parties may opt to change. In practice, the courts have walked a hazily defined middle line, refusing to hold that intellectual property statutes preempt contracts which alter their terms, but also refusing to enforce certain contracts that go "too far" in upsetting the balance the intellectual property laws have struck. In *Aqua Connect, Inc. v. Code Rebel, Inc.*, 2012 WL 469737 (C.D. Cal. Feb. 13, 2012), Aqua Connect alleged that Code Rebel misappropriated its trade secrets by reverse engineering in violation of an End User License Agreement (EULA) which prohibited reverse engineering. The court dismissed the claim on the ground that California UTSA provides that reverse engineering "shall not be considered improper means." The court

noted that although a breach of the EULA may support a cognizable breach of contract claim, it concluded that "the mere presence of the EULA does not convert reverse engineering into an 'improper means' within the definition of California trade secret law."

4. What remedies are appropriate in a case in which a court enforces a contract that extends beyond the scope of trade secret law?

F. DEPARTING EMPLOYEES

Many of the thorniest issues in trade secret (and contract) law arise when employees leave a company in order either to start their own business or to take a job elsewhere. Such cases present a fundamental clash of rights between an employee's mobility and ability to pursue gainful employment and a former employer's protection of its trade secrets. Judge Adams captures the tradeoff in the following excerpt from *SI Handling Systems v. Heisley*, 753 F.2d 1244 (3d Cir. 1985) (Adams, J., concurring):

> When deciding the equitable issues surrounding the request for a trade secret injunction, it would seem that a court cannot act as a pure engineer or scientist, assessing the technical import of the information in question. Rather, the court must also consider economic factors since the very definition of "trade secret" requires an assessment of the competitive advantage a particular item of information affords to a business. Similarly, among the elements to be weighed in determining trade secret status are the value of the information to its owner and to competitors, and the ease or difficulty with which the information may be properly acquired or duplicated.
>
> While the majority may be correct in suggesting that the trial court need not always "engage in extended analysis of the public interest," the court on occasion must apply the elements of sociology. This is so since trade secret cases frequently implicate the important countervailing policies served on one hand by protecting a business person from unfair competition stemming from the usurpation of trade secrets, and on the other by permitting an individual to pursue unhampered the occupation for which he or she is best suited. "Trade secrets are not . . . so important to society that the interests of employees, competitors and competition should automatically be relegated to a lower position whenever trade secrets are proved to exist." Robison, *The Confidence Game: An Approach to the Law About Trade Secrets*, 25 ARIZ. L. REV. 347, 382 (1983).
>
> These observations take on more force, I believe, when a case such as the present one involves the concept of "know-how." Under Pennsylvania law an employee's general knowledge, skill, and experience are not trade secrets. Thus in theory an employer generally may not inhibit the manner in which an employee uses his or her knowledge, skill, and experience—even if these were acquired during employment. When these attributes of the employee are inextricably related to the information or process that constitutes an employer's competitive advantage—as increasingly seems to be the case in newer, high

> technology industries—the legal questions confronting the court necessarily become bound up with competing public policies.
>
> It is noteworthy that in such cases the balance struck by the Pennsylvania courts apparently has favored greater freedom for employees to pursue a chosen profession. The courts have recognized that someone who has worked in a particular field cannot be expected to forego the accumulated skills, knowledge, and experience gained before the employee changes jobs. Such qualifications are obviously very valuable to an employee seeking to sell his services in the marketplace. A person leaving one employer and going into the marketplace will seek to compete in the area of his or her greatest aptitude. In light of the highly mobile nature of our society, and as the economy becomes increasingly comprised of highly skilled or high-tech jobs, the individual's economic interests will more and more be buffeted by competitive advantage. Courts must be cautious not to strike a balance that unduly disadvantages the individual worker. . . .
>
> In my view a proper injunction necessarily would impose the minimum restraint upon the free utilization of employee skill consistent with denying unfaithful employees an advantage from misappropriation of information. Thus, as I see it, the district court, on remand, should fashion an injunction that extends only so long as is essential to negate any unfair advantage that may have been gained by the appellants.

Id. at 1266–69. The majority opinion in SI Handling partially upheld a finding that two former employees had misappropriated trade secrets, but it vacated an injunction against them in order for the district court to reconsider its scope.

Professor Camilla Hrdy argues that excluding "general knowledge, skill, and experience" from the scope of trade secrets in departing employee cases is an important protection "intended to preserve an employee's right to improve her skills on the job and thereafter transfer those skills to a different job." *See* Camilla Hrdy, *The General Knowledge, Skill, and Experience Paradox*, 60 B.C. L. REV. 1 (2019). She notes that this requires a balancing not present in other trade secrets cases. It's not enough to decide whether information is generally known to the world at large. If that information is part of an employee's learning of skills, the employee should be free to use it even if others don't know it.

Departing employee cases constitute over two-thirds of all trade secret cases. See David S. Almeling, et al., *A Statistical Analysis of Trade Secret Litigation in State Courts*, 46 GONZ. L. REV. 57, 60 (2011). This section explores the thorny issues surrounding departing issues. Section 1 discusses restrictions on disclosure of a company's information (trade secret and otherwise) following employment. Section 2 addresses ownership of employee inventions. Section 3 examines the enforceability of nonsolicitation agreements. Section 4 discusses the enforceability of noncompetition agreements.

1. Confidentiality and Use of Trade Secrets

Nearly all companies require their employees to sign a confidentiality (or nondisclosure) agreement. These agreements generally recite that the employee will receive confidential information during their employment, and that they undertake to keep such information secret and not to use it for anyone other than the employer. Such agreements are essential to the establishment of trade secret protection—serving as a relatively low-cost effort to prevent disclosure—and are generally enforceable against current and former employees. Thus, there is a confidential relationship in most employee cases.

Even if there is no express nondisclosure agreement, some courts imply one. In *Winston Research Corp. v. 3M Co.*, 350 F.2d 134 (9th Cir. 1965), the court dismissed an argument that an employee owed no obligation of confidentiality in his own inventions:

> Winston argues that information is protected from disclosure only if communicated to the employee by the employer who is seeking protection, and that the information involved in this case was not disclosed by [3M] to the employees subsequently hired by Winston, but rather was developed by these employees themselves, albeit while employed by [3M].
>
> We need not examine the soundness of the rule for which Winston contends, or its applicability to a case such as this in which a group of specialists engaged in related facets of a single development project change their employer. . . . [A]n obligation not to disclose may arise from circumstances other than communication in confidence by the employer. It may also rest upon an express or implied agreement. In the present case, an agreement not to disclose might be implied from [3M]'s elaborate efforts to maintain the secrecy of its development program, and the employees' knowledge of those efforts and participation in them. In any event, [3M] and its employees entered into express written agreements binding the latter not to disclose confidential information, and these agreements did not exclude information which the employee himself contributed.

Id. at 140.

Employers sometimes attempt to limit an employee's use of information that does not constitute a trade secret. This issue parallels the problem of restrictive license provisions raised in Section E—are employers limited by the intellectual property laws to protecting only trade secrets or are they free to impose additional restrictions on their employees? Courts struggle with this issue, with the majority concluding that "reasonable" contract restrictions on use or disclosure of information by employees are enforceable even in the absence of a protectable trade secret. *See Bernier v. Merrill Air Engineers*, 770 A.2d 97 (Me. 2001); 12 ROGER MILGRIM, MILGRIM ON TRADE SECRETS §3.05[1][a], at 3-209 to 3-210. Many such restrictions, however, are subject to the public policy limits discussed below. "Overly broad nondisclosure agreements, while not specifically preventing an employee from entering into competition with the former

employer, raise the same policy concerns about restraining competition as noncompete clauses" and must be reasonably limited in time and scope. *See TLS Mgmt. & Mktg. Servs. v. Rodriguez-Toledo*, 966 F.3d 46, 57-58 (1st Cir. 2020) (invalidating nondisclosure agreement purporting to prohibit "information that 'is not in fact confidential'" (citation omitted)); *see also Brown v. TGS Mgmt. Co.*, 271 Cal.Rptr. 303 (Ct. App. 2020); *Nagler v. Garcia*, 370 F.Appx. 678, 681 (6th Cir. 2010); *Assured Partners v. Schmitt*, 44 N.E.3d 463, 475-76 (Ill. Ct. App. 2015).

As part of its effort to ban non-compete agreements, the Federal Trade Commission has also targeted overboard NDAs, providing that "[a] non-disclosure agreement between an employer and a worker that is written so broadly that it effectively precludes the worker from working in the same field after the conclusion of the worker's employment with the employer [might be] a de facto non-compete clause." *See* Federal Trade Commission, FTC Proposes Rule to Ban Noncompete Clauses, *Which Hurt Workers and Harm Competition* §910.1(b)(2)(1) (Jan. 5, 2023). District courts split on whether the FTC's ban on noncompetes exceeded its power. See *Ryan LLC v. Federal Trade Comm'n*, 746 F.Supp.3d 369 (N.D. Tex. 2024) (enjoining rule). At this writing the rule is on hold following the change of administration.

2. Ownership of Employee Inventions

i. The Common Law Obligation to Assign Inventions

At common law, if there is no contract, ownership of inventions—including ownership of patent rights—was determined according to an employee's status under a long line of common law employee invention cases. In general, employees fall into one of three categories: (1) employees "hired to invent," which results in employer ownership of the invention; (2) employees who invent on the employer's time or using its resources, which results in a limited, nonexclusive "shop right" on the part of the employer to practice the invention; and (3) an employee's "independent invention," in which case the employee owns the invention. *See generally United States v. Dubilier Condenser Corp.*, 289 U.S. 178 (1933); John C. Stedman, Employer-Employee Relations, in FREDRIK NEUMEYER, THE EMPLOYED INVENTOR IN THE UNITED STATES 30, 40–41 (1971).

The first category is relatively straightforward: if the employee was hired to invent, what else would the employer be buying except the resulting inventions? It seems logical to extend this treatment to consultants and others who are not "employees" in the strict sense. Robert P. Merges, *Intellectual Property and the Costs of Commercial Exchange: A Review Essay*, 93 MICH. L. REV. 1570 (1995) (highlighting the role of intellectual property in structuring non-employment-based organizations, such as consulting companies and joint ventures).

Category (2) reflects situations where employers have less than a complete claim to the invention, but where the employer's facilities or resources are combined with the inventor's talent and industry to produce the invention. The employee owns it, but the employer is compensated by receiving a limited right to practice the invention. *Cf. McElmurry v. Arkansas Power & Light Co.*, 27 U.S.P.Q.2d 1129, 1135 n.15 (Fed. Cir.

1993) (upholding shop right in employer where inventor/patentee was a consultant); Notably, however, that shop right does not include the right to sell the invention to others. *Beriont v. GTE Labs., Inc.*, 535 F. App'x 919 (Fed. Cir. 2013).

An employee's obligation to refrain from using an employer's trade secrets looks more onerous when it is the employee who came up with the secret. In Wexler v. Greenberg, 160 A.2d 430 (Pa. 1960), the Pennsylvania Supreme Court concluded that a departing employee was entitled to take formulas he had developed at his prior employer to work for a competitor. Despite the fact that the employee, Greenberg, was the chief chemist at the plaintiff, the court concluded that he was not in fact "hired to invent" and therefore owned the inventions he made.

The *Wexler* result, while it may seem fair, is not the majority rule. Even in Pennsylvania, Wexler is not always followed. *See Healthcare Affiliated Services v. Lippancy*, 701 F.Supp. 1142, 1155 (W.D. Pa. 1988) (rejecting *Wexler* analysis, emphasizing that although defendant developed inventions on his own, he did so using knowledge and information made available by the plaintiff employer); *but see Fidelity Fund v. DiSanto*, 500 A.2d 431 (Sup. Ct. Pa. 1985) (denying recovery against ex-employee salesman partly on the basis that he developed client contacts himself during employment).

Category (3) covers cases where the employee invents on his or her own time, outside the field of employment. See Dubilier, supra. As the next section explains, employers sometimes seek to own such inventions through assignment agreements.

ii. Assignment Agreements

Many companies require their employees to assign inventions made during their employment to the employer. These agreements are generally enforceable with regard to inventions made within the scope of employment. This means that the common law rules just discussed rarely apply today.

In some cases, assignment agreements extend to all inventions made by an employee, whether or not at the employer's facilities, during work hours, or within the scope of employment. Several states forbid such broad assignments. CALIFORNIA LABOR CODE §2870 prohibits employers from requiring assignment of "invention[s] that the employee developed entirely on his or her own time without using the employer's equipment, supplies, facilities, or trade secret information" unless the invention relates to the employer's current or demonstrably anticipated business. Other states have similar "freedom to create" limitations on employer assignment agreements. *See, e.g.*, MINN. STAT. ANN. §181.78 (1980); N.C. GEN. STAT. §66–57.1 to 57.2 (1981); WASH. REV. CODE ANN. §49.44.140 (1987). By contrast, *NEVADA REVISED STATUTES* §600.500 automatically assigns inventions to an employer provided they were developed in the course of employment and relate to the scope of the employee's work, whether or not the employee signs an invention assignment agreement.

COMMENTS AND QUESTIONS

1. *Encouraging Employee Inventions through Bonuses, Stock Options, and Other Rewards*. Some companies afford employed inventors a bonus or financial share in inventions that they develop. *See* Richard S. Gruner, *Corporate Patents: Optimizing Organizational Responses to Innovation Opportunities and Invention Discoveries*, 10 Marq. Intell. Prop. L. Rev. 1, 30–31, 30 n.83 (2006) (describing bonus award systems); JULIE L. DAVIS & SUZANNE S. HARRISON, EDISON IN THE BOARDROOM: HOW LEADING COMPANIES REALIZE VALUE FROM THEIR INTELLECTUAL ASSETS 29 (2002) (discussing patent incentive systems). Nonetheless, commentators argue that overbroad assignment agreements dull innovation incentives and undermine economic growth. *See* ORLY LOBEL, TALENT WANTS TO BE FREE (2014) (arguing for an open market for labor); Henrik D. Parker, *Reform for Rights of Employed Inventors*, 57 S. CAL. L. REV. 603 (1984) (calling for federal legislation granting employed inventors greater control over, and interests in, their inventions); Shashwat Alok & Krishnamurthy Subramanian, *Does Strengthening the Property Rights of Employee-Inventors Spur Innovation?* Empirical Evidence on Freedom-to-Create Laws Passed by U.S. States, 66 J. L. & ECON. 369 (2023) (finding that states that adopted limits on assignments saw more and better employee inventions) *but see* Robert P. Merges, *The Law and Economics of Employee Inventions*, 13 HARV. J.L. & TECH. 1 (1999) (defending employer ownership of inventions).

2. *Can Former Employees Challenge Assigned Patents?* Under the patent assignor estoppel doctrine, which we address in Chapter III(F)(1), courts have long barred someone who sells a patent or patent application from attacking the validity of the assigned patents in a subsequent patent infringement litigation absent exceptional circumstances. That meant that employees who signed assignment agreements and later moved to a competing company or started their own could not later claim that patents on the inventions they made at their prior employer were invalid. In *Minerva Surgical, Inv., v. Hologic, Inc.*, 594 U.S. 559 (2021), the Supreme Court substantially cabined the assignor estoppel doctrine, holding that it should not apply to a patent assignor who has not explicitly or implicitly represented the validity of an assigned patent. Another other limits on the doctrine, the Court specifically noted that employee inventors should not later be barred from challenging their own patents based on assignor estoppel where they assign future inventions to an employer as part of a standard invention assignment agreement.

3. *Confirmatory Assignment Agreements.* In the aftermath of Minerva, companies will likely require employee inventors to sign confirmatory assignment agreements at the time that patents based on the employee's work issue or prior to the employee's departure representing that the issued patent(s) or inventions made during their employment are valid. Will this practice largely nullify the effects of the Minerva decision? Is an employee "conveying something for value" if they sign a form "confirmation" that the employer already owns their invention? Does the need for such agreements afford departing employees bargaining leverage? Should Congress

eliminate or trim the assignor estoppel doctrine so as to ensure that invalid patents are not insulated from attack?

4. *Abandonment for Trade Secret Nonuse?* Professors Camilla Hrdy and Mark Lemley argue that employees should be able to take their own inventions to a new company if their employer does not use them. *See* Camilla Hrdy & Mark A. Lemley, *Abandoning Trade Secrets*, 73 STAN. L. REV. 1 (2021). Should abandonment apply to assigned patents as well? How would the former employees know if and how their prior inventions are being used by their former employer? What about negative trade secrets, such as the knowledge that a chemical composition does not cure a disease?

PROBLEMS

Problem II-17. Prior to graduate school, Mark Core worked full-time for TRW, a conglomerate corporation spanning automotive, aerospace, and electronics technologies. Core's employment agreement assigned to TRW all inventions that "relate to the business or activities of TRW" while reserving any inventions developed "entirely on his own time" that did not use TRW equipment, facilities, or trade secrets or relate to TRW's business. Upon entering a Ph.D. program funded by TRW, Core continued worked part time for TRW.

During graduate school, Core invented and patented techniques for improving optical signaling (transmitting information through fiber optics). A dispute arose over ownership of the patent.

The record before the district court established that Dr. Core sought funding for his Ph.D. studies through TRW's fellowship program; TRW provided that funding, the Ph.D. studies being sufficiently connected to TRW's business; and TRW expected to benefit from Dr. Core's participation in TRW's fellowship program at least through Dr. Core's return to full-time employment for one year after the completion of his Ph.D.. TRW's fellowship program required Dr. Core's Ph.D. research to "be in an engineering or scientific field of study related to [his] current or anticipated job responsibilities" and also required Dr. Core to have an internal TRW sponsor with whom he met regularly to discuss his educational or research progress.

Dr. Core and TRW offer competing views as to what it means for an invention to be "developed entirely on [Dr. Core's] own time." In Core's view, TRW's time is any time Dr. Core spent working "on the clock" on commercial projects at TRW's specific direction, and Dr. Core's "own time" is everything else (including his PhD research). TRW, by contrast, asserts that TRW's time also includes any time Dr. Core spent participating in the TRW fellowship program, with its substantial support conditional on pursuing the Ph.D. work, reporting on the work, and returning to TRW for a period. How should a court resolve this controversy?

Problem II-18. In 2010, Dr. Oscar Livingston and Dr. Tina Fenton were working for Bio-Fab. Each of them signed an agreement that provided:

(a) Employee agrees to disclose promptly to the Company [Bio-Fab] the full details of any and all ideas, processes, recipes, trademarks and service marks, works, inventions, discoveries, marketing and business ideas, and improvements or enhancements to any of the foregoing ("IP"), that Employee conceives, develops, creates, or reduces to practice alone or with the aid of others during the term of Employee's employment with the Company. . . .

(b) Employee shall assign to the Company, without further consideration, Employee's entire right to any IP described in the preceding subsection, which shall be the sole and exclusive property of the Company whether or not patentable.

Drs. Livingston and Fenton left Bio-Fab in April 2012, and together they formed 1000X Genomics in July 2012. By August 2012, 1000X filed the first of several provisional patent applications that focused on using microcapsules in capsule partitions or droplet partitions (referred to as capsule-in-capsule and capsule-in-droplets architecture, respectively) for DNA barcoding, a method of identification using a short section of DNA from a specific gene or genes. By January 2013, the 1000X inventors had conceived of a different architecture: "gel bead in emulsion" (GEM). The GEM architecture involves "partitioning nucleic acids, DNA or RNA, in droplets together with gel beads that are used to deliver the barcodes into the droplet," where the "barcodes are released from the gel beads using a stimulus."

In 2018, 1000X asserted these patents against Bio-Fab. As part of its defense, Bio-Fab argued that it co-owns the 1000X patents asserted against it because Drs. Livingston and Fenton conceived of the ideas embodied in the patents while they were still employed by Bio-Fab.

The evidence at trial showed that Drs. Livingston and Fenton worked chiefly on droplet-in-droplet architecture while at Bio-Fab and that this architecture is different from the GEM architecture that 1000X patented, but their GEM architecture was inspired by the work they did at Bio-Fab and so were based on work done in the scope of their employment.

How should a court rule on the patent ownership issue? What considerations inform your determination? Does it matter if the language of the patent extends beyond the new GEM architecture to cover droplet-in-droplet microcapsules?

iii. Trailer Clauses

An employee's obligation to assign inventions normally ends when employment ceases. *See Appleton v. Bacon*, 67 U.S. 699 (1862) ("Parties engaging the services of an inventor under an agreement . . . can lay no claim to improvements conceived by him after the expiration of such agreement."). To discourage employees from withholding inventions made during their employment, employers sometimes require employees to agree to a "trailer clause" assigning the employee's inventions for a period of time after they depart. Trailer clauses are enforceable in many states to the extent that they are "reasonable." They cannot, however, be enforced in most circumstances in California, which (as we will see) bans agreements not to compete. *See Whitewater West Indus. v.*

Alleshouse, 981 F.3d 1045 (Fed. Cir. 2020) (holding that California law barred a trailer clause); *Applied Materials, Inc. v. Advanced Micro-Fabrication Equipment (Shanghai) Co.*, 630 F.Supp.2d 1084 (N.D. Cal. 2009) (rejecting one-year trailer clause as an invalid noncompete agreement).

Clauses of particularly long or indefinite duration can be held unenforceable even in states that enforce trailer clauses and can even run afoul of the antitrust laws. *See United Shoe Machinery Co. v. La Chapelle*, 212 Mass. 467, 99 N.E. 289 (1912). One court expressed the requirement of reasonableness as follows:

> Hold-over clauses are simply a recognition of the fact of business life that employees sometimes carry with them to new employers inventions or ideas so related to work done for a former employer that in equity and good conscience the fruits of that work should belong to that former employer. In construing and applying hold-over clauses, the courts have held that they must be limited to reasonable times . . . and to subject matter which an employee worked on or had knowledge of during his employment . . . Unless expressly agreed otherwise, an employer has no right under a holdover clause to inventions made outside the scope of the employee's former activities, and made on and with a subsequent employer's time and funds.

Dorr-Oliver, Inc. v. United States, 432 F.2d 447, 452 (Ct. Cl. 1970). Courts are skeptical of restrictions that are broader in scope. This is particularly true of large conglomerates that attempt to require the assignment of any invention related to their (diverse) fields of business. *See Ingersoll-Rand Co. v. Ciavatta*, 110 N.J. 609, 542 A.2d 879, 896 n.6 (1988).

In addition to controlling inventions made shortly after departure, employers might be able to lay claim to ideas conceived while the defendant was employed, even if those ideas aren't put into practice until years after the defendant leaves her job. *See Motorola Inc. v. Lemko Corp.*, 2012 WL 74319 (N.D. Ill. Jan. 10, 2012) (employment agreement that required assignment of "ideas" as well as "inventions" could cover an idea developed at a former employer that wasn't turned into a patent application until five years later).

Even if an employer uses an enforceable trailer clause, there is always the risk that the former employee will simply wait out the duration of the term and then conveniently announce the discovery after the trailer clause's expiration date. Courts are sometimes called upon to evaluate the credibility of such invention dates. In *General Signal Corp. v. Primary Flow Signal, Inc.*, the former employee asserted that his breakthrough occurred invention just five days after the expiration of the six months specified in the trailer clause:

> The perfection of a flow meter proved to be a painstakingly intricate process involving extensive testing. It is therefore difficult to believe that after a long and distinguished career with Plaintiff, Mr. Halmi in his musing five days after the trailer clause expired for the first time came up with the idea for the NTV. Although the word "Eureka!" has allegedly been uttered by more than one

> inventor over the years, the concept at issue does not lend itself to such sudden discovery. The court finds that the concept of the '434 patent must have existed in Mr. Halmi's mind before his employment with GSC ended. Mr. Halmi therefore violated his agreement with GSC.

General Signal Corp. v. Primary Flow Signal, Inc., 1987 U.S. Dist. LEXIS 6929, at *10 (D.R.I. Jul. 27, 1987).

3. Nonsolictation Agreements

Soliciting employees. Employers worry that departing employees will take colleagues with them. Just the publicity of a mass defection can undermine a successful business. But is it illegal? In *Diodes, Inc. v. Franzen*, 260 Cal. App. 2d 244, 67 Cal. Rptr. 19 (1968), the president and vice-president of Diodes left to form a competing company, called Semtech. Before they left, the officers solicited a number of Diodes employees to join them. Diodes sued the departing employees, alleging a number of claims centering on unfair competition and breach of fiduciary duty. The court dismissed the complaint, stating:

As a general principle, one who unjustifiably interferes with an advantageous business relationship to another's damage may be held liable therefor. The product is bottled under a variety of labels, including unfair competition, interference with advantageous relations, contract interference, and inducing breach of contract.

> Even though the relationship between an employer and his employee is an advantageous one, no actionable wrong is committed by a competitor who solicits his competitor's employees or who hires away one or more of his competitor's employees who are not under contract, so long as the inducement to leave is not accompanied by unlawful action. In the employee situation the courts are concerned not solely with the interests of the competing employers, but also with the employee's interest. The interests of the employee in his own mobility and betterment are deemed paramount to the competitive business interests of the employers, where neither the employee nor his new employer has committed any illegal act accompanying the employment change.

67 Cal.Rptr. at 25–26 (citations omitted). *See also Reeves v. Hanlon*, 33 Cal.4th 1140 (2004) (a competitor who uses only lawful means to solicit at-will employees does not tortiously interfere with economic advantage). If it is legal for an employee to change jobs, why should it be illegal for someone to invite them to do so? *See* ORLY LOBEL, TALENT WANTS TO BE FREE (2014) (arguing against the enforcement of nonsolicitation agreements); *see also* ORLY LOBEL, YOU DON'T OWN ME: HOW MATTEL V. MGA ENTERTAINMENT EXPOSED BARBIE'S DARK SIDE (2018) (telling the extraordinary story of how Mattel Corporation sought to use employment agreements and copyright law to prevent a former employee from marketing the Bratz, a sassy, bratty, multi-racial doll ensemble).

Can employers change this result by forcing their employees to sign "nonsolicitation agreements" that prevent a departing employee from soliciting other employees to join him? Drawing on the California Supreme Court's decision in *Edwards v. Arthur*

Anderson LLP, 81 Cal.Rptr.3d 282 (2008), the California Court of Appeal held in *AMN Healthcare, Inc. v. Aya Healthcare Services, Inc.*, 28 Cal.App.5th 923, 936–39 (2018), that the broad nonsolicitation provision of the employment agreement at issue—barring employees from either "directly or indirectly" soliciting or recruiting, or causing others to solicit or induce, any AMN employee for a period of at least one year after termination of employment with AMN—was void under CALIFORNIA BUSINESS AND PROFESSIONS CODE §16600. The court emphasized California's strong public policy of protecting the right of its citizens to pursue any lawful employment and enterprise of their choice.

Are a group of employees departing together more likely to misappropriate trade secrets? In *Suzhou Angela Online Game Tech. v. Snail Games USA*, 2022 WL 326725 (C.D. Cal. Jan. 31, 2022), the court inferred misappropriation from the hiring of 60 employees from the plaintiff in the course of one year.

A related issue involves "no-poach" agreements in which companies agree not to hire each other's employees. Those agreements are unlawful under the antitrust laws. In Pittsburgh Logistics Sys. v. Beemac Trucking, (Pa. April 29, 2021), the Pennsylvania Supreme Court held that a no-poach agreement could not be justified as a legitimate restraint on solicitation ancillary to an otherwise valid business agreement. For an argument that no-poach clauses are part of a broader effort to restrain the free movement of labor, see Orly Lobel, *Gentlemen Prefer Bonds: How Employers Fix the Talent Market*, 59 SANTA CLARA L. REV. 663 (2020).

Soliciting clients. Sometimes departing employees try to bring clients rather than co-workers with them when they leave. A common case is the departing sales representative who "takes" a list of customers (either a written list or one that they have memorized) in order to call on those customers for a competitor.[7] Customer lists are generally protectable as trade secrets, but enjoining employees from calling on customers with whom they have had long-standing relationships raises serious concerns about employee mobility.

RESTATEMENT (THIRD) OF UNFAIR COMPETITION §41, Comment *d* states:

> The reasonableness of an agreement that merely prohibits the use or disclosure of particular information depends primarily upon whether the information protected by the agreement qualifies as a trade secret. If the information qualifies for protection under the rule stated in §39, a contract prohibiting its use or disclosure is generally enforceable according to its terms.

[7] Merely memorizing a trade secret rather than taking physical documents will not preclude a finding of misappropriation, though it may make misappropriation harder to detect. *See Ed Nowogroski Ins. Inc. v. Rucker*, 971 P.2d 936 (Wash. 1999). In *Stampede Tool Warehouse Inc. v. May*, 651 N.E.2d 209 (Ill. Ct. App. 1995), for example, the plaintiff alleged that former employees who started a competing business had misappropriated its trade secrets by memorizing a list of plaintiff's customers and soliciting those customers. The court found the defendants liable, reasoning that "memorization is one method of misappropriation." But if the case involved merely a former employee contacting those she knew from experience to be potential customers, rather than explicitly attempting to memorize a list of customers, it would be hard to fault the employee's conduct. *Cf. Timothy Murphy, Can't Get It Out of My Head: Trade Secrets Liability for Remembered Information*, 2023 WIS. L. REV. 1929 (arguing that some kinds of memorization are accidental and should not be the basis for liability).

> Although in some cases courts have enforced nondisclosure agreements directed at information found ineligible for protection as a trade secret, many of these decisions merely reflect a more narrow definition of trade secret than that adopted in §39. However, a nondisclosure agreement that encompasses information that is generally known or in which the promisee has no protectable interest, such as a former employee's promise not to use information that is part of the employee's general skill and training (see §42, Comment *d*), may be unenforceable as an unreasonable restraint of trade. Agreements that deny the promisor the right to use information that is in the public domain are ordinarily enforceable only if justified on the basis of interests other than the protection of confidential information.

Where should the line be drawn between permissible work and impermissible use of "secret" lists of customers? To whom does the value inherent in personal relationships belong?

A nonsolicitation agreement precludes sales reps from calling on customers with whom they have an existing relationship even in the absence of a trade secret. Many courts uphold these agreements, though they may restrict their scope. *See ADP, LLC v. Kusins*, 215 A.3d 924 (App. Div. N.J. 2019) (enforcing nonsolicitation agreement, but "blue-penciling" it to limit it to existing rather than prospective clients). Courts that have allowed agreements preventing the solicitation of customers have nonetheless made it clear that it is only affirmative solicitation of the customer that is forbidden; a departing employee does not need to cut off all contact with clients, *In re Document Techs. Litig.*, 275 F.Supp.3d 454, 465 (S.D.N.Y. 2017), and is free to work for a former customer who approaches them. *See Paramount Tax v. H&R Block*, 683 S.E.2d 141 (Ga. App. 2009); *Moss, Adams & Co. v. Shilling*, 179 Cal.App.3d 124 (1986) (drawing a line between an employee announcing her departure to start a competing company and then responding to client inquiries, which is permissible, and actively soliciting old clients to follow her, which is not); *Reeves v. Hanlon*, 33 Cal.4th 1140 (2004) ("the UTSA does not forbid an individual from announcing a change of employment, even to clients on a protected trade secret list."). More recently, California courts have punished solicitation of clients only if it was done using a secret customer list. *See Ret. Grp. v. Galante*, 176 Cal.App.4th 1226 (2009). Courts have also rejected alleged violations of the agreement based on speculation. *See GE Betz, Inc. v. Moffitt-Johnston*, 885 F.3d 318 (5th Cir. 2018) (requiring direct evidence of solicitation). Merely connecting with former customers or co-workers on LinkedIn, for instance, is not solicitation. *See Bankers Life & Cas. Co. v. Am. Senior Benefits LLC*, 2017 Ill. App. 160687 (Ill. App. Ct. 2017).

Should the dominance of the employer in the industry matter? In *Wood v. Acordia of W. Va., Inc.*, 618 S.E.2d 415 (2005), the court upheld a two-year agreement preventing insurance agents from soliciting any of Acordia's current, former, or prospective customers. In dissent, Justice Starcher pointed out that Acordia was so dominant in the West Virginia insurance market that "every prospect in the market has been spoken for by an Acordia salesman." The agreement at issue thus effectively prevents all competition.

4. Noncompetitions Agreements

Another way of reducing the risk that trade secrets will find their way into the hands of competitors is to limit departing employees' ability to compete with their former employer at all. Employees develop personal relationships with vendors, customers, and others that are immensely useful in business. Noncompetition agreements seek to prevent employees from competing with their former employer for a set period of time or within a particular geographic scope. Such agreements, however, directly impinge upon labor mobility and the ability to pursue gainful employment. Employees' livelihoods often depend on their ability to market their skills and know-how, thereby raising critical public policy and social justice questions. States vary in their approach to enforcing such agreements.

Edwards v. Arthur Andersen LLP
Supreme Court of California
81 Cal. Rptr. 3d 282 (Cal. 2008)

CHIN, J.

We granted review to address the validity of noncompetition agreements in California and the permissible scope of employment release agreements. We limited our review to the following issues: To what extent does Business and Professions Code section 16600 prohibit employee noncompetition agreements. . . .

We conclude that section 16600 prohibits employee noncompetition agreements unless the agreement falls within a statutory exception. . . . We therefore affirm in part and reverse in part the Court of Appeal judgment.

Facts

In January 1997, Raymond Edwards II (Edwards), a certified public accountant, was hired as a tax manager by the Los Angeles office of the accounting firm Arthur Andersen LLP (Andersen). Andersen's employment offer was made contingent upon Edwards's signing a noncompetition agreement, which prohibited him from working for or soliciting certain Andersen clients for limited periods following his termination. The agreement was required of all managers, and read in relevant part: "If you leave the Firm, for eighteen months after release or resignation, you agree not to perform professional services of the type you provided for any client on which you worked during the eighteen months prior to release or resignation. This does not prohibit you from accepting employment with a client. For twelve months after you leave the Firm, you agree not to solicit (to perform professional services of the type you provided) any client of the office(s) to which you were assigned during the eighteen months preceding release or resignation. You agree not to solicit away from the Firm any of its professional personnel for eighteen months after release or resignation." Edwards signed the agreement.

Between 1997 and 2002, Edwards continued to work for Andersen, moving into the firm's private client services practice group, where he handled income, gift, and estate tax planning for individuals and entities with large incomes and net worth. Over this

period he was promoted to senior manager and was on track to become a partner. In March 2002, the United States government indicted Andersen in connection with the investigation into Enron Corporation, and in June 2002, Andersen announced that it would cease its accounting practices in the United States. In April 2002, Andersen began selling off its practice groups to various entities. In May 2002, Andersen internally announced that HSBC USA, Inc. (a New York-based banking corporation), through a new subsidiary, Wealth and Tax Advisory Services (WTAS), would purchase a portion of Andersen's tax practice, including Edwards's group.

In July 2002, HSBC offered Edwards employment. Before hiring any of Andersen's employees, HSBC required them to execute a "Termination of Non-compete Agreement" (TONC) in order to obtain employment with HSBC. Among other things, the TONC required employees to, inter alia, (1) voluntarily resign from Andersen; (2) release Andersen from "any and all" claims, including "claims that in any way arise from or out of, are based upon or relate to Employee's employment by, association with or compensation from" defendant; (3) continue indefinitely to preserve confidential information and trade secrets except as otherwise required by a court or governmental agency; (4) refrain from disparaging Andersen or its related entities or partners; and (5) cooperate with Andersen in connection with any investigation of, or litigation against, Andersen. In exchange, Andersen would agree to accept Edwards's resignation, agree to Edwards's employment by HSBC, and release Edwards from the 1997 noncompetition agreement. . . .

Edwards signed the HSBC offer letter, but he did not sign the TONC. In response, Andersen terminated Edwards's employment and withheld severance benefits. HSBC withdrew its offer of employment to Edwards.

Procedural History

. . . In the published part of its opinion, the Court of Appeal held: (1) the noncompetition agreement was invalid under section 16600, and requiring Edwards to sign the TONC as consideration to be released from it was an independently wrongful act for purposes of the elements of Edwards's claim for intentional interference with prospective economic advantage. . . .

Discussion

A. Section 16600

Under the common law, as is still true in many states today, contractual restraints on the practice of a profession, business, or trade, were considered valid, as long as they were reasonably imposed. (*Bosley Medical Group v. Abramson* (1984) 161 Cal.App.3d 284, 288, 207 Cal.Rptr. 477.) This was true even in California. (*Wright v. Ryder* (1868) 36 Cal. 342, 357 [relaxing original common law rule that all restraints on trade were invalid in recognition of increasing population and competition in trade].) However, in 1872 California settled public policy in favor of open competition, and rejected the common law "rule of reasonableness," when the Legislature enacted the Civil Code. Today in California, covenants not to compete are void, subject to several exceptions discussed briefly below.

Section 16600 states: "Except as provided in this chapter, every contract by which anyone is restrained from engaging in a lawful profession, trade, or business of any kind is to that extent void." The chapter excepts noncompetition agreements in the sale or dissolution of corporations (§16601), partnerships (§16602), and limited liability corporations (§16602.5). In the years since its original enactment as Civil Code section 1673, our courts have consistently affirmed that section 16600 evinces a settled legislative policy in favor of open competition and employee mobility. (*See D'sa v. Playhut, Inc.* (2000) 85 Cal.App.4th 927, 933, 102 Cal.Rptr.2d 495.) The law protects Californians and ensures "that every citizen shall retain the right to pursue any lawful employment and enterprise of their choice." (*Metro Traffic Control, Inc. v. Shadow Traffic Network* (1994) 22 Cal.App.4th 853, 859, 27 Cal.Rptr.2d 573.) It protects "the important legal right of persons to engage in businesses and occupations of their choosing." (*Morlife, Inc. v. Perry* (1997) 56 Cal.App.4th 1514, 1520, 66 Cal.Rptr.2d 731.) . . .

Under the statute's plain meaning, therefore, an employer cannot by contract restrain a former employee from engaging in his or her profession, trade, or business unless the agreement falls within one of the exceptions to the rule. (§16600.) Andersen, however, asserts that we should interpret the term "restrain" under section 16600 to mean simply to "prohibit," so that only contracts that totally prohibit an employee from engaging in his or her profession, trade, or business are illegal. It would then follow that a mere limitation on an employee's ability to practice his or her vocation would be permissible under section 16600, as long as it is reasonably based.

Andersen contends that some California courts have held that section 16600 (and its predecessor statutes, Civil Code former sections 1673, 1674, and 1675) are the statutory embodiment of prior common law, and embrace the rule of reasonableness in evaluating competitive restraints. (*See, e.g., South Bay Radiology Medical Associates v. Asher* (1990) 220 Cal.App.3d 1074, 1080, 269 Cal.Rptr. 15 (South Bay Radiology) [§16600 embodies common law prohibition against restraints on trade]; *Vacco Industries, Inc. v. Van Den Berg* (1992) 5 Cal.App.4th 34, 47–48, 6 Cal.Rptr.2d 602 [§16600 is codification of common law reasonable restraint rule].) Andersen claims that these cases show that section 16600 "prohibits only broad agreements that prevent a person from engaging entirely in his chosen business, trade or profession. Agreements that do not have this broad effect—but merely regulate some aspect of post-employment conduct, e.g., to prevent raiding [employer's personnel]—are not within the scope of [s]ection 16600."

As Edwards observes, however, the cases Andersen cites to support a relaxation of the statutory rule simply recognize that the statutory exceptions to section 16600 reflect the same exceptions to the rule against noncompetition agreements that were implied in the common law. . . .

We conclude that Andersen's noncompetition agreement was invalid. As the Court of Appeal observed, "The first challenged clause prohibited Edwards, for an 18-month period, from performing professional services of the type he had provided while at Andersen, for any client on whose account he had worked during 18 months prior to his

termination. The second challenged clause prohibited Edwards, for a year after termination, from 'soliciting,' defined by the agreement as providing professional services to any client of Andersen's Los Angeles office." The agreement restricted Edwards from performing work for Andersen's Los Angeles clients and therefore restricted his ability to practice his accounting profession. (*See Thompson v. Impaxx*, Inc. (2003) 113 Cal.App. 4th 1425, 1429, 7 Cal.Rptr.3d 427 [distinguishing "trade route" and solicitation cases that protect trade secrets or confidential proprietary information].) The noncompetition agreement that Edwards was required to sign before commencing employment with Andersen was therefore invalid because it restrained his ability to practice his profession. (*See Muggill*, *supra*, 62 Cal.2d at pp. 242–243, 42 Cal.Rptr. 107, 398 P.2d 147.)

B. Ninth Circuit's Narrow-Restraint Exception

Andersen asks this court to adopt the limited or "narrow-restraint" exception to section 16600 that the Ninth Circuit discussed in *Campbell v. Trustees of Leland Stanford Jr. Univ.* (9th Cir. 1987) 817 F.2d 499 (*Campbell*), and that the trial court relied on in this case in order to uphold the noncompetition agreement. In *Campbell*, the Ninth Circuit acknowledged that California has rejected the common law "rule of reasonableness" with respect to restraints upon the ability to pursue a profession, but concluded that section 16600 "only makes illegal those restraints which preclude one from engaging in a lawful profession, trade, or business." (*Campbell,* 817 F.2d at p. 502.) The court remanded the case to the district court in order to allow the employee to prove that the noncompetition agreement at issue completely restrained him from practicing his "profession, trade, or business within the meaning of section 16600." (*Campbell*, at p. 503.)

The confusion over the Ninth Circuit's application of section 16600 arose in a paragraph in *Campbell*, in which the court noted that some California courts have excepted application of section 16600 "'where one is barred from pursuing only a small or limited part of the business, trade or profession.'" (*Campbell, supra*, 817 F.2d at p. 502.) . . .

Andersen is correct, however, that Campbell has been followed in some recent Ninth Circuit cases to create a narrow-restraint exception to section 16600 in federal court. . . .

Contrary to Andersen's belief, however, California courts have not embraced the Ninth Circuit's narrow-restraint exception. Indeed, no reported California state court decision has endorsed the Ninth Circuit's reasoning, and we are of the view that California courts "have been clear in their expression that section 16600 represents a strong public policy of the state which should not be diluted by judicial fiat." (*Scott v. Snelling and Snelling, Inc.* (N.D. Cal. 1990) 732 F.Supp. 1034, 1042.) Section 16600 is unambiguous, and if the Legislature intended the statute to apply only to restraints that were unreasonable or overbroad, it could have included language to that effect. We reject Andersen's contention that we should adopt a narrow-restraint exception to section 16600 and leave it to the Legislature, if it chooses, either to relax the statutory

restrictions or adopt additional exceptions to the prohibition-against-restraint rule under section 16600. . . .

DISPOSITION

We hold that the noncompetition agreement here is invalid under section 16600, and we reject the narrow-restraint exception urged by Andersen. Noncompetition agreements are invalid under section 16600 in California even if narrowly drawn, unless they fall within the applicable statutory exceptions of sections 16601, 16602, or 16602.5. . . .

We therefore affirm in part and reverse in part the Court of Appeal judgment, and remand the matter for proceedings consistent with the views expressed above.

In *Comprehensive Technologies Int'l v. Software Artisans, Inc.*, 3 F.3d 730 (4th Cir. 1993), CTI brought suit for copyright infringement and misappropriation of trade secrets against a group of former employees who left the company to form a competing company which shortly thereafter came out with a new product. The court concluded that the departing employees had not infringed CTI's copyrights or misappropriated any CTI trade secrets. Nonetheless, the court enforced an agreement signed by one of the employees, Dean Hawkes. The agreement provided that for a period of twelve months after he left CTI, Hawkes would not

> engage directly or indirectly in any business within the United States (financially as an investor or lender or as an employee, director, officer, partner, independent contractor, consultant or owner or in any other capacity calling for the rendition of personal services or acts of management, operation or control) which is in competition with the business of CTI. For purposes of this Agreement, the "business of CTI" shall be defined as the design, development, marketing, and sales of CLAIMS EXPRESS and EDI LINK-type PC-based software with the same functionality and methodology. . . .

The court stated the general legal standard governing covenants not to compete:

> Virginia has established a three-part test for assessing the reasonableness of restrictive employment covenants. Under the test, the court must ask the following questions:
>
> 1. Is the restraint, from the standpoint of the employer, reasonable in the sense that it is no greater than is necessary to protect the employer in some legitimate business interest?
> 2. From the standpoint of the employee, is the restraint reasonable in the sense that it is not unduly harsh and oppressive in curtailing his legitimate efforts to earn a livelihood?
> 3. Is the restraint reasonable from the standpoint of a sound public policy?
>
> *Blue Ridge Anesthesia & Critical Care, Inc. v. Gidick*, 239 Va. 369, 389 S.E.2d 467, 469 (Va. 1990). If a covenant not to compete meets each of these standards of reasonableness, it must be enforced. As a general rule, however, the Virginia

> courts do not look favorably upon covenants not to compete, and will strictly construe them against the employer. The employer bears the burden of demonstrating that the restraint is reasonable.

The court found that Hawkes's agreement, which prevented him from competing with CTI anywhere in the United States, was reasonable because CTI had offices, clients, or prospects in many (though not all) states throughout the country. Further, the court noted:

> As the individual primarily responsible for the design, development, marketing and sale of CTI's software, Hawkes became intimately familiar with every aspect of CTI's operation, and necessarily acquired information that he could use to compete with CTI in the marketplace. When an employee has access to confidential and trade secret information crucial to the success of the employer's business, the employer has a strong interest in enforcing a covenant not to compete because other legal remedies often prove inadequate. It will often be difficult, if not impossible, to prove that a competing employee has misappropriated trade secret information belonging to his former employer. On the facts of this case, we conclude that the scope of the employment restrictions is no broader than necessary to protect CTI's legitimate business interests.

COMMENTS AND QUESTIONS

1. The California rule set out in §16600 is the minority rule, but it is gaining broader acceptance. Other states, including Alabama, Oklahoma, Louisiana, Minnesota, Montana, North Dakota, and the District of Columbia, also forbid noncompetition agreements. Several states have enacted or are considering restrictions on noncompete agreements. Massachusetts, for example, requires advance notice of a noncompete before starting work, limits noncompetes to 12 months duration, bans their use for certain categories of employees, including hourly workers and those fired or laid off, and requires the employer to pay "garden leave" to former employees who can't work. A growing number of states, including Illinois, Washington, Oregon, Nevada, New Hampshire, and Colorado, ban noncompetes applied to "low-wage workers." *See, e.g.*, 820 ILCS §90; COLO. REV. STAT. §8-2-113. Still other states, including Colorado, Delaware, Massachusetts, and Tennessee, forbid them in professional settings but allow them in other contexts. *See, e.g., Murfreesboro Med. Clinic v. Udom*, 166 S.W.3d 674 (Tenn. 2005). In 2023, the Federal Trade Commission proposed to ban most noncompete agreements nationwide. *See* Federal Trade Commission, *FTC Proposes Rule to Ban Noncompete Clauses, Which Hurt Workers and Harm Competition* §910.1(b)(2)(1) (Jan. 5, 2023).

Most states that do not ban noncompetes outright apply an overarching requirement of "reasonableness" to covenants not to compete, as the Virginia court did in CTI. *See* MICH. COMP. LAWS §445.774a (noncompetition agreements enforceable if the agreement is "reasonable as to its duration, geographical area, and type of employment or line of business"). As a general matter that means the majority of states enforce noncompetes are long as they are reasonably limited. *See ADP, LLC v. Kusins*, 215 A.3d

924 (App. Div. N.J. 2019) (enforcing non- compete against sales reps limited to geographic region they served). They may disagree, however, on what restrictions are reasonable. In *Gateway 2000 Inc. v. Kelley*, 9 F.Supp.2d 790 (E.D. Mich. 1998), the court invalidated an agreement that was similar to the one upheld in CTI. The court relied in part on the fact that the company had later adopted a less restrictive noncompetition provision, suggesting that the older, broader provision was not necessary to protect its interests. And the Virginia Supreme Court has held unreasonable a noncompetition agreement that prevented the defendant from working for a competitor in any capacity, rather than specifying particular positions the defendant could not take. *See Modern Environments, Inc. v. Stinnett*, 561 S.E.2d 694 (Va. 2002); *see also Mutual Service Casualty Ins. Co. v. Brass*, 625 N.W.2d 648 (Wis. Ct. App. 2001); *Brentlinger Enters. v. Curran*, 752 N.E.2d 994 (Ohio Ct. App. 2001); *Harvey Barnett, Inc. v. Shidler*, 143 F.Supp.2d 1247 (D. Colo. 2001); *Mertz v. Pharmacists Mutual Ins.*, 625 N.W.2d 197 (Neb. 2001); *City Slickers, Inc. v. Douglas*, 40 S.W.3d 805 (Ark. Ct. App. 2001); *Intertek Testing Servs. v. Eastman*, 2023 WL 2544236 (Del. Ch. Mar. 16, 2023) (refusing to enforce three-year noncompete against co-founder who had sold the business).

What agreements are "reasonable" is far from clear in this context and is the subject of considerable litigation. *Compare Paramount Termite Control Co. v. Rector*, 380 S.E.2d 922 (Va. 1989) (upholding a two-year noncompete) *with Home Paramount Pest Control v. Shaffer*, 718 S.E.2d 762 (Va. 2011) (striking down the identical noncompete agreement). Some courts have limited the enforcement of noncompetition agreements to situations where trade secrets are likely to be used or disclosed if an employee is allowed to compete. The New York Court of Appeals, for example, took the following view:

> Undoubtedly judicial disfavor of these covenants is provoked by "powerful considerations of public policy which militate against sanctioning the loss of a man's livelihood" (*Purchasing Assoc. v. Weitz*. . . .) Indeed, our economy is premised on the competition engendered by the uninhibited flow of services, talent and ideas. Therefore, no restrictions should fetter an employee's right to apply to his own best advantage the skills and knowledge acquired by the overall experience of his previous employment. This includes those techniques which are but "skillful variations of general processes known to the particular trade" (RESTATEMENT, AGENCY 2d, §396 Comment b).
>
> Of course, the courts must also recognize the legitimate interest an employer has in safeguarding that which has made his business successful and to protect himself against deliberate surreptitious commercial piracy. Thus restrictive covenants will be enforceable to the extent necessary to prevent the disclosure or use of trade secrets or confidential customer information. In addition injunctive relief may be available where an employee's services are unique or extraordinary and the covenant is reasonable. This latter principle has been interpreted to reach agreements between members of the learned professions.

Reed Roberts Assocs. v. Strauman, 40 N.Y.2d 303, 353 N.E.2d 590 (Ct. App. 1976). Does the Reed Roberts approach in essence hold noncompetition agreements unenforceable, since it allows them to operate only when trade secret laws also provide relief? Are there sound reasons to enforce an employer-employee agreement that prevents the employee from competing after termination?

If a noncompetition agreement is overbroad, should the courts refuse to enforce it at all, or should they narrow it to make it enforceable? *Compare Coleman v. Retina Consultants*, 687 S.E.2d 457 (Ga. 2009) (refusing to reform unenforceable agreement) and NEV. REV. STAT. §613.200 (barring judicial reformation of problematic noncompete agreements) *with ADP, LLC v. Rafferty*, 923 F.3d 113 (3d Cir. 2019) (holding that overbroad agreements should be "blue-penciled": edited by the courts to make them reasonable).

2. There seems to be no question in the CTI court's mind that none of the defendants misappropriated any CTI trade secrets, infringed any copyrights, or otherwise "took" anything belonging to CTI in starting Software Artisans. Why doesn't that dispose of the case? What social purpose is served by enjoining former employees from pursuing their livelihood? In *ADP, LLC v. Rafferty*, 923 F.3d 113 (3d Cir. 2019), the court held that "the preservation of client relationships and goodwill" was a legitimate business justification for preventing competition by departing employees.

3. California courts have interpreted BUSINESS & PROFESSIONS CODE §16600 to bar noncompetition agreements altogether in employee contracts but to permit such agreements if they are ancillary to the sale of a business, so long as the terms of the agreement are "reasonable." *See Ixchel Pharma, LLC v. Biogen, Inc.*, 9 Cal.5th 1130 (2020); *Monogram Indus., Inc. v. SAR Indus., Inc.*, 64 Cal. App. 3d 692, 134 Cal. Rptr. 714, 718 (1976). Further, while California courts will not enforce a noncompetition agreement, they will prevent departing employees from using or disclosing their former employer's trade secrets. *See State Farm Mutual Automobile Ins. Co. v. Dempster*, 344 P.2d 821 (Cal. Ct. App. 1959); *Gordon v. Landau*, 49 Cal.2d 690, 321 P.2d 456 (Cal. 1958). And §16600 does not prevent an employer from barring current employees from moonlighting for a competitor while still employed. *Techno Lite Inc. v. Emcod LLC*, 44 Cal.App.5th 462 (2020).

4. The strength of California's commitment to the free movement of employees was demonstrated in *The Application Group, Inc. v. The Hunter Group, Inc.*, 72 Cal. Rptr. 2d 73 (Ct. App. 1998). There, the California Court of Appeals held that §16600 precluded the enforcement of a noncompetition agreement entered into in Maryland between a Maryland employer and employee, where the employee subsequently left to take a job telecommuting from Maryland for a California company. Despite the fact that Maryland courts would enforce the agreement, the California court concluded that California's interests were "materially stronger" than Maryland's in this case. *See also D'Sav. Playhut, Inc.*, 85 Cal. App. 4th 927, 102 Cal. Rptr. 2d 495 (2000) (disregarding choice of law provision in holding a noncompete agreement unenforceable); *Nuvasive, Inc. v. Alphatec Holdings*, 2019 WL 40108 (Del. Ct. Chan. Aug. 26, 2019) (finding that California's interest in barring noncompetes substantially outweighs Delaware's

interest in a case involving a California employee; refusing to enforce Delaware choice of law clause in contract). California reinforced its policy in 2017 by enacting CAL. LABOR CODE §925, which prevents companies from sending noncompete cases to arbitration.

California's strong public policy has led to conflicts with other states. The most notable example is *Advanced Bionics v. Medtronic*, 87 Cal. App. 4th 1235 (2001), in which both California and Minnesota courts asserted that their law should control, with the Minnesota court enjoining the departing employee and the California court enjoining the employer from proceeding with the suit. The California Supreme Court ultimately reversed, not because it didn't consider the policy of employee mobility important but because it thought the specter of conflicting judgments unseemly. *Advanced Bionics v. Medtronic*, 29 Cal. 4th 697, 128 Cal. Rptr. 2d 172 (2002). But the California court's deference to a sister court may simply subjugate California's policy to the law of any other state that would enforce a noncompete agreement, even if the employee doesn't work in that state. *See IBM Corp. v. Bajorek*, 191 F.3d 1033 (9th Cir. 1999) (applying New York law to enjoin competition against New York company by employee in California, and disregarding California policy to the contrary); *Draftkings Inc. v. Hermalyn*, 118 F.4th 416 (1st Cir. 2024) (applying Massachusetts law over California law to enforce a noncompete against a California employee); *Amazon.com, Inc. v. Powers*, 2012 WL 6726538 (W.D. Wash. Dec. 27, 2012) (enforcing Washington choice of law clause in noncompete contract against employee who left Amazon.com to work for Google in California). For a contrary ruling giving nationwide effect to a refusal to enforce a noncompete agreement under Georgia law, see *Palmer & Cay v. Marsh & McLennan*, 404 F.3d 1297 (11th Cir. 2005).

Is there a reasoned way to resolve such conflicts in public policy? Or will the inevitable result be a "race to the courthouse"? After *Advanced Bionics*, California enacted CAL. LABOR CODE §925, which prohibits employers from requiring California-based employees to agree to litigate their noncompetes outside the state. That suggests California remains strongly committed to protecting its employees against noncompetes.

5. What are the competing policy interests at stake in noncompetition clauses? On the one hand, it seems unfair to employers to simply allow their employees to do whatever they want upon leaving. Particularly where the employees were in positions of importance, their knowledge of the employer's trade secrets may leave the former employer at a competitive disadvantage. In a competitive industry, preventing the disclosure of trade secrets is far preferable to suing for misappropriation after the trade secrets have already been disclosed, and employers may see a noncompetition agreement as a way to short-circuit any risk of trade secret misappropriation.

On the other hand, such restrictions seem onerous burdens to impose on employees. *See* Viva Moffat, *The Wrong Tool for the Job: The IP Problem with Non-Competition Agreements*, 52 WM. & MARY L. REV. 873 (2010). Imagine how you would feel as an attorney if you left a firm only to find that you were prevented from practicing law in the same field or geographic region for the next two years. (In this regard, it is significant

that Reed Roberts expressed the view that the "learned professions" were properly subject to noncompetition agreements.) *See Central Indiana Podiatry PC v. Krueger*, 882 N.E.2d 723 (Ind. 2008) (noncompete agreement enforceable against physician if reasonable). In addition, it is not completely clear that such provisions benefit companies in the long run. Strauman, the defendant in *Reed Roberts*, came to Reed Roberts after having worked for a competitor for four years. He was hired in part because of his valuable experience in the industry. What if Strauman's former employer had required him to sign an enforceable noncompete agreement? *See* Charles Tait Graves, Analyzing the Non-Competition Covenant as a Category of Intellectual Property Regulation, 3 HASTINGS SCI. & TECH. L.J. 69 (2010) (criticizing enforcement of noncompetes).

Some scholars have suggested that there is a more practical economic motivation for precluding such noncompetition agreements. They argue that the relative success of California's Silicon Valley compared to Boston's Route 128 is directly attributable to the prevalence of noncompetition agreements in Route 128 companies, which prevented the free movement of employees and therefore discouraged start-up companies. *See* ORLY LOBEL, TALENT WANTS TO BE FREE: WHY WE SHOULD LEARN TO LOVE LEAKS, RAIDS, AND FREE RIDING (2015) (citing numerous empirical studies that noncompetes restrict innovation); Ronald J. Gilson, *The Legal Infrastructure of High Technology Industrial Districts: Silicon Valley, Route 128, and Covenants Not to Compete*, 74 N.Y.U. L. REV. 575 (1999); ANNALEE SAXENIAN, REGIONAL ADVANTAGE: CULTURE AND COMPETITION IN SILICON VALLEY AND ROUTE 128 (1994); *but see* Jonathan Barnett & Ted M. Sichelman, *The Case for Noncompetes*, 86 U. CHI. L. REV. 953 (2020) (calling into question the role of noncompete agreements in the emergence of Silicon Valley over Route 128 and the larger empirical literature questioning noncompetes, and concluding that the common law's reasonableness standard likely represents the best approach).

6. When a firm requires an existing employee to sign an employment agreement containing a covenant not to compete, the employee is giving up something substantial. What is the employer giving up? Some cases have raised the issue of consideration (in the contract law sense) in such an agreement on the part of the employer; they generally conclude that there is consideration, on one theory or another. *See, e.g., Central Adjustment Bureau v. Ingram*, 678 S.W.2d 28 (Tenn. 1984) (consideration in the form of continuous employment over a long period of time); *Alex Sheshunoff Mgmt. Servs. v. Johnson*, 209 S.W.3d 644, 646 (Tex. 2006) (same; rejecting prior Texas case law); *Lake Land Emp. Grp. v. Columber*, 804 N.E.2d 27 (Ohio 2004) (consideration in the form of continuing to employ an at-will employee; three Justices dissented).

Why not require, out of fairness, that an employer who insists on such a covenant must pay the employee's salary during the term of the noncompete provision? Several other nations follow this approach:

- *Germany*: The German Commercial Code requires that an employer compensate the employee for the complete duration of time that the covenant is in effect up to a maximum duration of two years. *See* WENDI S. LAZAR & GARY

R. SINISCALCO (EDS.), RESTRICTIVE COVENANTS AND TRADE SECRETS IN EMPLOYMENT LAW: AN INTERNATIONAL SURVEY, Vol. I, 17-5 (2010) (German Commercial Code §74(a)(1)). Compensation must be at least half of the employee's pay during the previous 12 months of employment.

- *China*: In 2008, China adopted a similar regime. *See* PRC LABOR CONTRACT LAW of 1 January 2008, Articles 23–24 (2008). Employers may include noncompete restrictions of no more than two years in employment agreements with senior technicians, senior managers, and other employees who have access to trade secrets. Under the law, the employer must compensate the employee throughout the post-employment noncompete period, although the law does not specify the compensation level. It is unclear whether the compensation must be at the prior level or can be as low as minimum wage.
- *United Kingdom*: The UK employs a "garden leave" policy, under which the employee must provide the employer with a long notice period before changing employment. The employer is required to pay full salary and benefits during this period, but cannot force the employee to work. (The name comes from the idea that the employee can stay at home and tend their garden.) The garden leave period must be reasonable under the circumstances of the employment.

Some U.S. companies have adopted such approaches on a voluntary basis. *See Marcam Corp. v. Orchard*, 885 F.Supp. 294 (D. Mass. 1995) (enforcing a contractual provision preventing Orchard from working for any competitor in the country for one year, provided that Marcam paid 110 percent of the salary offered by the competitor). *See* Sonya P. Passi, *Compensated Injunctions: A More Equitable Solution to the Problem of Inevitable Disclosure*, 27 BERKELEY TECH. L.J. 927 (2012) (suggesting such an approach). Is the employee likely to be satisfied by that approach? How employable will he be after sitting idle for two years?

On the other hand, Delaware takes the position that companies can condition compensation on agreements not to compete and can claw back stock paid to employees years earlier if they later compete with the employer. *See LKQ Corp. v. Rutledge*, 2024 WL 5152476 (Del. Dec. 18, 2024). As a practical matter that is likely to have the same effect as enjoining employment.

7. Does the reasonableness of a noncompete agreement depend on the likelihood of trade secret misappropriation? In *Zodiac Records, Inc. v. Choice Envt'l Servs.*, 112 So.2d 587 (Fla. Ct. App. 2013), the court held that a three-year noncompete was unreasonable and violated due process where the plaintiff stipulated that it could not show that the defendant would use its trade secrets unless the agreement was enforced.

8. Can an employer avoid state laws restricting noncompetition agreements by requiring the employee to sign an agreement that does not forbid employment, but calls for the payment of a "liquidated damage" penalty if the employee goes to work for a competitor? Is such a monetary penalty effectively the same as enforcing a noncompete? What if the employer doesn't forbid employment, but conditions the grant of stock options on not going to work for a competitor? *See ADP, LLC v. Rafferty*, 923 F.3d 113

(3d Cir. 2019) (upholding such a condition). Note that it is common in high-tech industries to grant employees stock options that "vest" over a period of years, giving the employee an incentive not to leave and abandon the unvested options. Those provisions are legal.

9. Despite their unenforceability, many employers in California require employees to sign noncompete agreements. *See* J.J. Prescott et al., *Understanding Noncompetition Agreements: the 2014 Noncompete Survey Project*, 2016 MICH. ST. L. REV. 369. Employees who do not know that the agreements are unenforceable might be deterred from going to work for a competitor or starting their own business. Should employers that knowingly require unenforceable agreements face some penalty for doing so?

10. States that enforce noncompetes nonetheless allow departing employees to "prepare to compete" during the term of the agreement, "because restraining such acts would have the effect of extending the term of the covenant." *In re Document Techs. Litig.*, 275 F.Supp.3d 54, 464 (S.D.N.Y. 2017).

Are there circumstances in which an employee's use or disclosure of trade secrets is "inevitable," so that the only way to avoid misappropriation of the secret is to preclude employment altogether? Consider the following case:

PepsiCo, Inc. v. Redmond
United States Court of Appeals for the Seventh Circuit
54 F.3d 1262 (7th Cir. 1995)

FLAUM, CIRCUIT JUDGE.

[The district court ordered the issuance of a preliminary injunction preventing Quaker Oats Co. from employing Redmond, a former general manager for PepsiCo North America. Redmond was general manager of PepsiCo's California business unit for ten years until, in 1994, he accepted Quaker's offer to become the chief operating officer of its Gatorade and Snapple Co. divisions. The court held that Redmond would inevitably be forced to use PepsiCo trade secrets for his new employer.]

PepsiCo asserts that Redmond cannot help but rely on PCNA [PepsiCo North America] trade secrets as he helps plot Gatorade and Snapple's new course, and that these secrets will enable Quaker to achieve a substantial advantage by knowing exactly how PCNA will price, distribute, and market its sports drinks and new age drinks and being able to respond strategically. This type of trade secret problem may arise less often, but it nevertheless falls within the realm of trade secret protection under the present circumstance.

Quaker and Redmond assert that they have not and do not intend to use whatever confidential information Redmond has by virtue of his former employment. They point out that Redmond has already signed an agreement with Quaker not to disclose any trade secrets or confidential information gleaned from his earlier employment. They also note with regard to distribution systems that even if Quaker wanted to steal information about

PCNA's distribution plans, they would be completely useless in attempting to integrate the Gatorade and Snapple beverage lines.

The defendants' arguments fall somewhat short of the mark. Again, the danger of misappropriation in the present case is not that Quaker threatens to use PCNA's secrets to create distribution systems or coopt PCNA's advertising and marketing ideas. Rather, PepsiCo believes that Quaker, unfairly armed with knowledge of PCNA's plans, will be able to anticipate its distribution, packaging, pricing, and marketing moves. Redmond and Quaker even concede that Redmond might be faced with a decision that could be influenced by certain confidential information that he obtained while at PepsiCo. In other words, PepsiCo finds itself in the position of a coach, one of whose players has left, playbook in hand, to join the opposing team before the big game. Quaker and Redmond's protestations that their distribution systems and plans are entirely different from PCNA's are thus not really responsive. . . .

Quaker and Redmond do not assert that the confidentiality agreement is invalid; such agreements are enforceable when supported by adequate consideration.[10] Rather, they argue that "inevitable" breaches of these contracts may not be enjoined. The case on which they rely, however, *R. R. Donnelley & Sons Co. v. Fagan*, 767 F.Supp. 1259 (S.D.N.Y. 1991) (applying Illinois law), says nothing of the sort. The *R. R. Donnelley* court merely found that the plaintiffs had failed to prove the existence of any confidential information or any indication that the defendant would ever use it. *Id*. at 1267. The threat of misappropriation that drives our holding with regard to trade secrets dictates the same result here.

. . . In *Teradyne [v. Clear Communications Corp.*, 707 F.Supp.353 (N.D. Ill. 1989)], Teradyne alleged that a competitor, Clear Communications, had lured employees away from Teradyne and intended to employ them in the same field. In an insightful opinion, Judge Zagel observed that "threatened misappropriation can be enjoined under Illinois law" where there is a "high degree of probability of inevitable and immediate . . . use of . . . trade secrets." *Teradyne*, 707 F.Supp. at 356. Judge Zagel held, however, that Teradyne's complaint failed to state a claim because Teradyne did not allege "that defendants have in fact threatened to use Teradyne's secrets or that they will inevitably do so." [The Teradyne court held]:

> the defendants' claimed acts, working for Teradyne, knowing its business, leaving its business, hiring employees from Teradyne and entering the same field (though in a market not yet serviced by Teradyne) do not state a claim of threatened misappropriation. All that is alleged, at bottom, is that defendants could misuse plaintiff's secrets, and plaintiffs fear they will. This is not enough. It may be that little more is needed, but falling a little short is still falling short.

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[10] The confidentiality agreement is also not invalid for want of a time limitation. *See* 765 ILCS 1065/8(b)(1) ("[A] contractual or other duty to maintain secrecy or limit use of a trade secret shall not be deemed to be void or unenforceable solely for lack of durational or geographic limitation on the duty."). Nor is there any question that the confidentiality agreement covers much of the information PepsiCo fears Redmond will necessarily use in his new employment with Quaker.

Id. at 357.

In *AMP* we affirmed the denial of a preliminary injunction on the grounds that the plaintiff AMP had failed to show either the existence of any trade secrets or the likelihood that defendant Fleischhacker, a former AMP employee, would compromise those secrets or any other confidential business information. AMP, which produced electrical and electronic connection devices, argued that Fleischhacker's new position at AMP's competitor would inevitably lead him to compromise AMP's trade secrets regarding the manufacture of connectors. *AMP*, 823 F.2d at 1207. In rejecting that argument, we emphasized that the mere fact that a person assumed a similar position at a competitor does not, without more, make it "inevitable that he will use or disclose . . . trade secret information" so as to "demonstrate irreparable injury." *Id*.

The ITSA, *Teradyne*, and *AMP* lead to the same conclusion: a plaintiff may prove a claim of trade secret misappropriation by demonstrating that defendant's new employment will inevitably lead him to rely on the plaintiff's trade secrets. *See also* 1 JAGER, . . . §7.02[2][a] at 7-20 (noting claims where "the allegation is based on the fact that the disclosure of trade secrets in the new employment is inevitable, whether or not the former employee acts consciously or unconsciously"). . . .

PepsiCo presented substantial evidence at the preliminary injunction hearing that Redmond possessed extensive and intimate knowledge about PCNA's strategic goals for 1995 in sports drinks and new age drinks. The district court concluded on the basis of that presentation that unless Redmond possessed an uncanny ability to compartmentalize information, he would necessarily be making decisions about Gatorade and Snapple by relying on his knowledge of PCNA trade secrets. It is not the "general skills and knowledge acquired during his tenure with" PepsiCo that PepsiCo seeks to keep from falling into Quaker's hands, but rather "the particularized plans or processes developed by [PCNA] and disclosed to him while the employer-employee relationship existed, which are unknown to others in the industry and which give the employer an advantage over his competitors." *AMP*, 823 F.2d at 1202. The Teradyne and AMP plaintiffs could do nothing more than assert that skilled employees were taking their skills elsewhere; PepsiCo has done much more.

COMMENTS AND QUESTIONS

1. What Pepsi trade secrets are threatened by Redmond's "defection" to Quaker? The information Redmond possesses includes: (1) new flavor and product packaging information; (2) pricing strategies; (3) Pepsi's "attack plans" for specific markets; and (4) Pepsi's new distribution plan, being pilot tested in California. What advantages would Quaker obtain by knowing this information? How long would it take Quaker to find out about each in the absence of inside knowledge from Redmond? If all these items would become readily apparent the moment Pepsi's plans were implemented, does this circumstance suggest a limit on the appropriate remedy?

Assuming that Quaker will learn of Pepsi's strategies from Redmond unless enjoined, how expensive would it be for Pepsi to develop a new marketing strategy?

Could the new strategy take advantage of the fact that Quaker *thinks* it knows what Pepsi will do? How would this possibility affect Quaker's use of the information?

2. Assume that the market for sports and new age drinks is increasingly concentrated in the hands of two companies, Pepsi and Quaker. Should this affect the outcome of the case? Given the court's decision, what can one predict about future salary and benefits negotiations in this industry for employees like Redmond?

3. Is it fair to preclude former employees from doing any work for a competitor simply because they would be incapable of not using the information they obtained from their former employer? Note that the Seventh Circuit upheld an injunction against Redmond's employment for only six months. At the same time, the court issued a permanent injunction against the disclosure of Pepsi's trade secrets. Does this result make sense? If the theory of inevitable disclosure is that Redmond *must* use Pepsi's secrets in his employment, could he go to work for Quaker at the end of six months without violating the permanent injunction? Perhaps the court was implicitly seeking to balance Redmond's interests in employment mobility, reasoning that the business secrets would be less important after that time.

4. Is there any way that that employee can "keep separate" the ideas and projects he was working on for his old employer from the ideas and projects he will be asked to develop for his new employer? If not, should the employer be entitled to prevent the employee from competing even if it cannot show that the employee *intends* to use its trade secrets? *Cf. Al Minor & Assocs. v. Martin*, 881 N.E.2d 850 (Ohio 2008) (holding that the fact that a defendant had the plaintiff's secrets in his memory rather than on a disk or document did not preclude a finding of misappropriation).

Several cases have followed PepsiCo and enjoined employment absent either proof of trade secret misappropriation or an enforceable noncompetition agreement. *See Uncle B's Bakery v. O'Rourke*, 920 F.Supp. 1405 (N.D. Iowa 1996) (citing *PepsiCo* with approval and enjoining former plant manager at a bagel manufacturer from working for any competing business within a 500-mile radius); *see also Nat'l Starch & Chem. Corp. v. Parker Chem. Corp.*, 530 A.2d 31 (N.J. Super. Ct. App. Div. 1987). By contrast, one court has adopted what might be called a "partial inevitable disclosure" injunction. *See Merck & Co. v. Lyon*, 941 F.Supp. 1443 (M.D.N.C. 1996) (enjoining a pharmaceutical marketing director from discussing his former employer's products or pricing for a period of two years, but declining to enjoin him from competing employment altogether absent a "showing of bad faith"); *Novell Inc. v. Timpanogos Research Grp.*, 46 U.S.P.Q.2d 1197 (D. Utah 1998) (applying the doctrine, but limiting injunction duration to nine months because the secrets at risk would turn stale over time).

5. One court notes that in discussing "inevitable disclosure doctrine" that "calling a line of reasoning a 'doctrine' poses the risk of ossifying the 'factors' into a rigid test." *Molon Motor & Coil Cor. v. Nidec Motor Corp.,* 2017 WL 1954531, at *5 n.13 (N.D. Ill. May 11, 2017). The "inevitable disclosure" language is used by many courts to summarize evidentiary showings pointing to an ongoing imminent risk of "threatened misappropriation." *See* PETER S. MENELL, ET AL., TRADE SECRET CASE MANAGEMENT JUDICIAL GUIDE §§2.6.1.1, 5.2, 5.8 (2023) (collecting cases and discussing factual

showings pointing toward and away from a finding of imminent threatened misappropriation sufficient to support a claim for pre-trial injunctive relief); Stacey Dogan & Felicity Slater, *The Long Shadow of Inevitable Disclosure*, 30 GEO. MASON L. REV. 3 (2023) (noting that only a handful of jurisdictions have adopted the most extreme form of the doctrine and even those states rarely apply it to limit employee mobility). These showings are almost always based in on improper acts and not simply information that an individual knows.

6. Some jurisdictions reject the inevitable disclosure doctrine altogether. California's strict policy favoring employee mobility is the clearest example. *See* CAL. BUS. & PROF. CODE §16600. Some jurisdictions have rejected injunctions barring employment based on inevitable disclosure, although they have indicated that a noncompetition agreement could achieve such a result. *See Campbell Soup Co. v. Giles*, 47 F.3d 467 (1st Cir. 1995) (noting that public policy "counsels against unilateral conversion of nondisclosure agreements into non-competitive agreements"); *Carolina Chem. Equip. Co. v. Muckenfuss*, 471 S.E.2d 721 (S.C. Ct. App. 1996) (agreement entitled "Covenant Not to Divulge Trade Secrets" was an overbroad and unenforceable covenant not to compete, because the definition of trade secrets in the agreement effectively prevented any competition); *Del Monte Fresh Produce Co. v. Dole Food Co.*, 148 F.Supp.2d 1326, 1337–39 (S.D. Fla. 2001) (same); *see also Holton v. Physician Oncology Servs.*, 742 S.E.2d 702, 705–06 (Ga. 2013) (holding that "the inevitable disclosure doctrine is not an independent claim under which a trial court may enjoin an employee from working for an employer or disclosing trade secrets"; such relief is only available upon a showing of actual or threatened misappropriation); *LeJeune v. Coin Acceptors*, 849 A.2d 451, 469–71 (Md. 2004); *FMC Corp. v. Cyprus Foote Mineral Co.,* 899 F.Supp. 1477, 1483 (W.D.N.C. 1995) (stating that North Carolina's "courts would refuse to enjoin an employee from working for its former employer's competitor under the doctrine of 'inevitable discovery' absent some showing of bad faith, underhanded dealing, or employment by an entity so plainly lacking comparable technology that misappropriation can be inferred").

7. The federal Defend Trade Secrets Act, enacted in 2016, acknowledges the conflicts between the states but declines to adopt an inevitable disclosure rule that would override the public policy of California and other states favoring employee mobility. *See* S. REP., NO. 114-220, 114th Cong., 2D SESS., DEFEND TRADE SECRETS ACT OF 2016 12 n.12 (2016). To avoid doing so, the DTSA requires that proof of threatened future misappropriation be based on evidence of conduct and intent and not simply inferred from the employee's position or knowledge. 18 U.S.C. §1836(b)(3)(A)(i). That section provides that a court may:

> (A) grant an injunction
>
> > (i) to prevent any actual or threatened misappropriation described in paragraph (1) on such terms as the court deems reasonable, provided the order does not
> >
> > > (I) prevent a person from entering into an employment relationship, and that the conditions placed on such employment shall be based on

> evidence of threatened misappropriation and not merely on the information the person knows; or
>
> (II) otherwise conflict with an applicable State law prohibiting restraints on the practice of a lawful profession, trade, or business.

The SENATE REPORT notes that "[t]hese limitations on injunctive relief were included to protect employee mobility, as some have expressed concern that the injunctive relief authorized under the bill could override State-law limitations that safeguard employee mobility and thus could be a substantial departure from existing law in those states." S. REP., S. 1890 at 12. Thus, inevitable disclosure is not a viable theory under the DTSA. *See Idexx Labs. v. Bilbrough*, 2022 WL 3042966 (D. Me. Aug. 2, 2022); *CAE Integrated v. Moov Techs., Inc.*, 44 F.4th 257, 262–63 (5th Cir. 2022) (holding that where an employee had discarded all customer lists before moving to a new firm, the DTSA did not prohibit him from taking the job even if he still knew the customer information because doing so would impermissibly be based on his knowledge and not his behavior).

At the same time, the DTSA does not preempt state laws that apply the inevitable disclosure doctrine.

8. How inevitable must the disclosure be? In *Bimbo Bakeries v. Botticella*, 613 F.3d 102 (3d Cir. 2010), the court affirmed an injunction preventing a senior executive of Bimbo Bakeries, the maker of Thomas' English Muffins, from going to work for competitor Hostess. Botticella was one of only seven people at Bimbo who knew the formula for the muffins. Notably, the court did not find that it was "virtually impossible" for Botticella to do his job at Hostess without disclosing the formula. Instead, the court found it sufficient that there was a "substantial threat" of misappropriation. Does this result make sense? If the defendant denies any intent to deliver the secret to his new employer, what evidence should a court require before preventing him from going to work? Some courts seek to strike a middle ground, holding that where misappropriation is merely threatened rather than actual, the plaintiff must demonstrate "a high degree of probability of inevitable disclosure. . . . Mere knowledge of a trade secret is not enough, even where the person with such knowledge takes a comparable position with a competitor." *Katch, LLC v. Sweetser*, 2015 WL 6942132 (D. Minn. Nov. 10, 2015); *see also Archer Daniels Midland Co. v. Sinele*, 139 N.E.3d 1036, 1046 (Ill. Ct. App. 2019) (distinguishing PepsiCo where a sales manager went to a broker rather than to a competing seller); *Prime Therapeutics v. Beatty*, 354 F.Supp.3d 957 (D. Minn. 2018) (no inevitable disclosure when employee's job for a competitor is somewhat different than the old job).

9. Even states like California that do not recognize the inevitable disclosure doctrine will sometimes enjoin departing employees from working at a new company, but only on a showing that the employee or the new employer actually engaged in conduct making trade secret misappropriation likely. Thus, in the high-profile lawsuit between Google (Waymo) and Uber over self-driving cars, Anthony Levandowski, the former head of Waymo's self-driving car division, was ordered not to work at Uber on the same parts of the project he worked on for Waymo and was eventually fired. *See* Aaron

Marxhall, *Uber and Waymo Abruptly Settle For $245 Million*, WIRED (Feb. 9, 2019). The court ordered Levandowski to pay $179 million and the U.S. Attorney filed criminal trade secret and other charges. Levandowski ultimately pled guilty. *See* Reed Albergotti, *Ex-Uber executive Anthony Levandowski pleads guilty to trade-secret theft*, WASH. POST (Mar. 19, 2020).

PROBLEM 11-19

You have been offered a position with a high-technology start-up company. They ask you to sign the following agreement. Do you sign it? Is it enforceable?

EMPLOYMENT, CONFIDENTIAL INFORMATION, AND INVENTION ASSIGNMENT AGREEMENT

As a condition of my employment with Science Company, its subsidiaries, affiliates, successors, or assigns (together the "Company"), and in consideration of my employment with the Company and my receipt of the compensation now and hereafter paid to me by the Company, I agree to the following:

1. Confidential Information

(a) Company Information. I agree at all times during the term of my employment and thereafter, to hold in strictest confidence, and not to use, except for the benefit of the Company, or to disclose to any person, firm, or corporation without written authorization of the Board of Directors of the Company, any Confidential Information of the Company. I understand that "**Confidential Information**" means any Company proprietary information, technical data, trade secrets or know-how, including, but not limited to, research, product plans, products, services, customer lists and customers (including, but not limited to, customers of the Company on whom I called or with whom I became acquainted during the term of my employment), markets, software, developments, inventions, processes, formulas, technology, designs, drawings, engineering, hardware configuration information, marketing, finances, or other business information disclosed to me by the Company either directly or indirectly in writing, orally, or by drawings or observation of parts or equipment. I further understand that Confidential Information does not include any of the foregoing items which has become publicly known and made generally available through no wrongful act of mine or of others who were under confidentiality obligations as to the item or items involved.

2. Inventions

I agree that I will promptly make full written disclosure to the Company, will hold in trust for the sole right and benefit of the Company, and hereby assign to the Company, or its designee, all my right, title, and interest in and to any and all inventions, original works of authorship, developments, concepts, improvements or trade secrets, whether or not patentable or registrable under copyright or similar laws, which I may solely or jointly conceive or develop or reduce to practice, or cause to be conceived or developed or reduced to practice (collectively referred to as "Inventions"), during the period of time I am in the employ of the Company and for three months thereafter, except as provided below. I further acknowledge that all original works of authorship which are

made by me (solely or jointly with others) within the scope of and during the period of my employment with the Company and which are protectable by copyright are "works made for hire," as that term is defined in the United States Copyright Act.

3. Conflicting Employment

I agree that, during the term of my employment with the Company and for a period of one year thereafter, I will not engage in any other employment, occupation, consulting, or other business activity in competition with or directly related to the business in which the Company is now involved or becomes involved during the term of my employment, nor will I engage in any other activities that conflict with my obligations to the Company.

4. Returning Company Documents

I agree that at the time of leaving the employ of the Company, I will deliver to the Company (and will not keep in my possession, recreate or deliver to anyone else) any and all devices, records, data, notes, reports, proposals, lists, correspondence, specifications, drawings, blueprints, sketches, materials, equipment, other documents or property, or reproductions of any aforementioned items developed by me pursuant to my employment with the Company or otherwise belonging to the Company, its successors or assigns.

5. Notification to New Employer

In the event that I leave the employ of the Company, I hereby grant consent to notification by the Company to my new employer about my rights and obligations under this Agreement.

6. Solicitation of Employees

I agree that for a period of twelve (12) months immediately following the termination of my relationship with the Company for any reason, whether with or without cause, I shall not either directly or indirectly solicit, induce, recruit or encourage any of the Company's employees to leave their employment, or take away such employees, or at- tempt to solicit, induce, recruit, encourage, or take away employees of the Company, either for myself or for any other person or entity.

G. REMEDIES

As might be expected given the widely varying circumstances surrounding trade secret misappropriation, trade secret law affords courts a broad range of options and discretion for tailoring appropriate remedies. The Uniform Trade Secrets Act sets forth the following remedies for misappropriation:

Section 2

(a) Actual or threatened misappropriation may be enjoined. Upon application to the court, an injunction shall be terminated when the trade secret has ceased to exist, but the injunction may be continued for an additional reasonable period of time in order to eliminate commercial advantage that otherwise would be derived from the misappropriation.

(b) If the court determines that it would be unreasonable to prohibit future use, an injunction may condition future use upon payment of a reasonable royalty for no longer than the period of time the use could have been prohibited.

(c) In appropriate circumstances, affirmative acts to protect a trade secret may be compelled by court order.

Section 3

(a) In addition to or in lieu of injunctive relief, a complainant may recover damages for the actual loss caused by misappropriation. A complainant also may recover for the unjust enrichment caused by misappropriation that is not taken into account in computing damages for actual loss.

(b) If willful and malicious misappropriation exists, the court may award exemplary damages in an amount not exceeding twice any award made under subsection (a).

Section 4

If (i) a claim of misappropriation is made in bad faith, (ii) a motion to terminate an injunction is made or resisted in bad faith, or (iii) willful and malicious misappropriation exists, the court may award reasonable attorney's fees to the prevailing party.

What motivates this range of remedial measures? As we shall see in the chapters to come, most intellectual property statutes operate on the basis of "property rules." That is, as in cases involving real property, the owner of the intellectual property right is entitled to judicial assistance in protecting the right from future interference. Normally, this assistance comes in the form of injunctive relief. By contrast, most tort and contract cases do not involve injunctive relief but rather damages designed to make the plaintiff "whole" in the sense of restoring her to the position she occupied before the tort, or to the position she expected to occupy if the contract had been performed.

Section 2 of the Uniform Trade Secrets Act seems to entitle trade secret plaintiffs to property-like protection, at least so long as their secret remains a secret. But §2(b) holds open the possibility that courts may refuse to grant such an injunction, settling instead for a reasonable "royalty" (presumably a court's attempt to approximate what the parties might have agreed to pay in a licensing transaction). This provision casts some doubt on the "property entitlement" a trade secret owner might expect.

Similar doubt pervades the provisions on damages. Concepts like "reasonable royalty," "lost profits," and limited-time injunctions designed to "eliminate commercial advantage" all sound like measures aimed at making the plaintiff whole after a loss without necessarily punishing or deterring the defendant. But further provisions permit trade secret plaintiffs to recover for "unjust enrichment" on the part of defendants, and to recover treble damages and attorney fees in the case of willful misappropriation. Those provisions are more focused on deterring defendants. And in some circumstances misappropriation of trade secrets can be a criminal offense, an idea that is certainly more consistent with a property entitlement rule than a tort or contract rule.

1. Injunctions

Injunctions are commonly ordered in trade secret cases, although their scope and duration are typically tailored based on the circumstances. Since injunctions offer only prospective relief, however, damages for pre-injunction activities may also be collected. Since, unlike patents and copyrights, trade secrets have no definite term, the length of the injunction is often a difficult issue. The following case illustrates the use of one important measure of trade secret injunctions, the "head start" theory.

Winston Research Corp. v. 3M Corp
United States Court of Appeals for the Ninth Circuit
350 F.2d 134 (9th Cir. 1965)

BROWNING, CIRCUIT JUDGE.

For some uses of precision tape recorder/reproducers, the time interval between coded signals must be recorded and reproduced with great accuracy. To accomplish this, the tape must move at as constant a speed as possible during both recording and reproduction, and any changes in tape speed during recording must be duplicated as nearly as possible during reproduction. The degree to which a particular tape recorder/reproducer accomplishes, this result is measured by its "time-displacement error."

An electronic device known as a "servo" system is commonly used to reduce time displacement error by detecting fluctuations in tape speed and immediately adjusting the speed of the motor. Machines prior to the Mincom machine employed a flywheel to inhibit fluctuation in tape speed by increasing the inertia of the system. However, the flywheel reduced the effectiveness of the servo system since the increased inertia prevented rapid adjustments in the speed of the motor.

The effectiveness of the servo system in prior machines was also reduced by resonances created by the moving parts. The range of sensitivity of the servo system was limited to exclude the frequencies of the interfering resonances. This had the disadvantage of limiting the capacity of the servo system to respond to a full range of variations in the speed of the tape.

To solve these problems Mincom eliminated the flywheel and reduced the mass of all other rotating parts. This reduced the inertia of the tape transport system, permitting rapid adjustments in tape speed. Interfering resonances were eliminated by mechanical means. This permitted use of a servo system sensitive to a wide range of frequencies, and hence capable of rapid response to a wide range of variations in tape speed. After four years of research and development based upon this approach, Mincom produced a successful machine with an unusually low time-displacement error.

In May 1962, when Mincom had substantially completed the research phase of its program and was beginning the development of a production prototype, Johnson, who was in charge of Mincom's program, left Mincom's employment. He joined Tobias, who had previously been discharged as Mincom's sales manager, in forming Winston Research Corporation. In late 1962, Winston contracted with the government to develop a precision tape reproducer. Winston hired many of the technicians who had participated

in the development of the Mincom machine to work on the design and development of the Winston machine.

In approximately fourteen months, Winston completed a machine having the same low time-displacement error as the Mincom machine.

Conflicting policy considerations come into play in deciding what limitations should be imposed upon an employee in the use and disclosure of information acquired in the course of a terminated employment relationship—or, conversely, what protection should be extended to the former employer against use and disclosure of such information.

On the one hand, restrictions upon the use and disclosure of such information limit the employee's employment opportunities, tie him to a particular employer, and weaken his bargaining power with that employer. Such restrictions interfere with the employee's movement to the job in which he may most effectively use his skills. They inhibit an employee from either setting up his own business or from adding his strength to a competitor of his employer, and thus they diminish potential competition. Such restrictions impede the dissemination of ideas and skills throughout industry. The burdens that they impose upon the employee and society increase in proportion to the significance of the employee's accomplishments, and the degree of his specialization.

On the other hand, restrictions upon an employee's disclosure of information that was developed as a result of the employer's initiative and investment, and which was entrusted to the employee in confidence, are necessary to the maintenance of decent standards of morality in the business community. Unless protection is given against unauthorized disclosure of confidential business information by employees, employee-employer relationships will be demoralized; employers will be compelled to limit communication among employees with a consequent loss in efficiency; and business, espionage, deceit, and fraud among employers will be encouraged. . . .

. . . [S]tate law protecting trade secrets cannot be based "on a policy of rewarding or otherwise encouraging the development of secret processes or devices. The protection is merely against breach of faith and reprehensible means of learning another's secret." RESTATEMENT, TORTS §757, comment *b*.

The district court found, and Winston concedes, that Johnson and the other former Mincom employees based Winston's development program upon the same approach to the problem of achieving a low time-displacement error as they had pursued in developing the Mincom machine. The district court further found that this general approach was not a trade secret of Mincom's. Finally, the district court found that the particular embodiment of these general concepts in the Mincom machine was Mincom's trade secret, and had been improperly utilized by the former Mincom employees in developing the Winston machine.

[The court affirmed the district court's finding that Winston had misappropriated Mincom's trade secrets.]

The district court enjoined Winston Research Corporation, Johnson, and Tobias from disclosing or using Mincom's trade secrets in any manner for a period of two years

from the date of judgment. The court also required the assignment of certain patent applications to Mincom. No damages were awarded. . . . Mincom argues that the injunction should have been permanent, or at least for a substantially longer period. Winston contends that no injunctive relief was appropriate.

Mincom was, of course, entitled to protection of its trade secrets for as long as they remained secret. The district court's decision to limit the duration of injunctive relief was necessarily premised upon a determination that Mincom's trade secrets would shortly be fully disclosed, through no fault of Winston, as a result of public announcements, demonstrations, and sales and deliveries of Mincom machines. Mincom has not seriously challenged this implicit finding, and we think the record fully supports it. . . .

We think the district court's approach was sound. A permanent injunction would subvert the public's interest in allowing technical employees to make full use of their knowledge and skill and in fostering research and development. On the other hand, denial of any injunction at all would leave the faithless employee unpunished where, as here, no damages were awarded; and he and his new employer would retain the benefit of a headstart over legitimate competitors who did not have access to the trade secrets until they were publicly disclosed. By enjoining use of the trade secrets for the approximate period it would require a legitimate Mincom competitor to develop a successful machine after public disclosure of the secret information, the district court denied the employees any advantage from their faithlessness, placed Mincom in the position it would have occupied if the breach of confidence had not occurred prior to the public disclosure, and imposed the minimum restraint consistent with the realization of these objectives upon the utilization of the employees' skills. . . .

Winston also challenges the district court's determination that "knowledge of the reasons for" the particular specifications of the Mincom machine, and "knowledge of what not to do . . . and how not to make the same mistakes" as Mincom had made in arriving at these specifications, were Mincom trade secrets. Although we agree with the district court's conclusion that such "negative know-how" is a trade secret, in the circumstances of this case we can see no way to prohibit Mincom's former employees from using such knowledge without prohibiting them from using their general knowledge and experience at the same time. In an appropriate case, this kind of knowledge can be protected by an injunction or even an award of damages, but this is not such a case. . . .

Mincom argues that the district court should have awarded money damages as well as injunctive relief. We think the district court acted well within its discretion in declining to do so. Since Winston sold none of its machines, it had no profits to disgorge. The evidence as to possible future profits was at best highly speculative. To enjoin future sales and at the same time make an award based on future profits from the prohibited sales would result in duplicative and inconsistent relief, and the choice that the district court made between these mutually exclusive alternatives was not an unreasonable one. There was evidence that Winston would probably sell its machine and realize profits after the injunction expired, but these sales and profits, as we have seen, would not be

tainted by breach of confidence, since Winston could by that time have developed its machine from publicly disclosed information. . . .

[Judgment affirmed.]

COMMENTS AND QUESTIONS

1. Since the Supreme Court's decision in *eBay, Inc. v. MercExchange LLC*, 547 U.S. 388 (2006), the general rule in patent and copyright cases has been that injunctive is not automatic; rather, courts apply a four-factor balancing test that asks whether the plaintiff will be irreparably injured absent an injunction, whether the grant or denial of an injunction would impose more hardship, and where the public interest lies. Because the public disclosure of a trade secret can destroy the secret altogether, courts and commentators have traditionally thought injunctions appropriate to prevent an injury that truly is irreparable. But in the wake of eBay some courts have denied injunctive relief. *See, e.g., Faiveley Transport Malmo AB v. Wabtec Corp.*, 559 F.3d 110 (2d Cir. 2009); *First Western Capital v. Malamed*, 874 F.3d 1136 (10th Cir. 2017) (no presumption of irreparable injury, and no preliminary injunction without proof of irreparable injury); *Tribal Sols. Grp. v. Valandra*, 2023 WL 7314308 (5th Cir. Nov. 6, 2023); *Am. Airlines, Inc. v. Imhof*, 620 F.Supp.2d 574 (S.D.N.Y. 2009) (refusing to presume irreparable injury; plaintiff did not show that the defendant was likely to disclose the documents he took to his new employer).

Should there be a presumption that injunctive relief is appropriate? Such a presumption is typical of cases involving real property, but no such rule exists in most tort cases, and certainly not in typical contract cases. Are damages sufficient to protect trade secret owners? It would seem not, since trade secrets are often hard to value, and misappropriation by one party can destroy the secret altogether. On the other hand, the parties in most states could contract for injunctive relief, at least in employment cases, using noncompetition or confidentiality agreements. Should the law impose obligations the parties have not undertaken voluntarily? *See East v. Aqua Gaming Inc.*, 805 So.2d 932 (Fla. Dist. Ct. App. 2001) (affirming injunction against use of trade secrets, but vacating injunction that prevented competition in the absence of an enforceable noncompete agreement).

One problem with such "automatic" injunctive relief is that it is difficult—and costly—to enforce. Is it an appropriate use of judicial resources to supervise employer-employee relationships on an ongoing basis? Is there a more cost-effective alternative to such supervision?

2. "Head-start injunctions" like the one in Winston are available to plaintiffs who have published or otherwise disclosed their secret at some point after it was misappropriated. Suppose Anne possesses a secret that she is in the process of commercializing. Suppose further that it takes Anne two years after developing the secret to bring the product to market, at which point the secret is disclosed. If Benjamin steals Anne's idea during the development process (say, after one year), Benjamin will be able to get to market one year earlier than if he had waited until the information became public. In such a case, courts will issue a "head-start" injunction for a period of

one year, putting Benjamin in the same position he would have been in without the secret. *See, e.g., Verigy US Inc. v. Mayder*, 2008 WL 564634 (N.D. Cal. Feb. 29, 2008) (granting a five-month injunction to account for the lag time defendant would have faced in getting to market absent misappropriation). As one court explained,

> The inquiry into a proper "head-start period" is a practical inquiry focused on ensuring that one who prematurely used secret information gains no unfair advantage in the competitive marketplace—no "'head start' on the competition"—from that premature use. The Texas Supreme Court long ago made clear that the period to be identified is the period of the misappropriator's "marketing advantage or head start as compared to the [plaintiff] or any manufacturer or processor" who properly got the information. *Hyde*, 314 S.W.2d at 773; see id. at 778 (stressing focus on "economic equality"); *see also Halliburton Energy*, 444 S.W.3d at 257–60 (explaining that a competitive advantage is to be evaluated in the context of the industry and how a competitor could have properly obtained the advantage). The inquiry in this context reflects the "fundamental principle of corrective remedies that is used throughout the law": Restore the parties to the position they would have occupied in the absence of the wrong.

AMS-Osram USA Inc. v. Renesas Elecs. Am., 113 F.4th 1337, 1348-49 (Fed. 2025).

3. Should the idea of "head start" injunctions apply to noncompete agreements as well as trade secret misappropriation? In *EMC Corp. v. Arturi*, 655 F.3d 75 (1st Cir. 2011), Justice Souter, sitting by designation, held that the plaintiff could not extend a noncompete agreement beyond its expiration date, even if the court had not enforced the agreement pending litigation by issuing a preliminary injunction.

If an employee agrees not to compete for a year, and it takes more than a year for the court to decide that agreement is enforceable, what is the plaintiff's remedy? How would damages be calculated in such a case?

4. In *Kewanee Oil Co. v. Bicron Corp.,* 416 U.S. 470, 473 (1974), the former employees had signed confidentiality agreements. The Court upheld the district court's granting of 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 public, or had been obtained by respondents from sources having the legal right to convey the information. *Id*. at 473–74. *See also Henry Hope X-Ray Prods., Inc. v. Marron Carrel, Inc.*, 674 F.2d 1336, 1342 (9th Cir. 1982) (the limitation on confidential information contains the implicit temporal limitation that information may be disclosed when it ceases to be confidential).

Most courts have held that an indefinite injunction that extends beyond the head start period is inappropriate. *See Texas Advanced Optoelectronic v. Renesas Elecs. Am.*, 888 F.3d 1322, 1336 (Fed. Cir. 2018); *Howard Schultz & Assocs. v. Broniec*, 239 Ga. 181, 236 S.E.2d 265, 270 (1977) ("The nondisclosure covenant here contains no time limitation and hence it is unenforceable"); *Gary Van Zeeland Talent, Inc. v. Sandas*, 54 Wis. 2d 202, 267 N.W.2d 242, 250 (1978) (unlimited duration of agreement not to

disclose trade secret customer list makes the agreement per se void). The Eighth Circuit in *Sigma Chemical Co. v. Harris*, 794 F.2d 371, 375 (8th Cir. 1986) explained, in the course of rejecting a "temporally unlimited" injunction, the rationale for limiting injunctions in time:

> [E]xtending the injunction beyond the time needed for independent development would give the employer "a windfall protection and would subvert the public interest in fostering competition and in allowing employees to make full use of their knowledge and ability."
>
> We believe the part of the injunction prohibiting disclosure of trade secrets must be limited in duration and, accordingly, reverse in part and remand the case to the district court for consideration of the time it would take a "legitimate competitor" to independently reproduce the information contained in the product and vendor files. On remand, the district court should also modify the language of the injunction to expressly state that Harris may use that information which is already in the public domain.

But see Halliburton Energy Servs., Inc. v. Axis Techs., LLC, 444 S.W.3d 251 (Tex. App. 2014) (ordering a perpetual injunction and opining that such perpetual injunctions were the norm). Halliburton represents a decidedly minority view among courts to consider the duration of injunctions. S*ee* Richard F. Dole, Jr., *Permanent Injunctive Relief for Trade Secret Misappropriation Without an Express Limit upon Its Duration: The Uniform Trade Secrets Act Reconsidered*, 17 B.U. J. SCI. & TECH. L. 173, 191–98 (2011) (collecting cases). The Federal Circuit held in Texas Advanced that the Texas Supreme Court would not apply such a rule.

In addition to limits on time, courts also refuse to grant general "obey the law" injunctions against any misappropriation, instead enjoining only the use or disclosure of specific, identified trade secrets. FED. R. CIV. P. 65(d); *Corning, Inc. v. PicVue Elecs.*, 365 F.3d 156, 157–58 (2d Cir. 2004). Thus, courts have reversed overbroad injunctions that prevented the defendant from using any information obtained from the plaintiff without determining whether the information was in fact a trade secret or merely represented general skill and knowledge the defendant gained on the job. *See, e.g., Mallet & Co. v. Lacayo*, 16 F.4th 364 (3d Cir. 2021).

5. Who should be enjoined? Several courts have refused to hold the new employer liable for an employee's malfeasance where they were unaware of it. *See Infinity Prods. v. Quandt*, 810 N.E.2d 1028 (Ind. 2004) (no respondeat superior liability for trade secret law); *BEA Sys. v. WebMethods, Inc.*, 595 S.E.2d 87 (Ga. Ct. App. 2004).

6. *Ex Parte Seizure Orders*. While most requests for early equitable relief in trade secret disputes are made on notice pursuant to FED. R. CIV. P. 65, Congress enacted as part of the DTSA a self-contained "civil seizure" provision, patterned on similar language in the Lanham Act, permitting the trade secret owner to seek an ex parte seizure order without notice to the other side to prevent the "propagation or dissemination" of the trade secret in "extraordinary circumstances." 18 U.S.C.

§1836(b)(2)(A). This portion of the DTSA was also the issue most heavily debated and redrafted in the years leading up to its enactment.

This provision reflects Congress's concerns about cybersecurity and foreign hacking of websites. "The ex parte seizure provision is expected to be used in instances in which a defendant is seeking to flee the country or planning to disclose the trade secret to a third party immediately or is otherwise not amenable to the enforcement of the court's orders." S. Rep. No. 114-220, 114th Cong., 2d Sess., Defend Trade Secrets Act of 2016 9–10 (2016).

The DTSA permits *ex parte* seizures of trade secret information and evidence of misappropriation where there is some risk that the secrets would be disclosed or the evidence destroyed before a court could enjoin it during normal legal processes. Such ex parte seizures are subject to a number of conditions, limitations, and safeguards, including proof not only that the plaintiff is likely to win the case and meet the requirements for an injunction but also that the normal process of a temporary restraining order is inadequate because the defendant will not comply with it and that the defendant would destroy or hide the evidence if she were given notice of the proposed seizure. *See* 18 U.S.C. §1836(b)(A)(ii). If seizure is granted, the seizure order must "provide for the narrowest seizure of property necessary" to achieve the purposes of the order and to minimize any interruption of the business operations of third parties and, to the extent possible, the legitimate business operations of the person accused of misappropriation of the trade secret. The party seeking the *ex parte* seizure order "shall" be required to post security to pay damages that any person may be entitled to recover as a result of a wrongful or excess seizure or attempted seizure. The statute includes additional detailed safeguards, including protecting the party against whom an order is directed from publicity about the order and seizure at the behest of the person obtaining the order, protecting the seized storage medium, protecting the confidentiality of seized materials that are unrelated to the seized trade secret information and, where appropriate, appointing a special master and technical experts not controlled by or associated with the moving party or its counsel to assist in taking control of the seized material. See 18 U.S.C. §1836(b)(2)(C)–(D).

2. Damages and Disgorgement

The UTSA provides for damages adequate to compensate for infringement, and in addition for the disgorgement of defendant's profits from misappropriation to the extent they are not taken into account in the damages award. Both damages and profits must, however, be limited to losses suffered during the head start period, before the defendant could have lawfully obtained or developed the secret. *See Texas Advanced Optoelectronic v. Renesas Elecs. Am.*, 888 F.3d 1322, 1336 (Fed. Cir. 2018).

Damages. A plaintiff is entitled to recover as damages any economic losses they suffer as a result of the infringement. Those may include lost sales to a competitor or the loss of the value of the secret itself. And it can extend extraterritorially to sales lost abroad as a result of trade secret theft in the U.S. *See Motorola Solutions, Inc. v. Hytera Comm'ns*, 108 F.4th 458 (7th Cir. 2024). But the plaintiff must prove that harm; it is not

enough to speculate that the plaintiff would have succeeded in a new market but for the infringer's competition. *See Geometwatch Corp. v. Behunin*, 38 F.4th 1183, 1205 (10th Cir. 2022); *Pegasystems Inc. v. Appian Corp.*, 904 S.E.2d 247 (Va. App. 2024) (reversing $2 billion trade secrets verdict because plaintiff relied on defendant's total sales but could not prove that the misappropriation caused those sales). While the plaintiff whose secret is disclosed and therefore destroyed by the defendant can recover the value of the secret as a whole, plaintiff can recover the value of the trade secret only if the defendant's acts destroyed the secret. *See Syntel Sterling Best Shores Mauritius Ltd. v. The Trizetto Group*, 68 F.4th 792 (2d Cir. 2023); *Airfacts, Inc. v. Amezaga*, 30 F.4th 359 (4th Cir. 2022).

Disgorgement. Plaintiffs can also obtain disgorgement of the defendant's gains from misappropriation to the extent they aren't already counted in plaintiff's losses. Disgorgement is designed to deter misappropriation by depriving the defendant of ill-gotten gains, even if those gains exceed what the plaintiff itself could have made. Like injunctions, disgorgement is limited to the period of time during which the defendant had the secret unlawfully; it ends when the secret becomes public or the defendant successfully reverse-engineers it. *See AMS-Osram USA Inc. v. Renesas Elecs. Am.*, 133 F.4th 1337, 1348–51 (Fed. Cir. 2025).

A jury trial may be available on the damages claim, but disgorgement is an equitable remedy that is decided by a judge. *See Texas Advanced Optoelectronic Sols. v. Renesas Elecs Am.*, 895 F.3d 1304, 1337–44 (Fed. Cir. 2018).

By contrast, New York, the only state that follows the RESTATEMENT rather than the UTSA, has held that disgorgement of defendant's profits from infringement is not an available remedy. *See E.J. Brooks Co. v. Cambridge Security Seals*, 31 N.Y.3d 441 (Ct. App. N.Y. 2018).

Royalties. Even if an injunction is impossible and the plaintiff can't show lost profits, courts may allow the defendant to continue using the former secret but require them to pay a "reasonable royalty." The reasonable royalty is set by the court in an effort to approximate the royalty the trade secret owner might have charged in a voluntary transaction. That in turn is based on the value the defendant obtained from using the secret. *See PPG Indus. Inc. v. Jiangsu Tie Mao Glass Co.*, 47 F.4th 156, 162 (3d Cir. 2022).

Is a reasonable royalty a fair solution in such a situation? *See Mid-Michigan Comp. Sys. v. Marc Glassman Inc.*, 416 F.3d 505 (6th Cir. 2005) (basing damages for misappropriation of computer software on a reasonable royalty). At least one commentator has suggested that such a remedy "is peculiarly inappropriate to redress a situation where injunctive relief ought to be applied." *See* 12 ROGER MILGRIM, MILGRIM ON TRADE SECRETS §1.01[2][a], at 1–36 n.20 (citing a district court decision concluding that limiting relief to a reasonable royalty invites misappropriation).

Is a reasonable royalty always appropriate in the absence of an injunction, even if there is no evidence that the plaintiff lost money (or the defendant gained it) as a result of the misappropriation? In *Ajaxo Inc. v. E*Trade Fin. Corp.*, 115 Cal.Rptr.3d 168 (Ct.

App. 2010), the court held that it was error to refuse to award a reasonable royalty where the plaintiff could not prove damages or unjust enrichment. And in *Bianco v. Globus Medical, Inc.*, 53 F.Supp.3d 929 (E.D. Tex. 2014), the court treated a reasonable royalty as the normal remedy for use of a trade secret when the parties are not in competition, just as it is in patent cases. Notably, the *Bianco* court concluded that the royalty should be paid for fifteen years, well after the secret would have been discovered by independent means, reasoning that when the trade secret owner licensed ideas voluntarily it often signed contracts that required ongoing royalties. *See also Airfacts, Inc. v. Amezaga*, 30 F.4th 359 (4th Cir. 2022) (holding that a reasonable royalty should be awarded even though the defendant made no commercial use of the secret and merely put it on his resume).

The Seventh Circuit holds that the UTSA's provision of treble damages for misappropriation of trade secrets is unconstitutional, extending a line of tort cases that limits the ratio of punitive to actual damages. *See Epic Sys. v. Tata Consultancy Servs.*, 980 F.3d 1117 (7th Cir. 2020). The court held that punitive damages could not exceed the amount of actual damages (thus permitting doubling but not trebling the award). Curiously, however, the same court later held that the federal DTSA, which has an identical treble damages provision, was not unconstitutional. *See Motorola Solutions, Inc. v. Hytera Comm'ns*, 108 F.4th 458 (7th Cir. 2024).

3. State Criminal Trade Secret Statutes

Misappropriation of trade secrets is not only a tort; in some circumstances, it is a crime. A series of well-publicized criminal prosecutions of computer executives accused of taking trade secrets to their new employers have raised the consciousness of industry professionals about trade secrets. The prosecutions have also raised ethical and political questions about the propriety of trade secret prosecutions "engineered" by the real parties in interest, often major companies such as Intel or Borland.

Criminal trade secret cases differ from civil ones in several respects. The complaining party is the government, rather than the injured company. However, the injured companies are the "real parties in interest" and usually have some presence in the case. Even though they are not parties to the criminal proceeding, they at least supply a significant number of the witnesses and enjoy a high level of communication with the district attorney.

The burden of proof is higher than in a civil case. Some cases that could be won by the plaintiffs as civil cases will be lost in criminal court. This situation is even more likely because several states have definitions of trade secrets in their criminal laws that are more limited than their civil counterparts. For example, CAL. PENAL CODE §499c, which governs theft of trade secrets, historically limited the definition of a trade secret to "scientific or technical" information. (The constitutionality of this definition of trade secrets was upheld against a vagueness attack in *People v. Serrata*, 133 Cal. Rptr. 144 (Ct. App. 1976).) But in 1996, the California legislature amended its criminal trade secret statute to be coextensive with the broader definition of trade secrets in the UNIFORM TRADE SECRETS ACT.

Defendants accused of stealing trade secrets may be charged with other offenses as well. For example, defendants who acquire a secret through improper means, as opposed to acquisition in a confidential relationship, may be guilty of larceny, receiving stolen property, or a host of similar crimes. *See People v. Gopal*, 217 Cal.Rptr. 487, 493–94 (Ct. App. 1985). Further, the growth of computer technology has expanded the federal role in prosecuting theft of trade secrets, since data taken over a computer network is considered to cross state lines. *See United States v. Riggs*, 739 F.Supp. 414 (N.D. Ill. 1990) (allowing indictment of computer hackers who published data from a Bell South computer text file for wire fraud and interstate transportation of stolen property).

The prosecution of a criminal (rather than civil) trade secret case has other effects on the parties involved. First, criminal trade secret courtrooms are the scene of constant battles over the publication of information. The real parties in interest will naturally oppose the disclosure in a public courtroom of the very secrets the defendant is accused of stealing. This concern runs headlong into the defendant's constitutional right to a public trial.[8] Second, civil cases are generally stayed pending the outcome of a criminal prosecution. Thus, a criminal prosecution may actually delay injunctive relief—the kind of remedy a civil plaintiff is often most interested in.

COMMENTS AND QUESTIONS

1. Given the stay imposed on a parallel civil action and the higher burden of proof in a criminal case, why would a civil plaintiff ever seek a criminal prosecution?

2. Should theft of trade secrets be a criminal offense? Does the presence of criminal sanctions have any effect on the optimal level of deterrence provided in damages suits, and therefore on the damages that should be awarded in a civil suit?

Do you see any problems with California's inclusion of business information in the criminal trade secret statute? Are there reasons to treat theft of scientific information more harshly than theft of business information?

4. Federal Criminal Trade Secret Liability

The Economic Espionage Act, enacted in 1996, imposes criminal liability for trade secret misappropriation. The EEA is divided into two sections: one focused on foreign espionage and the other applying generally. Section 1831 punishes the theft or misappropriation of a trade secret when undertaken by anyone "intending or knowing that the offense will benefit any foreign government, foreign instrumentality or foreign agent." 18 U.S.C. §1831(a). This prohibition targets foreign business espionage. To establish a violation of §1831, the government must prove that: (1) the defendant stole or without authorization of the owner, obtained, possessed destroyed, or conveyed

[8] There is no such right in civil cases. To avoid the very real danger that a misappropriation action will result in disclosure of the very secrets the plaintiff seeks to protect, civil trade secret actions will almost invariably include protective orders limiting the disclosure of information produced in discovery. Such orders are usually agreed to by the parties but may sometimes be imposed by the court. They will sometimes go so far as to prevent the parties themselves (as opposed to the attorneys and hired experts) from reviewing the other side's documents. In such a case, should in-house counsel be given access to discovery documents? *See Brown Bag Software v. Symantec Corp.*, 960 F.2d 1465, 1470 (9th Cir. 1992).

information; (2) the defendant knew this information was proprietary; (3) the information was in fact a trade secret; and (4) the defendant intended or knew that the offense would "benefit" a "foreign government, foreign instrumentality or foreign agent."

Section 1832 is a general criminal trade secrets provision and applies to anyone who knowingly engages in any misappropriation of a trade secret. To establish a violation of §1832, the government must prove:

> (1) that the defendant intended to convert proprietary information to the economic benefit of anyone other than the owner; (2) that the proprietary information was a trade secret; (3) that the defendant knowingly stole, copied, possessed or received trade secret information; (4) that the defendant intended or knew the offense would injure the owner of the trade secret; and (5) that the trade secret was included in a product that is placed in interstate commerce.

United States v. Wen Chyu Liu, 716 F.3d 159, 169 (5th Cir. 2013).

By contrast to civil trade secret liability but in line with nearly all criminal statutes, both §1831(a)(4) and §1832(a)(4) also prohibit "attempts to commit any offense described in any of paragraphs (1) through (3)." *See United States v. Lange*, 312 F.3d 263 (7th Cir. 2002) (affirming guilty verdict on defendant even if he did not have real trade secrets in his possession because he thought that he did and took a substantial affirmative act (attempted sale) toward completion of the offense).

H. FEDERAL PREEMPTION

The Supremacy Clause of the U.S. CONSTITUTION provides that

> This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing [sic] in the Constitution or Laws of any State to the Contrary notwithstanding.

U.S. CONST., ART. VI, CL. 2. Thus, the Supremacy Clause nullifies state law attempts to duplicate or interfere with federal intellectual property protection. More difficult cases involve state laws that do not directly conflict with federal authority but instead address interstitial gaps within the federal regime. Courts must grapple with whether Congress intended to leave such gaps unfilled, thereby precluding state protection, or simply allowed state law to fill these voids. The following case addressed the interplay of federal patent law and state trade secret protection.

Kewanee Oil Co. v. Bicron Corp.
Supreme Court of the United States
416 U.S. 470 (1974)

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 preemption. The Courts of Appeals for the Second, Fourth, Fifth, and Ninth Circuits have reached the opposite conclusion. . . .

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 public, 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. . . .

III.

The first issue we deal with is whether the States are forbidden to act at all in the area of protection of the kinds of intellectual property which may make up the subject matter of trade secrets.

ARTICLE I, §8, CL. 8, of the CONSTITUTION grants to the Congress the power

> [t]o 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. . . .

In the 1972 Term, in *Goldstein v. California*, 412 U.S. 546 (1973), we held that the CL. 8 grant of power to Congress was not exclusive and that, at least in the case of writings, the States were not prohibited from encouraging and protecting the efforts of those within their borders by appropriate legislation. The States could, therefore, protect against the unauthorized rerecording for sale of performances fixed on records or tapes, even though those performances qualified as "writings" in the constitutional sense and Congress was empowered to legislate regarding such performances and could pre-empt the area if it chose to do so. This determination was premised on the great diversity of interests in our Nation—the essentially nonuniform character of the appreciation of intellectual achievements in the various States. Evidence for this came from patents granted by the States in the 18th century. 412 U.S., at 557.

Just as the States may exercise regulatory power over writings so may the States regulate with respect to discoveries. States may hold diverse viewpoints in protecting intellectual property relating to invention as they do in protecting the intellectual property relating to the subject matter of copyright. The only limitation on the States is that in regulating the area of patents and copyrights they do not conflict with the operation of the laws in this area passed by Congress, and it is to that more difficult question we now turn.

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 Avocado Growers 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. 173, 176 (1942). This is true, of course, even if the state law is enacted in the exercise of otherwise undoubted state power." . . .

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 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." . . .

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 nonpatentable 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*, 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. . . .

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 respect 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. . . .

. . . 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. . . .

The final category of patentable subject matter to deal with is the clearly patentable invention, 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. . . .

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. . . .

. . . 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. . . . Congress, by its silence over these many years, has seen the wisdom of 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. . . .

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 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 suit to redress theft of a trade secret is grounded in tort damages for breach of a contract—a historic remedy, *Cataphote Corp. v. Hudson*, 422 F.2d 1290. Damages for breach of a confidential relation are not pre-empted by this patent law, but an injunction against use is pre-empted because the patent law states the only monopoly over trade secrets that is enforceable by specific performance; and that monopoly exacts as a price full disclosure. A trade secret can be protected only by being kept secret. Damages for breach of a contract are one thing; an injunction barring disclosure does service for the protection accorded valid patents and is therefore pre-empted. . . .

COMMENTS AND QUESTIONS

1. The rule set forth by *Sears, Roebuck & Co v. Stiffel Co.*, 376 U.S. 225 (1964), was fairly clear: patent law reflects a compromise between the goal of promoting innovation and the danger of condoning monopoly. Supplementing the scope of patent law may upset that balance, and is therefore prohibited. Supplementing enforcement of the federal intellectual property laws was condoned in dictum at the end of *Compco Corp. v. Day-Brite Lighting, Inc.*, 376 U.S. 234 (1964), a companion case, and in Justice Harlan's concurrence in both cases. After these cases, state law served a very limited function in the scheme of intellectual property protection. States could work to further the goals of federal protection, but they had to work within the parameters set down by federal law. As a result, both *Sears* and *Compco* struck down state statutes providing design protection to unpatentable utilitarian articles.

The *Kewanee* opinion takes a remarkably different tack. Chief Justice Burger's opinion for the Court emphasizes only one of the two policies shaping the patent laws: the goal of promoting innovation. The opinion does not discuss the dangers intellectual

property protection poses for free competition. As a result, the *Kewanee* Court finds no problem with trade secret protection that extends beyond the scope of the patent laws. Note that the Court seems to approve not only of state laws that protect nonpatentable subject matter (an area in which it could be argued that the federal government has no interest),[9] but also the protection of inventions not patentable for some other reason (i.e., suppression, misuse, lack of novelty, or obviousness).

Is *Kewanee* reconcilable with *Sears*? The *Kewanee* Court did not overrule Sears or Compco; indeed, it cited them in support of its holding. Thus state laws preventing copying were treated differently from trade secret laws after *Kewanee*. The latter, although broader in scope (they prevented far more than just outright copying of products), were permissible; the former were not. *See* Paul Goldstein, Kewanee Oil Co. v. Bicron Corp.: *Notes on a Closing Circle*, 1974 SUP. CT. REV. 81 (1974) (arguing that Kewanee "closed the circle" on the open-ended preemption analysis of Sears and Compco); Camilla A. Hrdy, *State Patents as a Solution to Underinvestment in Innovation*, 62 U. KAN. L. REV. 487 (2013) (arguing that state patents, which preceded the adoption of the CONSTITUTION in 1789, are still possible and in some cases desirable despite federal nature of patent law).

2. Is preemption a good idea? That depends on what you think of the balance the federal laws have struck. If you are more concerned about injury to competition by conferring monopoly rights on patentees, you are likely to favor the result in Sears. If, on the other hand, you think that innovation is under-rewarded, it is reasonable to oppose federal preemption. One way to reconcile these cases may be to read Sears and Compco as expressing a federal policy in favor of reverse engineering of products in the public domain. If that is the overarching federal goal, it is logical to strike down the laws in *Sears* and *Compco* but not *Kewanee*, since trade secrets statutes (unlike the unfair competition laws we have discussed) generally allow reverse engineering. This result is also consistent with the reading of trade secret laws as merely an application of tort and contract principles.

[9] Even in this area, though, a federal interest may be discerned. If Congress has declared some subject matter unpatentable, that could reflect a federal determination that that matter is unworthy of protection, a determination that state law should not be allowed to upset.