Patents in Open Source

Introduction

The relationship between the patent system and software hasn't always been clear. Software is a unique construction, incorporating both creative and functional aspects. While creative aspects of software are protected under copyright law, the functional aspects of software may be protectable via patent law.[1] The interaction between patent law and open source licenses is the focus of this chapter.

A patent gives its owner the right to exclude others from making, using, and selling the claimed invention.[2] In contrast, open source licenses grant broad rights to modify, compile, distribute, and use the software. Absent explicit treatment in the license, the patent-related right to exclude and the open-source-granted right to use are at least apparently in tension.

A number of open source licenses[3] address

this tension explicitly by including a patent grant in the text of the license. However, just seeing the word "patent" or not in an open source license is not enough to identify whether there is an effective grant of patent rights. For example, the Open Source Initiative has stated its view that all open source licenses implicitly include a patent grant, relying on the text of elements 1 and 7 of the open source definition.[4]
Further, even when there is an explicit patent grant, the scope of the patent grant may not be well-defined. Finally, the distribution of open source-licensed software may have implications for patent exhaustion.

This chapter presents materials related to four separate but related issues:

1. **Explicit licenses:** Express language in open source licenses granting patent licenses;
2. **Implicit Licenses:** The existence and scope of implied patent licenses in open source licenses;
3. **Express but Non-specific Licenses:** Express grants in open source licenses that do not include the term "patent;" and
4. **Patent Exhaustion:** The doctrine of patent exhaustion and its applicability to the distribution of open source software.

Explicit Patent Licensing

Selections from Open Source Licenses

About half of all open source licenses include express patent grants, but the scope of those licenses may vary depending upon the language of the grant. Below are a number of widely-used or noteworthy open source licenses that expressly include a patent grant.

Academic Free License 3.0

Excerpt from the Academic Free License, Version 3.0[5]

2) Grant of Patent License. Licensor grants You a worldwide, royalty-free, non-exclusive, sublicensable license, under patent claims owned or controlled by the Licensor that are embodied in the Original Work as furnished by the Licensor, for the duration of the patents, to make, use, sell, offer for sale, have made, and import the Original Work and Derivative Works.

Apache 2.0

Excerpt from the Apache License, Version 2.0[6]

6. Grant of Patent License.
Subject to the terms and conditions of this License, each Contributor hereby grants to You a perpetual, worldwide, non-exclusive, no-charge, royalty-free, irrevocable (except as stated in this section) patent license to make, have made, use, offer to sell, sell, import, and otherwise transfer the Work, where such license applies only to those patent claims licensable by such Contributor that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted....

Eclipse Public License version 2.0

Excerpt from the Eclipse Public License, Version 2[7]

2. GRANT OF RIGHTS

...

b) Subject to the terms of this Agreement, each Contributor hereby grants Recipient a non-exclusive, worldwide, royalty-free patent license under Licensed Patents to make, use, sell, offer to sell, import and otherwise transfer the Contribution of such Contributor, if any, in Source Code or other form. This patent license shall apply to the combination of the Contribution and the Program if, at the time the Contribution is added by the Contributor, such addition of the Contribution causes such combination to be covered by the Licensed Patents. The patent license shall not apply to any other combinations which include the Contribution. No hardware per se is licensed hereunder.

GNU General Public License 2.0

Excerpt from the GNU General Public License License, Version 2.0[8]

Preamble

...

Finally, any free program is threatened constantly by software patents. We wish to avoid the danger that redistributors of a free program will individually obtain patent licenses, in effect making the program proprietary. To prevent this, we have made it clear that any patent must be licensed for everyone's free use or not licensed at all.

...

7. If, as a consequence of a court judgment or allegation of patent infringement or for any other reason (not limited to patent issues), conditions are imposed on you (whether by court order, agreement or otherwise) that contradict the conditions of this License, they do not excuse you from the conditions of this License. If you cannot distribute so as to satisfy simultaneously your obligations under this License and any other pertinent obligations, then as a consequence you may not distribute the Program at all. For example, if a patent license would not permit royalty-free redistribution of the Program by all those who receive copies directly or indirectly through you, then the only way you could satisfy both it and this License would be to refrain entirely from distribution of the Program.

GNU General Public License 3.0

Excerpt from the GNU General Public License License, Version 3.0[9]

11. Patents.

A "contributor" is a copyright holder who authorizes use under this License of the Program or a work on which the Program is based. The work thus licensed is called the contributor's "contributor version".

A contributor's "essential patent claims" are all patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version. For purposes of this definition, "control" includes the right to grant patent sublicenses in a manner consistent with the requirements of this License.

Each contributor grants you a non-exclusive, worldwide, royalty-free patent license under the contributor's essential patent claims, to make, use, sell, offer for sale, import and otherwise run, modify and propagate the contents of its contributor version.

In the following three paragraphs, a "patent license" is any express agreement or commitment, however denominated, not to enforce a patent (such as an express permission to practice a patent or covenant not to sue for patent infringement). To "grant" such a patent license to a party means to make such an agreement or commitment not to enforce a patent against the party.

If you convey a covered work, knowingly relying on a patent license, and the Corresponding Source of the work is not available for anyone to copy, free of charge and under the terms of this License, through a publicly available network server or other readily accessible means, then you must either (1) cause the Corresponding Source to be so available, or (2) arrange to deprive yourself of the benefit of the patent license for this particular work, or (3) arrange, in a manner consistent with the requirements of this License, to extend the patent license to downstream recipients. "Knowingly relying" means you have actual knowledge that, but for the patent license, your conveying the covered work in a country, or your recipient's use of the covered work in a country, would infringe one or more identifiable patents in that country that you have reason to believe are valid.

If, pursuant to or in connection with a single transaction or arrangement, you convey, or propagate by procuring conveyance of, a covered work, and grant a patent license to some of the parties receiving the covered work authorizing them to use, propagate, modify or convey a specific copy of the covered work, then the patent license you grant is automatically extended to all recipients of the covered work and works based on it.

A patent license is "discriminatory" if it does not include within the scope of its coverage, prohibits the exercise of, or is conditioned on the non-exercise of one or more of the rights that are specifically granted under this License. You may not convey a covered work if you are a party to an arrangement with a third party that is in the business of distributing software, under which you make payment to the third party based on the extent of your activity of conveying the work, and under which the third party grants, to any of the parties who would receive the covered work from you, a discriminatory patent license (a) in connection with copies of the covered work conveyed by you (or copies made from those copies), or (b) primarily for and in connection with specific products or compilations that contain the covered work, unless you entered into that arrangement, or that patent license was granted, prior to 28 March 2007.

Nothing in this License shall be construed as excluding or limiting any implied license or other defenses to infringement that may otherwise be available to you under applicable patent law.

Mozilla Public License 2.0

Excerpt from the Mozilla Public License, Version 2.0[10]

2. License Grants and Conditions

2.1. Grants

Each Contributor hereby grants You a world-wide, royalty-free, non-exclusive license:

...

under Patent Claims of such Contributor to make, use, sell, offer for sale, have made, import, and otherwise transfer either its Contributions or its Contributor Version.

...

2.3. Limitations on Grant Scope

The licenses granted in this Section 2 are the only rights granted under this License. No additional rights or licenses will be implied from the distribution or licensing of Covered Software under this License. Notwithstanding Section 2.1(b) above, no patent license is granted by a Contributor:

for any code that a Contributor has removed from Covered Software; or

for infringements caused by:

1. Your and any other third party's modifications of Covered Software, or
2. the combination of its Contributions with other software (except as part of its Contributor Version); or
3. under Patent Claims infringed by Covered Software in the absence of its Contributions.

Discussion

1. How does the wording of the grant affect its scope? For example, what are the substantive differences in scope between grants covering:
   - "patent claims ... embodied in the Original Work as furnished by the Licensor" (AFL3)
   - "patent claims ... that are necessarily infringed by their Contribution(s) alone or by combination of their Contribution(s) with the Work to which such Contribution(s) was submitted" (Apache2)
   - "combination of the Contribution and the Program if ... such addition of the Contribution causes such combination to be covered by the Licensed Patents" (EPL2)
   - "patent claims owned or controlled by the contributor, whether already acquired or hereafter acquired, that would be infringed by some manner, permitted by this License, of making, using, or selling its contributor version, but do not include claims that would be infringed only as a consequence of further modification of the contributor version." (GPL3)
2. How do the different open source licenses treat the licensing of subsequent derivative works? Can patent-claim-implementing code be extracted from an open source project and used in a different context?
3. How do the different licenses treat the issue of later-acquired patent rights?
4. The GNU General Public License, version 2, purports to condition the use of the code on the statement that any applicable patent "must be licensed for everyone's free use or not licensed at all." Is this language effective as a patent license?

Industry Agreements

While there aren't any industry agreements that affect *all* open source, a large number of open source packages are covered by the patent license agreement provided by the Open Invention Network ("OIN").

The Open Invention Network is a shared defensive patent pool with the mission to protect Linux. Launched in 2005, OIN includes (as of October 2018) 2747 participating licensees [11]. Based upon the number of patents publicly owned by participants in OIN, the patent pool includes more than 100,000 active patents cross-licensed on a royalty-free basis, making it the largest patent pool in any industry.

The patent pool maintained by OIN covers what is described as the "Linux System." The Linux System is substantially broader than just the underlying operating system. It also includes a number of standard packages that are included with most Linux distributions

The OIN Linux System is defined as follows:[12]

> "Linux Environment Component" shall mean any of the software packages whose released source code shall be identified on the OIN website, including bug fixes and error corrections thereto, or a Predecessor Release or Successor Release of any of such packages.
>
> "Linux System" shall mean a Linux Environment Component or any combination of such components to the extent each such component is (i) generally available under an Open Source License or in the public domain (and the source code for such component is generally available) and (ii) Distributed with, or for use with, the Linux Kernel (or is the Linux Kernel).

Also see the the tables listing applicable standards[13] and current list of packages.[14]

One of the unique aspects of the OIN patent pool is that it grows in scope over time. Periodically the trustees of the Open Invention Network will propose a new set of packages to be added to the Linux System. If individual companies object to the inclusion of the new components, they can exercise a "Limitation Election" to stop participating in the pool before the new components are added - but all previously licensed components remain licensed.

The Open Invention Network Agreement

Excerpt from the Open Invention Network License Agreement:[15]

SECTION 1. Licenses.

1.1 Subject to Section 1.2(b), OIN, grants to You and Your Subsidiaries a royalty-free, worldwide, nonexclusive, non-transferable license under OIN Patents to make, have made, use, import, and Distribute any products or services. In addition to the foregoing and without limitation thereof, with respect only to the Linux System, the license granted herein includes the right to engage in activities that in the absence of this Agreement would constitute inducement to infringe or contributory infringement (or infringement under any other analogous legal doctrine in the applicable jurisdiction).

1.2 Subject to Section 2.2 and in consideration for the license granted in Section 1.1, You, on behalf of yourself and your Affiliates, (a) grant to each Licensee and its Subsidiaries that are Subsidiaries as of the Eligibility Date a royalty-free, worldwide, nonexclusive, non-transferable license under Your Patents for making, having made, using, importing, and Distributing any Linux System; and (b) represent and warrant that (i) You have the full right and power to grant the foregoing licenses and the release in Section 1.4 and that Your Affiliates are and will be bound by the obligations of this Agreement; and (ii) neither You nor any of Your Affiliates has a Claim pending against any Person for making, having made, using, importing, and Distributing any Linux System. Notwithstanding anything in another Company Licensing Agreement to the contrary, You and your current and future Subsidiaries do not and shall not receive, and hereby disclaim and waive, any license from a Licensee and its current and future Affiliates pursuant to a Company Licensing Agreement for implementations of Linux Environment Components as specified in such Company Licensing Agreement to the extent that You and your current and future Affiliates are excepting any such implementations of Linux Environment Component from your license to a Licensee and its current and future Subsidiaries. The previous sentence is for the express benefit of the Members of OIN, OIN, and OIN's Licensees.

1.3 Subject to Section 1.2(b), OIN irrevocably releases You and Your Subsidiaries from claims of infringement of the OIN Patents to the extent such claims are based on acts prior to the Agreement Date that, had they been performed after the Agreement Date, would have been licensed under this Agreement.

1.4 You, on behalf of Yourself and Your Affiliates, irrevocably releases and shall release each Licensee and its Subsidiaries that are Subsidiaries on the Amendment Date and their respective Channel Entities and Customers that are Channel Entities and Customers, respectively, on or before the Amendment Date from any and all claims of infringement of Your Patents to the extent such claims are based on acts prior to the Amendment Date that, had they been performed after the Amendment Date, would have been licensed under this Agreement. As used herein, a Licensee's "Amendment Date" shall mean the later of the date an amendment becomes effective under Section 2.1 and the date such Licensee becomes a Licensee.

...

Definitions:

"Affiliate" shall mean, with respect to any specified Person, any other Person that now or in the future (i) is a Subsidiary of the specified Person, (ii) is a parent of the specified Person or (iii) is a Subsidiary of a parent of the specified Person. In each of the foregoing cases, such other Person shall be deemed to be an Affiliate only during the time such relationship as a Subsidiary or parent exists.

Discussion

1. How does the OIN License Agreement change in scope over time? What is the effect of the wording around a person "that now or in the future" is an Affiliate?
2. How significant is the OIN patent pool? Many of the technologies used in the Linux System are more than twenty years old, and so are out of scope for any enforceable patents. On the other hand, many new technologies are being developed in open source *first,* and only later

commercialized. Which effect predominates?

Implied Patent Licenses

Open source software licenses are designed to spread: They maximize the ease of distribution and minimize the friction associated with ordinary license negotiations. Typically, an open source license is self-executing [16], meaning that the a new license grant is automatically given to each person receiving a copy of the covered work upon receipt. As described in *De Forest*, this act of freely licensing the source code may give rise to an implied patent license:[17]

> Any language used by the owner of the patent, or any conduct on his part exhibited to another from which that other may properly infer that the owner consents to his use of the patent in making or using it, or selling it, upon which the other acts, constitutes a license and a defense to an action for a tort.

As you read this case and the follow-on cases that have further refined the scope of implied licenses, think about whether any of a) the statements in the license itself, b) the actions of the licensor in applying the open source license and distributing copies to the public, or c) the self-executing nature of open source licenses may reasonably give rise to an implied patent license.

De Forest Radio Telephone Co. v. United States

United States Supreme Court (1927)[18]

MR. CHIEF JUSTICE TAFT delivered the opinion of the Court.

This is an appeal from a judgment of the Court of Claims dismissing the petition of the appellant, on the 4th of May, 1925. This was before the effective date of the Act of February 13, 1925, c. 229, 43 Stat. 936, by which direct appeals from the Court of Claims under §§ 242 and 243 of the Judicial Code were repealed and the review by certiorari was substituted.

The De Forest Radio Telephone Telegraph Company filed its petition in the Court of Claims against the United States, seeking to recover for an alleged unlawful use by the Government of certain patented vacuum tubes or audions, used in radio communication. The suit was brought under the Act of June 25, 1910, c. 423, 36 Stat. 851, as amended by the Act of July 1, 1918, c. 114, 40 Stat. 704, 705. The Act of 1910 provided that whenever an invention described in and covered by a patent of the United States should thereafter be used by the Government without license of the owner or lawful right to use it, the owner could recover reasonable compensation for the use in the Court of Claims, provided that the United States could avail itself of all defenses, general or special, which might be pleaded by any other defendant charged with infringement. The amending Act of 1918 enlarged the scope of the Act by providing that the recovery by the owner should include compensation for patented inventions used or made by or for the United States.

The petition showed, that the two patents involved in the suit were granted to De Forest and by him were duly assigned to the appellant, the company bearing his name, and that that company executed and delivered to the Western Electric Company a written instrument conveying certain rights in the patents, which were subsequently conveyed to the American Telephone Telegraph Company. This contract was set out in the petition. In consideration of one dollar and other good and valuable considerations, it granted a license to make, use, install, operate and lease, and to sell or otherwise dispose of to others for sale, installation and operation, apparatus and systems embodying or made or operating in accordance with the invention. It purported to give this license for the full terms of the patents and for all transferable rights of the De Forest Company in the inventions, except such as were expressly reserved by that company. The reservations included nonassignable rights for the purpose of making the articles in question for, and selling them to, the United States Government for its use. The instrument further provided that the Western Company and the De Forest Company might respectively institute and conduct suits against others for any of the patents within the fields in which each respectively possessed rights, but that all such suits should be conducted at the expense of the party bringing them, that party to retain any judgment recovered in any such suits.

Paragraph 12 of the instrument provided that the Western Company might transfer to others, in whole or in part, the rights granted by the instrument, and might assign rights thereunder, or grant licenses, to various persons, firms or corporations for the several uses to which the inventions were applicable. The petition further alleges that the United States, being engaged in war, informed the American Telephone Telegraph Company that it desired to have large numbers of the audions made promptly for it by the General Electric Company and others; and that the American Telephone Telegraph Company replied by writing to the Chief Signal officer of the Army that it would not do anything to interfere with the immediate manufacture of the audions, provided it were understood and agreed that the Telephone Telegraph Company "waived none of its claims under any patents or patent rights owned by it on account of said manufacture, and that all claims under patent rights and all patent questions be reserved and later investigated, adjusted and settled by the United States." The plan was accepted by the United States, and the orders for said audions were thereafter given by the United States to the General Electric Company and the Moorhead Laboratories, Inc., who made them and delivered them to the Government, which used them.

The petition further alleged, that, for the purposes of assisting the United States to obtain said audions promptly, pursuant to the orders given, the American Telephone Telegraph Company furnished information, drawings and blueprints to the General Electric Company, and permitted representatives and experts of the United States and of said General Electric Company to witness and study the manufacture of said audions by the Telephone Telegraph Company, all to the end that the audions might be the more promptly made and delivered to the United States for use in the war in which it was then engaged.

After the filing of the petition in the suit, it was amended by an averment that, after the audions were made and used by the United States, negotiations were carried on between it and the American Telephone Company, and that the latter company executed a release to the United States and all manufacturers acting under its orders of all claims for compensation for the making and use of the audions, and that the release included "all claims which had arisen or might thereafter arise, for royalties, damages, profits or compensation for infringement of any or all letters patent owned or controlled by the Telephone Telegraph Company, whether expressly recited therein or not, for the manufacture or use prior thereto, and for use by the United States occurring thereafter."

The petition was demurred to, the demurrer was sustained and the petition dismissed. It is conceded by the parties that, on the face of the petition, with the contracts which were made exhibits, the De Forest Company and the American Telephone Telegraph Company had each the right to license to the United States the making and use of these audions, and that, if either did so license them, it would be a complete defense to a claim by the other for damages for the tort of infringement.

The sole question, therefore, which the Court of Claims considered, and decided against the appellant, was whether on the facts recited in the petition the American Telephone Telegraph Company had in fact given a license to the United States to have made and to use these audions, covered by the patents. In other words, was the claim which the American Telephone Telegraph Company had against the United States for the manufacture and use of the audions, based on a contract, or was it based on a tort? If it was the former, it was a full defense to any claim by the De Forest Company. If it was the latter, the De Forest Company was entitled to recover under the Act of 1918.

The appellant says that the necessary effect of the allegations of its petition is, that the Telephone Company said to the United States, in answer to the United States' notice that it wished to make and use the audions, "You will be infringing my rights. I shall not stop you but I notify you that I shall hold you for such infringement," and therefore that the subsequent acts of the United States and its manufacturers were torts. We think a different construction should be given the allegations. The agreement by the Telephone Company that it would not do anything to interfere with the immediate making of the audions for the United States, interpreted in the light of its subsequent action in assisting the United States to a prompt making of the audions for its use, in furnishing the needed information and drawings and blueprints for such manufacture, and in giving to the experts of the United States and its manufacturers the opportunity to witness and study the manufacture of audions by the Telephone Company, to the end that the audions might be more promptly manufactured and delivered to the United States for use in the war, made such conduct clearly a consent to their manufacture and use, and a license, and this without any regard to the effect of the subsequent release by the Telephone Telegraph Company of compensation for such manufacture and use. No formal granting of a license is necessary in order to give it effect. Any language used by the owner of the patent, or any conduct on his part exhibited to another from which that other may properly infer that the owner consents to his use of the patent in making or using it, or selling it, upon which the other acts, constitutes a license and a defense to an action for a tort. Whether this constitutes a gratuitous license, or one for a reasonable compensation, must of course depend upon the circumstances; but the relation between the parties thereafter, in respect of any suit brought, must be held to be contractual and not based on unlawful invasion of the rights of the owner. Concede that if the owner had said, "If you go on and infringe my patent, I shall not attempt to enjoin you, but I shall subsequently sue you for infringement," the tort would not be waived — that is not this case. Here the circumstances show clearly that what the Company was doing was not only fully consenting to the making and using by the United States of the patent, but was aiding such making and using and, in doing so, was licensing it, only postponing to subsequent settlement what reasonable compensation, if any, it might claim for its license. The case of *Henry v. Dick*, 224 U.S. 1, in its main point was overruled in the *Motion Picture Patents Company v. Universal Film Company*, 243 U.S. 502; but that does not shake the authority of the language of the Court in the following passage (p. 24):

"If a licensee be sued, he can escape liability to the patentee for the use of his invention by showing that the use is within his license. But if his use be one prohibited by the license, the latter is of no avail as a defense. As a license passes no interest in the monopoly, it has been described as a mere waiver of the right to sue by the patentee," citing Robinson on Patents, §§ 806 and 808.

In this case the language used certainly indicated the purpose of the Telephone

Company not to seek an injunction against infringement, and not to sue for damages therefor, but only to sue or seek for an amicable settlement by payment of just compensation. Such action by the Telephone Company was a license, and constituted a complete defense against a suit for infringement by the De Forest Company.

Judgment affirmed.

Wang Laboratories, Inc. v. Mitsubishi Electonics America, Inc.

Wang Labs., Inc. v. Mitsubishi Elecs. Am., Inc., Fed. Cir. 1997 [19]

BACKGROUND

James Clayton, the named inventor in the patents in suit, joined Wang Laboratories in the fall of 1982. At the time, computer memory components remained relatively large, expensive, and difficult to upgrade. In the spring of 1983, Clayton developed the SIMM as a smaller, lower cost, replaceable form of computer memory. On September 2, 1983, Clayton, with Wang as assignee, applied for a patent on the SIMM invention, application serial number 528,817.

...

Mitsubishi first met with Wang regarding SIMMs in December 1983. In their meetings, Wang supplied drawings and other details to Mitsubishi and repeatedly requested that Mitsubishi manufacture SIMMs. Mitsubishi researched the possibility of producing SIMMs for Wang, but did not proceed with the project at that time. After Mitsubishi began making 256K memory chips, however, Mitsubishi decided to assemble 256K SIMMs, incorporating the new chips into a SIMM similar to Wang's, for sale to Wang and others. Mitsubishi declined to assess engineering costs to Wang, contrary to its asserted practice when creating a custom product exclusively for a particular purchaser.

In 1985 meetings, in the context of ongoing contacts between the two companies, Mitsubishi and Wang discussed Mitsubishi's new 256K SIMMs. [Footnote Omitted] In one meeting, Clayton suggested that Mitsubishi modify its SIMM by placing the decoupling capacitors on the same side of the substrate with the chips, as in the original Wang design. Mitsubishi complied. Mitsubishi went on to mass produce 256K SIMMs; and in 1987, Wang began buying Mitsubishi SIMMs. Wang never informed Mitsubishi of its patent applications, patents, or of any intent to execute a license or receive royalties until a December 22, 1989 letter accusing Mitsubishi of infringing the '605 and '513 patents, which had issued in 1987 and 1988 respectively.

Wang sued Mitsubishi for infringement on June 4, 1992, in the United States District Court for the Eastern District of Virginia. Wang argued that Mitsubishi literally infringed the '513 patent and infringed the '605 patent under the doctrine of equivalents. Mitsubishi had the case transferred to the United States District Court for the Central District of California and filed counterclaims seeking a declaratory judgment of invalidity, non-infringement, and unenforceability, as well as alleging assorted state and federal antitrust violations. Mitsubishi also asserted several affirmative defenses, including the defense that Wang's conduct created an implied license.

...

...Wang and Mitsubishi fought over the formulation of the implied license instruction to the jury. Wang submitted legal estoppel language; Mitsubishi objected and offered equitable estoppel or estoppel by conduct as the basis of its license. The final instruction merged the parties' competing proposals into one instruction which read as follows:

> One who owns a patent as patentee or assignee, having the right to exclude others from making, using, or selling what is claimed, may agree to let another do one or more of those acts. This is called a license, and the person allowed to do the set of acts is a licensee.
>
> An implied license is a form of implied-in-fact contract. In order to proved [sic] the defense of implied license, [\Mitsubishi] must establish by a preponderance of the evidence that (1) there was an

> existing relationship between Wang and [Mitsubishi]; (2) within that relationship, Wang transferred a right to use SIMM invention to [Mitsubishi]; (3) the right was transferred for valuable consideration; and (4) Wang has now denied the existence of the right it transferred to [Mitsubishi].
>
> In deciding whether [Mitsubishi has] proved the existence of an implied license, you may consider statements and conduct of Wang from which one would reasonably infer Wang's consent to Mitsubishi's making, using, or selling products to persons other than Wang under the patents.
>
> If you find that a right to make, use, or sell the SIMM invention granted to [Mitsubishi] then you should find and [sic] implied license was granted to [Mitsubishi] by Wang.

The relevant question to the jury on the Special Verdict Form read, "Has Mitsubishi proven by a preponderance of the evidence that Wang licensed Mitsubishi to make, use, or sell the subject matter of the '513 patent?. The jury answered "Yes."

...

After the verdict, the court held a hearing on Mitsubishi's equitable defenses, then directed Wang to draft a proposed judgment and findings of fact and conclusions of law adopting the jury's determinations on the equitable defenses, which Wang did. Mitsubishi objected to Wang's drafts and protested that, although the findings and conclusions did not cover the implied license, Wang wrote findings on other issues which contradicted and undermined the jury's implied license verdict. Furthermore, Wang had written that the jury found an implied license, "under the doctrine of legal estoppel.. Notwithstanding Mitsubishi's objections, the court entered both the Judgment and the Findings of Fact and Conclusions of Law.

On March 6, 1995, the parties argued six motions to the district court. Wang's motions addressed the implied license defense. First, Wang moved for Rule 50(b) JMOL because Wang believed that no reasonable jury could find Mitsubishi provided valuable consideration for a license, as required by

Wang's formulation of implied license elements based on legal estoppel. Second, Wang sought a partial new trial on the implied license defense. Third, Wang moved to amend the judgment based on its theory that the implied license conclusion mandated a finding that an implied contract existed and that, assuming an absence of other consideration, Mitsubishi must have promised royalties to Wang.

...

ANALYSIS

Wang appeals the partial summary judgment of non-infringement of the '605 patent based on prosecution history estoppel, and the resolution of the implied license issue to negate infringement of the '513 patent. Mitsubishi cross-appeals from the judgment on best mode, nonobviousness, and infringement.

...

The '513 Patent: Implied License

Mitsubishi argued at trial that Wang's conduct had created an implied license to it under the '513 patent. The parties agreed to submit Mitsubishi's implied license defense to the jury and the jury found an implied license to exist. The district court entered judgment on the verdict, and added the rationale that the implied license arose "under the doctrine of legal estoppel. Focusing on the legal estoppel rationale, Wang moved for JMOL or a new trial on the implied license issue because, according to Wang, a reasonable jury could not have found facts to support legal estoppel and because the court misapplied the law of legal estoppel. See Fed.R.Civ.P. 50(b) and 59(a). Wang also moved the court to infer contract terms requiring Mitsubishi to pay royalties to Wang as part of the implied license. See Fed.R.Civ.P. 59(e). The district court denied the motions. Wang now seeks a reversal of the judgment or new trial on the implied license defense. In an appeal from a judgment following denial of JMOL, we must affirm factual findings that are supported by substantial evidence, we then review legal conclusions to determine whether the factual findings can bear them. *Railroad Dynamics, Inc. v. A. Stucki Co.* 727 F.2d

1506, 1512, 220 USPQ 929, 935-36 (Fed.Cir.1984); *Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 893, 221 USPQ 669, 672-73 (Fed.Cir.1984). We review the denial of a motion for a new trial for abuse of discretion. *Railroad Dynamics*, 727 F.2d at 1512, 220 USPQ at 935-36.

Because the second step of this review will require us to determine whether the factual findings support the conclusion of law, we must first ascertain what facts the jury found relating to Mitsubishi's implied license defense. *Id*. The Special Verdict Form asked the jury to answer only the ultimate question of whether an implied license exists, so the jury instructions serve as our most direct guide to what the jury decided.3 See *Newell Cos., Inc. v. Kenney Mfg. Co.*, 864 F.2d 757, 765, 9 USPQ2d 1417, 1423 (Fed.Cir.1988) (we accept factual findings presumed from jury verdict, subject to substantial evidence test). In order to arrive at its affirmative answer on the implied license question, the jury necessarily found that (1) a relationship existed between Wang and Mitsubishi, (2) within that relationship, Wang granted to Mitsubishi a right to use its SIMM inventions, (3) Wang received valuable consideration for that grant of right, (4) Wang denied that Mitsubishi had an implied license, and (5) Wang's statements and conduct created the impression that Wang consented to Mitsubishi making, using, or selling Wang's patented inventions, including sales to consumers other than Wang. Separately, the jury found that Mitsubishi made, used, or sold several versions of SIMMs that would infringe the '513 patent but for the license.

With regard to the factual component of our review, Wang challenges only the finding of valuable consideration. Before we can apply the substantial evidence test to this finding, however, it becomes necessary to look beyond the jury instructions and verdict to discover what the jury understood to constitute "valuable consideration.. The district court's order denying Wang's motion for JMOL identified three benefits conferred on Wang: (1) by agreeing to manufacture and sell SIMMs, Mitsubishi contributed to a "high volume supply and downward pressure on [the] price" of SIMMs, which benefited Wang as a purchaser of SIMMs; (2) Mitsubishi absorbed development and tooling costs; and, (3) Mitsubishi redesigned its SIMMs to conform to Wang's preferred design. The district court ruled that each form of consideration was supported by substantial evidence.

Looking to the record in search of substantial evidence, Wang's own statements show that when the company introduced its SIMM design in June 1983, Wang intended to buy SIMMs from other producers rather than produce SIMMs itself. Eventually, Wang hoped to "get the advantage of the cost reduction because of the volumes involved.. The evidence indicates that Wang considered lower prices and a larger market to be of value to it, as they obviously were as a large user of SIMMs. In time, JEDEC adopted Wang's SIMM design as a standard in what became a multi-billion dollar market. The market grew; prices dropped. The record contains evidence that Mitsubishi contributed to this advantageous outcome. Clayton's notes about Mitsubishi, for example, contain references to prices "dropping to mid-teens.. Wang introduced evidence that dozens of producers have participated in making the SIMM market, and that Mitsubishi sold $361 million worth of SIMMs between April 1985 and March 1994. A reasonable person could conclude from the evidence that Mitsubishi supplied consideration to Wang by helping Wang achieve the market scenario it sought and valued.

Substantial evidence of the second and third benefits also appears on the record. Mitsubishi personnel testified that they made design changes to accommodate Wang's needs: specifically, moving the capacitors onto the same side of the substrate as the memory chips. Similarly, testimony indicated that Mitsubishi declined to assess development and tooling charges to Wang because it understood Wang was permitting Mitsubishi to sell SIMMs to other customers. Clayton's notes reveal that, from the first meeting onward, he closely followed Mitsubishi's development and tooling of SIMMs with 64K or 256K chips in PLCCs. Clayton clearly wanted Mitsubishi to make 64K SIMMs, which Mitsubishi decided against, but Clayton also sought "to open [communication with] Japan for us on a 256K X9 SIMM. All the while, Wang and Mitsubishi exchanged designs and samples. A reasonable person could conclude that Wang received something it valued because Mitsubishi was persuaded to follow Wang's design suggestions, but was led to believe the resultant SIMMs were not custom products for Wang and did not assess charges. Although Wang points to contrary evidence, we cannot reevaluate credibility or substitute our choices for those of the jury. *Perkin-Elmer*, 732 F.2d at 893, 221 USPQ at 672-73. Therefore, these findings survive the substantial evidence test.

With the findings of fact firmly in hand, we now turn to the legal conclusion that an implied license exists. See *Met-Coil Sys. Corp. v. Korners Unltd., Inc.*, 803 F.2d 684, 687, 231 USPQ 474, 476 (Fed.Cir.1986) (implied license is question of law). In patent law, an implied license merely signifies a patentee's waiver of the statutory right to exclude others from making, using, or selling the patented invention. *Spindelfabrik Suessen-Schurr Stahlecker & Grill GmbH v. Schubert & Salzer Maschinenfabrik Aktiengesellschaft*, 829 F.2d 1075, 1081, 4 USPQ2d 1044, 1048 (Fed.Cir.1987). In the words of the Supreme Court,

> No formal granting of a license is necessary in order to give it effect. Any language used by the owner of the patent, or any conduct on his part exhibited to another from which that other may properly infer that the owner consents to his use of the patent in making or using it, or selling it, upon which the other acts, constitutes a license and a defense to an action for a tort.

De Forest Radio Tel. Co. v. United States, 273 U.S. 236, 241, 47 S.Ct. 366, 367, 71 L.Ed. 625 (1927). Since *De Forest*, this court and others have attempted to identify and isolate various avenues to an implied license. As a result, courts and commentators relate that implied licenses arise by acquiescence, by conduct, by equitable estoppel (estoppel in pais), or by legal estoppel. See *AMP, Inc. v. United States*, 182 Ct.Cl. 86, 389 F.2d 448, 452 nn. 4-5, 156 USPQ 647, 649 nn. 4-5 (1968); Robert L. Harmon, Patents and the Federal Circuit § 6.2(c) (3d ed. 1994 & Supp.1996); 6 Ernest B. Lipscomb III, Walker on Patents § 20:14-20:17 (3d ed. 1987 & Supp.1995). These labels describe not different kinds of licenses, but rather different categories of conduct which lead to the same conclusion: an implied license. The label denotes the rationale for reaching the legal result.

One of our predecessor courts observed that "courts generally have first looked for facts which give rise to an estoppel in the process of concluding that there is an implied license." *AMP*, 389 F.2d at 452, 156 USPQ at 649. The opinions that hew most closely to the *De Forest* language and the "entire course of conduct" analysis rely on the doctrine of equitable estoppel, because *De Forest* requires that conduct of the patentee led the other to act. *Bandag, Inc. v. Al Bolser's Tire Stores, Inc.*, 750 F.2d 903, 925-26, 223 USPQ 982, 998-99 (Fed.Cir.1984); *Stickle v. Heublein, Inc.*, 716 F.2d 1550, 1559, 219 USPQ 377, 383 (Fed.Cir. 1983). In *Bandag*, we reversed a conclusion of implied license because the infringer failed to show an awareness of the conduct which supposedly created the license. *Bandag*, 750 F.2d at 925-26, 223 USPQ at 998-99. In *Stickle*, we affirmed that no implied license existed absent the required nexus between the patentee's conduct and the infringing actions, given that the course of infringing action only began later and distinct from the cited conduct. *Stickle*, 716 F.2d at 1559, 219 USPQ at 383-84.

Neither this court nor the Supreme Court, however, has required a formal finding of equitable estoppel as a prerequisite to a legal conclusion of implied license. See *AMP*, 389 F.2d at 453-54, 156 USPQ at 651. To do so would remove all distinction between the doctrines. Rather the estoppel doctrines serve as guidelines. See *id*. at 451-52, 182 Ct.Cl. 86, 389 F.2d 448, 156 USPQ at 649-50. The primary difference between the estoppel analysis in implied license cases and the analysis in equitable estoppel cases is that implied license looks for an affirmative grant of consent or permission to make, use, or sell: i.e., a license. See *Stickle*, 716 F.2d at 1559, 219 USPQ at 383-84. Equitable estoppel, on the other hand, focuses on "misleading" conduct suggesting that the patentee will not enforce patent rights. *A.C. Aukerman Co. v. R.L. Chaides Constr. Co.*, 960 F.2d 1020, 1041-44, 22 USPQ2d 1321, 1335-38 (Fed.Cir.1992). In *Aukerman*, we described a typical equitable estoppel situation as one in which (1) the infringer knows of the patent, (2) the patentee objects to the infringer's activities, (3) but the patentee does not seek relief until much later, (4) thereby misleading the infringer to believe the patentee will not act. *Id*. at 1042-43, 960 F.2d 1020, 22 USPQ2d at 1335-36. Thus, the two doctrines are not conterminous. Illustratively, both the jury, in its advisory capacity, and the district court decided against Mitsubishi on the defense of equitable estoppel per se, with misleading conduct as a required component of that defense.

Legal estoppel refers to a narrower category of conduct encompassing scenarios where a patentee has licensed or assigned a right, received consideration, and then sought to derogate from the right granted. *Spindelfabrik*, 829 F.2d at 1080, 4 USPQ2d at 1048; AMP 389 F.2d at 452, 156 USPQ at 649-50. In *AMP*, for example, a patentee granted a license to, and received payment from, the United States for use of an "idea" which later became the subject matter of its patent. *Id*. at 453-54, 182 Ct.Cl. 86, 389 F.2d 448, 156 USPQ at 651. The patentee then discovered a preexisting patent covering an aspect of the invention. *Id*. at 451, 182 Ct.Cl. 86, 389 F.2d 448, 156 USPQ at 648. After acquiring the preexisting patent, the patentee sued the government for infringement of the preexisting patent. *Id*. The Court of Claims held that an implied license barred patentee from using the preexisting-but-after-acquired patent to derogate from the express license negotiated under the other patent. *Id*. at 454, 182 Ct.Cl. 86, 389 F.2d 448, 156 USPQ at 651.

We review issues of law, like the implied license defense, de novo. *Guinn v. Kopf*, 96 F.3d 1419, 1421, 40 USPQ2d 1157, 1159 (Fed.Cir.1996). In this process, we review judgments rather than opinions. See, e.g., *Baxter Healthcare Corp. v. Spectramed, Inc.*, 49 F.3d 1575, 1582, 34 USPQ2d 1120, 1125 (Fed.Cir.), cert. denied, 516 U.S. 906, 116 S.Ct. 272, 133 L.Ed.2d 194 (1995). Moreover, we may affirm a district court's action where the record offers a route to affirm that neither expands nor contracts the rights established for either party by the judgment. *Consolidated Aluminum Corp. v. Foseco Int'l Ltd.*, 910 F.2d 804, 815, 15 USPQ2d 1481, 1489 (Fed.Cir. 1990). Here, we agree with the district court that the factual findings support the jury's legal conclusion on the implied license defense, although we do not necessarily agree with all of the district court's reasoning. The jury's findings may support an implied license in the nature of legal estoppel given the transfer of a right for consideration and the subsequent suit for infringement, but we instead follow the lead of our predecessor, the United States Court of Claims, and focus on an alternative form of estoppel. See *AMP*, 389 F.2d at 452, 156 USPQ at 650 (rejected equitable estoppel and affirmed based on legal estoppel).

Although judicially implied licenses are rare under any doctrine, Mitsubishi proved that the "entire course of conduct" between the parties over a six-year period led Mitsubishi to infer consent to manufacture and sell the patented products. See *De Forest*, 273 U.S. at 241, 47 S.Ct. at 367. Furthermore, the level of interaction between the parties while Mitsubishi designed and made SIMMs distinguishes this scenario from *Bandag* where the infringer based its failed defense on conduct unknown to the infringer when the infringement occurred. See *Bandag*, 750 F.2d at 925-26, 223 USPQ at 998-99. The record shows that Wang tried to coax Mitsubishi into the SIMM market, that Wang provided designs, suggestions, and samples to Mitsubishi, and that Wang eventually purchased SIMMs from Mitsubishi, before accusing Mitsubishi years later of infringement. We hold, as a matter of law, that Mitsubishi properly inferred consent to its use of the invention of Wang's patents.

The findings that Wang bestowed "a right to use the SIMM invention" and that Mitsubishi supplied valuable consideration to Wang, support our holding that Wang's conduct created a license. This falls short of the express licenses or assignments usually discussed in conjunction with legal estoppel, but it constitutes part of a course of conduct that transcends "unilateral expectations … of one party." *Stickle*, 716 F.2d at 1559, 219 USPQ at 383. Wang not only led Mitsubishi to infer consent, Wang obtained payment. Wang publicly announced its desired compensation. Wang also manifested this desire in other ways, for example, by Wang's efforts at JEDEC to have its SIMM designated a standard. With the contributions of Mitsubishi and others, Wang received exactly the remuneration it desired: Wang's design is an industry standard, and the benefits of a large market and lower prices for SIMMs redound to this day. In sum, Wang consented to Mitsubishi's use of the invention, granted the right to make, use, or sell the patented SIMMs without interference from Wang, and received consideration. Therefore, we agree with the district court's determination, reiterated in denying Wang's motion to amend the judgment, that Mitsubishi possesses an irrevocable royalty-free license under the '513 patent.

Because the jury's findings of fact are supported by substantial evidence and the jury reached the correct legal conclusion based on its findings, we affirm the judgment regarding Mitsubishi's implied license defense. In reaching this result, we hold that Mitsubishi's implied license is in the nature of equitable rather than legal estoppel, because the license arose from an accord implicit in the entire course of conduct between the parties as discussed in *De Forest* and subsequent cases relying on equitable estoppel as a guideline. We further hold that the district court did not abuse its discretion by denying Wang a partial new trial on this issue.

A. C. Aukerman Co. v. R. L. Chaides Construction Co

Excerpt from *A. C. Aukerman Co. v. R. L. Chaides Constr. Co.*, Fed. Cir. 1992[20]

An [equitable] estoppel case ... has three important elements. [1] The actor, who usually must have knowledge of the true facts, communicates something in a misleading way, either by words, conduct or silence. [2] The other relies upon that communication. [3] And the other would be harmed materially if the actor is later permitted to assert any claim inconsistent with his earlier conduct.

...

The first element of equitable estoppel concerns the statements or conduct of the patentee which must "communicate something in a misleading way." The "something" with which this case, as well as the vast majority of equitable estoppel cases in the patent field is concerned, is that the accused infringer will not be disturbed by the plaintiff patentee in the activities in which the former is currently engaged. The patentee's conduct must have supported an inference that the patentee did not intend to press an infringement claim against the alleged infringer. It is clear, thus, that for equitable estoppel the alleged infringer cannot be unaware--as is possible under laches--of the patentee and/or its patent. The alleged infringer also must know or reasonably be able to infer that the patentee has known of the former's activities for some time....

The second element, reliance... is essential to equitable estoppel. The accused infringer must show that, in fact, it substantially relied on the misleading conduct of the patentee in connection with taking some action....

Finally, the accused infringer must establish that it would be materially prejudiced if the patentee is now permitted to proceed.

Discussion

1. The *De Forest* court found that the patent owner's statements and ongoing conduct implied a license even when the patent owner indicated that royalties might later be assessed. What kind of common actions by companies releasing code under an open source license might similarly give rise to an implied patent license?
2. The *Wang* court lays out different circumstances under which a court may infer a patent license. One of those is "an affirmative grant of consent or permission to make, use, or sell." Is distribution of source code, that, when compiled, implements a patented method or embodies a patented system an affirmative grant to "make" or "use" that method or system?
3. Another fact pattern identified by the *Wang* court is legal estoppel: "scenarios where a patentee has licensed or assigned a right, received consideration, and then sought to derogate from the right granted." In the context of open source, rights are licensed to recipients via the open source license. Does the use of the code by others provide the necessary consideration to support a theory of legal estoppel? (*Cf.* the establishment of the SIMM as a standard in *Wang*, and the following in *Jacobsen v. Katzer*: "The lack of money changing hands in open source licensing should not be presumed to mean that there is no economic consideration, however. There are substantial benefits, including economic benefits, to the creation and distribution of copyrighted works under public licenses that range far beyond traditional license royalties." *Jacobsen v. Katzer*, 535 F.3d 1373, 1379).
4. "Equitable estoppel... focuses on "misleading" conduct suggesting that the patentee will not enforce patent rights." (*Wang* at 1271). Is distribution of source code or binaries under an open source license the sort of conduct that suggests non-enforcement of patent rights? Is the name of the copyright holder on the license enough to make the user of the open source aware "of the patentee and/or its patent"? (*Aukerman* at 1042)

Limitations on Implicit Patent Licenses

The general rule is that the existence of an explicit patent clause in an agreement will foreclose the finding of any implied license with a broader grant.

The following cases discuss the scope of patent grants when there is ambiguous express language dealing with the issue. Think about how these cases might apply to the GPL version 2, which discusses patents but does not include specific grant language.

State Contracting & Engineering Corp. v. Florida

State Contr. & Eng'g Corp. v. Florida, Fed. Cir. 2001 [21]

... The contract in question was drafted by the State of Florida, and was lengthy. It incorporated what are known as value engineering provisions -- designed to encourage contractors to develop better methods of doing the job. As noted above, the contract provided for additional payments to the contractor if it developed such methods and allowed the state to use these methods on the contract and on option contracts free of charge.

The relevant portion of the contract, section 4-3.5.8 of the FDOT Standard Specifications, entitled "Department's Future Rights to a VECP," provided:

> In the event of acceptance of a VECP, the Contractor hereby grants to the Department *all rights to use, duplicate or disclose*, in whole or in part, in any manner and for any purpose whatsoever, and to have or to permit others to do so, *data* reasonably necessary to fully utilize such proposal *on this and any other Department contract*.

(emphases added [in original]). These provisions were not limited to the contract in question, but extended to all future State of Florida use. The district court found this language to be unambiguous and held that "Plaintiffs agreed in the VECP to allow FDOT to utilize their then unpatented data, without any agreement to compensate Plaintiffs for future use, beyond the instant contract savings and any optional work included in the original contract." Final Order, slip op. at 12-13. While we agree with the district court that this language is unambiguous, we disagree with the district court's interpretation of this language. We conclude that the contract does not provide a license for patent rights to the private contractors.

Whether express or implied, a license is a contract 'governed by ordinary principles of state contract law.'" *McCoy v. Mitsuboshi Cutlery, Inc.*, 67 F.3d 917, 920 36 U.S.P.Q.2D (BNA) 1289, 1291 (Fed. Cir. 1995) (quoting *Power Lift, Inc. v. Weatherford Nipple-Up Sys., Inc.*, 871 F.2d 1082, 1085, 10 U.S.P.Q.2D (BNA) 1464, 1466 (Fed. Cir. 1989)). Although we apply Florida law in construing the contract, it is significant that the Supreme Court has recognized that patent rights and trade secret rights are quite distinct, and that a contract may provide for different treatment of the two. For example, in *Aronson v. Quick Point Pencil Co.*, 440 U.S. 257, 262, 59 L. Ed. 2d 296, 99 S. Ct. 1096 (1979), the Supreme Court held that even though a patent application had not issued, the parties' agreement for the payment of a royalty for the use of proprietary technology was valid, because "state law is not displaced merely because the contract relates to intellectual property which may or may not be patentable." So too in *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 474, 491-93, 40 L. Ed. 2d 315, 94 S. Ct. 1879 (1974), the Supreme Court held that Ohio's law protecting trade secrets was not preempted by the federal patent laws because the trade secret law did not clash with the objectives of the federal patent law.

The right to use State Contracting's proprietary technology on the original contract was covered by the supplemental VECP agreement itself as discussed above. The only rights that the state acquired for future contracts were by virtue of section 4-3.5.8. To be sure, the provision apparently contemplated that State Contracting's "proposal" would be used on "other Department contracts." But that section only conveyed rights to use "data" in future contracts, and did not in terms convey the right to manufacture the sound barriers using plaintiffs' design or to use plaintiffs' manufacturing method. Most significantly the section did not explicitly convey any patent rights, require the contractor to surrender its rights to the technology, or bar the contractor from securing a patent on the invention.

The contract's failure to explicitly provide for the licensing of patent rights is a glaring omission, particularly where, as here, the contracting parties clearly contemplated that there might be relevant patents. Section 7-3 of the FDOT Standard Specifications, entitled "Patented Devices, Materials and Processes," provides: "It is agreed that, without exception, contract prices are to include all royalties and costs arising from patents, trademarks, and copyrights, in any way involved in the work." The provision for licensing of patents is limited to work under the contract and does not convey any license to future use of the patented technology. The existence of this provision shows that, if the parties had intended to convey other patent rights, they would have done so explicitly.

Under these circumstances we think it clear that the contract did not in fact provide a license for patent rights to the private contractors under future contracts. The State of Florida drafted the contract, and Florida law requires that it be construed against the drafter. *Golden Door Jewelry Creations, Inc. v. Lloyds Underwriters Non-Marine Ass'n*, 117 F.3d 1328 (11th Cir. 1997). Therefore, we vacate the district court's grant of summary judgment to the private contractors on the patent infringement counts (counts III and VII), and remand for proceedings consistent with this opinion.

Hilgraeve Corp. v. Symantec Corp.

Hilgraeve Corp. v. Symantec Corp., 265 F.3d 1336, Fed. Cir. 2001 [22]

...

IV. *Symantec's Licensing Defense*

Symantec urges that even if we vacate the district court's grant of summary judgment of non-infringement, the judgment can be affirmed on an alternative ground, namely that Symantec was licensed to practice the patent. We cannot agree.

The district court held that Symantec had no license defense for the period prior to March 2, 1999, because the purported transfer of patent rights from Delrina (Delaware) to Delrina (Canada) under the June 30, 1993 SDCS agreement was ineffective. While the district court appears to have been correct, we believe that there is a more fundamental defect in Symantec's license defense argument - Delrina (Delaware) itself never acquired a transferable license to practice the '776 patent, and Delrina (Delaware) therefore could not sub-license the '776 patent either before March 2, 1999, or thereafter.

Unless the '776 patent was licensed under the June 30, 1993 Agreement, Symantec agrees that it could not acquire a license. Symantec also admits that there is no express language in the June 30, 1993 Technology Transfer Agreement licensing or transferring rights to the '776 patent or any other Hilgraeve patent. Instead, Symantec points to language in the paragraph 2.1 of the Agreement providing that "HILGRAEVE sells, conveys, assigns and transfers to DELRINA DELAWARE and to HILGRAEVE, as joint tenants and not as tenants in common, all copyright rights in the Software, " and that Hilgraeve acknowledged in paragraph 9.1 that as part of the transfer "HILGRAEVE has also agreed to transfer the necessary know-how and technical expertise to DELRINA DELAWARE with respect to the Software." On the basis of this language, Symantec urges us to find that:

> 'Software' is more than source code and object code. . . . When read in conjunction with the . . . 'know-how' and 'technical expertise' transferred to Delrina (Delaware), Delrina (Delaware) essentially acquired Hilgraeve's entire knowledge base with respect to [Hilgraeve's] products. Since the Software included in-transit anti-virus features, Delrina acquired Hilgraeve's knowledge base with respect to those in-transit anti-virus features and could use that knowledge base as it pleased."

In summary, Symantec urges us to find that "the Technology Transfer Agreement covered the technology in this case, which is allegedly covered by the '776 Patent."

Whatever the definition of "knowledge base" proposed by Symantec, we cannot conclude that rights to the '776 patent were transferred by the Technology

Transfer Agreement. Under Ontario law, "effect must first be given to the intention of the parties, to be gathered from the words they have used . . . ." *Consol. Bathurst Exp. Ltd. v. Mut. Boiler & Mach. Ins. Co.*, 1 S.C.R 888, 888 (Can. 1980). When the language of a contract is clear and unambiguous, only the contract is considered for interpretation, not extrinsic evidence. *Indian Molybdenum v. The King*, 3 D.L.R. 497, 502 (Can. 1951). Here, the contract provided for Hilgraeve to transfer "all copyright rights in the Software," but failed to mention the transfer of patent rights. From the terms of the contract we cannot conclude that the parties intended to transfer any patent rights. Symantec relies on *Allan v. Bushnell T.V. Co., Ltd.*, 1 D.L.R. (3d) 534, 539 (Ont. High Ct. 1968) for the proposition that "unexpressed terms [are implied] to implement [the] parties' presumed intention." Allan, however, stated that

> the presumption is against the adding to contracts of terms which the parties have not expressed. The general presumption is that the parties have expressed every material term . . . . But . . . there may be cases where obviously some term must be implied if the intention of the parties is not to be defeated, some term of which it can be predicated that 'it goes without saying', some term not expressed but necessary to give to the transaction such business efficacy as the parties must have intended.

Id. Allan was a case involving a contract between a broadcasting company and a news service in which the unexpressed term which was implied in the contract was that the news to be supplied to the company by the service had to be "accurate." Here, we cannot say (and it does not "go without saying") that where the contract provided for the transfer of copyrights in the software, but failed to mention the transfer of patent rights, that we must imply such a term to the contract. The contract has a business efficacy without adding this unexpressed term to it.

Moreover, in the subparagraph immediately following the paragraph 2.1 pertaining to the transfer of copyrights, the contract refers to other intellectual property rights. In paragraph 2.2, the parties agreed that Hilgraeve "shall not assert against DELRINA DELAWARE, any other intellectual property right, including patent rights, it has or may have in the future, with respect to the production, copying, licensing of the Software, or the exercise by DELRINA DELAWARE of any rights transferred hereunder." Since the contract specifically mentions patent rights in paragraph 2.2, we cannot say that the omission of mention of patent rights in paragraph 2.1, which transferred rights to copyrights in the Software, was accidental or that the transfer of patent rights is implicit anywhere the contract. *Cf. State Contracting & Eng'g Corp. v. Florida*, 258 F.3d 1329, 59 U.S.P.Q.2D (BNA) 1498 (Fed. Cir. 2001) (applying Florida law to construe an agreement).

Symantec also contends that the covenant not to sue for patent infringement in paragraph 2.2 is equivalent to a freely transferable license to the patent. This court has stated that "licenses are considered as nothing more than a promise by the licensor not to sue the licensee." *Jim Arnold Corp. v. Hydrotech Sys., Inc.*, 109 F.3d 1567, 1577, 42 U.S.P.Q.2D (BNA) 1119, 1127 (Fed. Cir. 1997). The covenant not to sue in paragraph 2.2 does not grant a transferable license to the patent.

Discussion

1. A typical rule of interpretation is that contracts are "construed against the drafter," and that "effect must first be given to the intention of the parties." How might these rules apply in the context of open source licenses, where the party that drafted the license is probably not the party using the license to release code, and there might not be a unity of interest between the licensor and licensee?
2. The court in *State Contracting* found that there was licensing of both trade secrets and patents, but only the future use of trade secrets was contemplated under the contract. To what extent is it relevant that the contract in *State Contracting* "only conveyed rights to use 'data' in future contracts," as opposed to language that implied patentable elements like processes?
3. Is it significant that the contract in *Hilgraeve* provided for the *transfer* of copyrights, as opposed to the licensing of the copyrights? Would a court be more likely to find that the repeated granting of a license, such as occurs in open source licensing, to support an implied right to use any implicated patents?

Express but Non-Specific Licenses

One issue that comes up in the context of open source licenses is license ambiguity. Many open source licenses were not written by people with legal training, and other licenses were written at a time when software was not widely believed to be patentable. As a result, many open source licenses are ambiguous relative to the question of patent rights: The licenses include express language that suggests the existence of a patent right, such as the term "use," but the specific terms "patent" or "patent license" are not part of the text of the license.

As discussed above,[23] the existence of some patent language in a license will usually prevent the finding of an implicit patent license. But an express grant with ambiguous scope may constitute an express patent license.

Statutory Law

Each area of intellectual property law reserves particular rights to the owner of the corresponding intellectual property. The exclusive rights granted under copyright law are different than the exclusive rights granted under patent law.

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17 U.S. Code § 106 - Exclusive rights in copyrighted works

Subject to sections 107 through 122, the owner of copyright under this title has the exclusive rights to do and to authorize any of the following:

1. to reproduce the copyrighted work in copies or phonorecords;
2. to prepare derivative works based upon the copyrighted work;
3. to distribute copies or phonorecords of the copyrighted work to the public by sale or other transfer of ownership, or by rental, lease, or lending;
4. in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform

the copyrighted work publicly;

5. in the case of literary, musical, dramatic, and choreographic works, pantomimes, and pictorial, graphic, or sculptural works, including the individual images of a motion picture or other audiovisual work, to display the copyrighted work publicly; and
6. in the case of sound recordings, to perform the copyrighted work publicly by means of a digital audio transmission.

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35 U.S.C. 271 Infringement of patent.

(a) Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States, or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.

Selected Open Source Licenses

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Discussion

1. The licenses above all include the permission to "use" the software. Is that a patent grant or verbal shorthand for "create copies of the software in a computer memory and interpret the copy by means of a processor"? Could it be both?
2. To what extent does the right the "distribute

   $$the$$

   software ... with
   or without fee" implicate the patent-reserved right to "sell" or "offer to sell" the patented item?
3. Software has both expressive (copyright-protected) and functional (patent-protected) elements inextricably bound together. In the case of a "mixed" work such as software, does the copyright-denominated license to "copy" or "make derivative works" *necessarily* implicate the patent-denominated right to "make" the patented item?
4. As noted before, it is a standard rule of contract interpretation to construe the terms of the license against the drafter. But typically, the open source licensor is not the same person as the license drafter. Further, open source licenses are *fixed*, and not subject to negotiation. Organizations choose to use particular open source licenses for many reasons.

Can the use of a license that was not drafted by the licensor be construed against the licensor?

Cases

The discussion in the previous section was focused on license terms that specifically reflect or at least implicate reserved rights under patent law. A careful review of the language, however, shows that there are also *broad, but unspecific* grants of rights in many open source licenses. For example, the MIT license:

> Permission is hereby granted, free of charge, to any person obtaining a copy of this software... to deal in the Software without restriction...

The GNU GPL, version 2:

> Activities other than copying, distribution and modification are not covered by this License; they are outside its scope. The act of running the Program is not restricted...

As you read the following cases, think about whether these statements may act as express patent licenses granted to recipients of the open source software.

A. Natterman & CIE GmBH v. Bayer Corp.

A. Natterman & CIE GmBH v. Bayer Corp., 428 F. Supp. 2d 253, E.D.Pa, 2006. [28]

MEMORANDUM AND ORDER

ANITA B. BRODY, District Judge.

In this patent infringement action, Plaintiffs A. Nattermann & Cie GmbH ("Nattermann") and Aventis Behring L.L.C. bring suit against Defendants Bayer Corporation and Bayer Healthcare LLC for alleged infringement of U.S. Patent No. 5,565,427 ("the '427 patent"). Defendants bring counterclaims against Plaintiffs and Counterclaim Defendant Aventis Behring

GmbH.[29] Plaintiff Nattermann is the owner of the '427 patent, Counterclaim Defendant Aventis Behring GmbH has a non-exclusive license to the patent, and Plaintiff Aventis Behring L.L.C. has a sublicense. The '427 patent involves a drug used in the treatment of hemophilia. Plaintiffs claim that an anti-hemophilila drug marketed by Defendants under the name KOGENATE® FS infringes the '427 patent. Defendants bring counterclaims against Plaintiffs for, inter alia, breach of a 1998 Supply Agreement entered into by Bayer and Centeon L.L.C., a predecessor of Plaintiff Aventis Behring L.L.C., under which Bayer was to manufacture its KOGENATE® product for Centeon L.L.C.

Before me is Defendants' motion for summary judgment on their fourth affirmative defense of license under the '427 patent. Defendants claim that the 1998 Supply Agreement between Bayer and Centeon L.L.C. granted Defendants an express license under the '427 patent and that this license is a complete defense to the instant patent infringement suit. Also before me is Plaintiffs' motion for summary judgment on Defendants' affirmative defense of license and Defendants' third counterclaim for breach of contract. Plaintiffs seek a judgment that Defendants have no express or implied license under the '427 patent and that, as a result, Defendants' counterclaim for breach of contract fails as a matter of law. For the reasons that follow, I will deny both motions.

I. FACTUAL BACKGROUND

For purposes of the instant motions, the relevant undisputed facts are as follows.

A. *The 1993 Patent Settlement Agreement*

In 1993, Defendants' predecessor Miles Inc. ("Miles") and Rhône Poulenc Rorer Inc. ("RPR"), parent company of Centeon L.L.C.'s predecessor Armour Pharmaceutical Co. ("Armour"), signed an agreement ("the 1993 Patent Settlement Agreement") settling their previous patent litigation. As a result of the 1993 Patent Settlement Agreement, Bayer AG, the parent company of Miles, received an express license to certain patents, known as the "Scripps patents," involving recombinant factor VIII technology used in the treatment of hemophilia.

B. *The 1994 Supply Agreement*

As part of the 1993 Patent Settlement Agreement, Miles and Armour, the predecessors of Bayer and Centeon L.L.C. respectively, entered into the 1994 Supply Agreement. The 1994 Supply Agreement obligated Bayer to supply Centeon L.L.C. "with certain defined quantities of recombinant factor VIII (the 'Product' as further defined below). . . ." The "Product" of the 1994 Supply Agreement consisted of Bayer AG's first-generation KOGENATE 0 product. Under the 1994 Supply Agreement, Bayer supplied Centeon L.L.C. with KOGENATE®, and Centeon L.L.C. sold this product under its own HELIXATE® trade-name.

Section 9 of the 1994 Supply Agreement states:

> No license, express or implied, is granted by one party to the other hereunder, save for those purposes which permit performance, by each party, of its obligations under this Agreement.

C. *The 1998 Supply Agreement*

From 1997 to 1998, Bayer and Centeon L.L.C. renegotiated the 1994 Supply Agreement and formed the 1998 Supply Agreement. Bayer and Centeon L.L.C. renegotiated the Supply Agreement, in part, so that each party could secure continued access to future recombinant factor VIII products. Under the 1998 Supply Agreement, Bayer agreed to "continue to provide quantities of human recombinant Factor VIII to Centeon under the terms and conditions specified herein. . . ." The 1998 Supply Agreement was to be "considered part of the Settlement Agreement between Bayer AG and Armour just as the 1994 Agreement was part of said Settlement Agreement." The parties incorporated Section 9 of the 1994 Agreement into Section 10 of the 1998 Agreement.

D. *KOGENATE® FS and the 1998 Supply Agreement*

When the parties negotiated and signed the 1998 Supply Agreement, Bayer was marketing its first-generation KOGENATE® product, which does not infringe the '427 patent. The 1998 Supply Agreement provides that Centeon L.L.C. and its successors would receive access to later improvements of Bayer's KOGENATE® product. One such contemplated improvement that was specifically contemplated in the Agreement was called KOGENATE® II. KOGENATE® II was defined in the 1998

Supply Agreement as "an antihemophilic Factor VIII (Recombinant) protein to be formulated as a sterile, stable, purified, freezedried concentrate, purified and formulated without the use of albumin." Bayer has assigned the trademark KOGENATE® FS to the KOGENATE® II Product referenced in the 1998 Supply Agreement. At the time Bayer and Centeon L.L.C signed the 1998 Supply Agreement, Bayer had not provided Centeon L.L.C. with full specifications for any future recombinant factor VIII product in development, including KOGENATE® FS.

...

III. DISCUSSION

Defendants move for summary judgment on the affirmative defense of express license under the '427 patent. Plaintiffs cross-move for summary judgment on Defendants' affirmative defense of license, seeking judgment as a matter of law that Defendants have no license to the '427 patent, either express or implied. Plaintiffs also move for summary judgment on Defendants' third counterclaim (breach of the 1998 Supply Agreement), which they assert is dependent on a finding that the Agreement created a license to the '427 patent. All of these issues boil down to the single question of whether Defendants were licensed under the '427 patent.

A. *Background*

A license, whether express or implied, is a defense to patent infringement. [FN8] *See Carborundum Co. v. Molten Metal Equip. Innovations*, 72 F.3d 872, 878 (Fed. Cir.1995). The alleged infringer has the burden of establishing this affirmative defense. *Id*. It has been observed that:

> [n]o formal granting of a license is necessary in order to give it effect. Any language used by the owner of the patent, or any conduct on his part exhibited to another from which that other may properly infer that the owner consents to his use of the patent in making or using it, or selling it, upon which the other acts, constitutes a license and a defense to an action for a tort.

Wang Labs., Inc. v. Mitsubishi Electronics Am., Inc., 103 F.3d 1571, 1580

(Fed.Cir. 1997) (quoting *De Forest Radio Tel. & Tel. Co. v. United States*, 273 U.S. 236, 241, 47 S.Ct. 366, 71 L.Ed. 625 (1927)). Defendants claim that the 1998 Supply Agreement between Plaintiffs' predecessor Centeon L.L.C. and Bayer gave Defendants an express license to manufacture KOGENATE® FS, the drug that Plaintiffs allege infringes the '427 patent. The determination of whether there is an express license or an implied license to a patent is "governed by ordinary principles of state contract law." *State Contracting & Eng'g Corp. v. Florida*, 258 F.3d 1329, 1339 (Fed. Cir.2001) (quoting *McCoy v. Mitsuboshi Cutlery, Inc.*, 67 F.3d 917, 920 (Fed.Cir. 1995)).

Here, the parties agree that Connecticut law applies to the interpretation of the 1998 Supply Agreement upon which Defendants' claim of express license is based. Under Connecticut law, "[a]lthough ordinarily the question of contract interpretation, being a question of the parties' intent, is a question of fact, where there is definitive contract language, the determination of what the parties intended by their contractual commitments is a question of law." *Hanks v. Powder Ridge Restaurant Corp.*, 276 Conn. 314, 885 A.2d 734, 739 (2005) (internal citations omitted).

B. *Defendants' Motion for Summary Judgment*

Defendants do not dispute that no license to the '427 patent is explicitly mentioned in the 1998 Supply Agreement or any of its precursors. However, Defendants claim that Section 10 of the 1998 Supply Agreement created an express license to the '427 patent:

> **No Express or Implied License**
>
> No license, express or implied, is granted by one party to the other hereunder, *save for those purposes which permit performance, by each party, of its obligations under this Agreement.*

(Defs.' Mot. Summ. J. Ex. A at 27 (emphasis added).) Defendants claim that the plain meaning of Section 10 is to create express licenses to such patents as "permit performance, by each party, of its obligations under this Agreement." Defendants claim that because a license to the '427 patent was essential to Bayer's performance of the contract, this provision creates an express license to that patent. They cite various other provisions of the Supply Agreement in support of the contention that Bayer required a license to the '427 patent in order to perform its obligations under the Agreement.

In order for Defendants to obtain summary judgment on the question of express license, it would have to be clear from the four corners of the 1998 Supply Agreement that Section 10 grants Bayer an express license to the '427 patent. The fact that the provision is entitled "No Express or Implied License" and provides, in part, that "[n]o license, express or implied, is granted by one party to the other hereunder" is at least enough to raise sufficient ambiguity to preclude summary judgment for Defendants.

C. *Plaintiffs' Motion for Summary Judgment*

Plaintiffs raise several arguments for why summary judgment for Defendants is improper and why, in fact, summary judgment should be granted in Plaintiffs' favor: (1) Centeon L.L.C. never had the right to license the '427 patent to Bayer in the first place; (2) even if it did, the plain terms of the 1998 Supply Agreement foreclose any express or implied license to the '427 patent; and (3) even if the Supply Agreement were construed to grant an express or implied license to patents necessary to the performance of the parties' contractual obligations, the '427 patent would not fall within the scope of such a license. An absence of genuine issues of material fact as to any one of these three issues might entitle Plaintiffs to summary judgment. Thus, I will address each argument in turn.

...

2. *Whether the 1998 Supply Agreement forecloses any license to the '427 patent*

Plaintiffs also argue that the plain terms of the 1998 Supply Agreement unambiguously negate the existence of any license to the '427 patent, express or implied. Under Connecticut law, contract interpretation is a question of fact for the jury unless the parties' intent is "clear and unambiguous" from the four corners of the contract, in which case it becomes a question of law for the court. *Peter-Michael, Inc. v. Sea Shell Assocs.*, 244 Conn. 269, 709

A.2d 558, 562 (1998); see also *McCann Real Equities Series XXII, LLC v. David McDermott Chevrolet, Inc.*, 93 Conn.App. 486, 890 A.2d 140, 153 (2006) ("When only one interpretation of a contract is possible, the court need not look outside the four corners of the contract."). The parties' intent is not clear and unambiguous from the four corners of the 1998 Supply Agreement with respect to whether the Agreement grants licenses to patents necessary for the performance of the parties' contractual obligations.

Section 10 of the 1998 Supply Agreement provides:

> No license, express or implied, is granted by one party to the other hereunder, save for those purposes which permit performance, by each party, of its obligations under this Agreement.

In order to grant summary judgment for Plaintiffs on this question, I would have to find that the language of Section 10 clearly and unambiguously forecloses any express or implied license to the '427 patent. Section 10's plain terms do not do this. Plaintiffs would have me read this provision as stating simply that "no license, express or implied, is granted by one party to the other hereunder." Such a statement would indeed have been an unambiguous expression that the contract foreclosed any express or implied licenses.

Yet Section 10 does not say that; rather it states that the Agreement creates no express or implied licenses "*save* for those purposes which permit performance, by each party, of its obligations under this Agreement." A plausible reading of this provision would thus be that it *does* grant such licenses as are necessary to the performance of the 1998 Supply Agreement.

At the very least, Section 10 does not clearly and unambiguously rule out an implied license to the '427 patent. [FN12] To the contrary, the provision seems to contemplate the possibility that one or more patent licenses would be necessary to the performance of the Agreement, and carves out such licenses from the general statement that "no license, express or implied, is granted by one party to the other hereunder." Thus, Plaintiffs are not entitled to summary judgment because the 1998 Supply Agreement does not, as a matter of law, foreclose the possibility of a license to the '427 patent. There is a genuine issue of material fact as to this question.

Plaintiffs also argue that, read as a whole, the 1998 Supply Agreement cannot be interpreted to create a license to the '427 patent, because it incorporates express licenses to other patents while making no mention of the '427 patent. Plaintiffs rely on the principle of *expressio unius est exclusio alterius*, under which the express mention of one thing (such as the grant of a license) in a written document is presumed to exclude another that is not mentioned. The problem with this argument is that nowhere does the 1998 Supply Agreement expressly grant any patent rights to either party. Plaintiffs claim that because the 1998 Supply Agreement was considered part of the 1993 Patent Settlement Agreement settlement between RPR and Miles, predecessors of Plaintiffs and Defendants respectively, the 1998 Supply Agreement incorporates the express license to the Scripps patents that was included in the 1993 settlement. The failure to mention the '427 patent explicitly in the 1998 Agreement, Plaintiffs argue, coupled with the express license of the Scripps patents in 1993, creates a presumption that the 1998 Agreement creates no new licenses.

If the 1998 Supply Agreement itself had explicitly mentioned a license to the Scripps patents, or to some other patent, and conspicuously omitted any mention of the '427 patent, Plaintiffs' argument might have some force. See, e.g., *State Contracting*, 258 F.3d at 1340 ("The provision for licensing of patents is limited to work under the contract and does not convey any license to future use of the patented technology. The existence of this provision shows that, if the parties had intended to convey other patent rights, they would have done so explicitly."); *Hilgraeve Corp. v. Symantec Corp.*, 265 F.3d 1336, 1345 (Fed.Cir.2001) ("Here, the contract provided for Hilgraeve to transfer `all copyright rights in the Software,' but failed to mention the transfer of patent rights. From the terms of the contract we cannot conclude that the parties intended to transfer any patent rights."). However, because the 1998 Supply Agreement is completely silent on the issue of licenses to intellectual property (aside from Section 10, which I have already found to be ambiguous), Plaintiffs' argument fails.

There are genuine issues of material fact as to whether the 1998 Supply

Agreement was intended to create a license to the '427 patent as a patent necessary to the performance of the parties' contractual obligations.

3. *Whether a license to the '427 patent was necessary to Bayer's performance of its obligations under the 1998 Supply Agreement*

Finally, Plaintiffs argue that even if the 1998 Agreement granted express or implied licenses to those patents necessary to the performance of the parties' obligations, the '427 patent was not such a patent. The parties devote much of the briefing of the instant motions to debating whether Bayer could have fulfilled its obligations under the Agreement without infringing the '427 patent. This question presents genuine issues of material fact.

IV. CONCLUSION

Because there are genuine issues of material fact precluding summary judgment to either party on the issues raised in the instant motions, I will deny both parties' motions for summary judgment.

Selected footnotes from A. Natterman & CIE GmBH v. Bayer Corp:

[FN8]: An express license is merely "[o]ne which is granted in direct terms." Black's Law Dictionary 920 (6th ed.1990). The definition of "implied license" in this context is slightly more nuanced. In patent law, the term "implied license" has been used to refer to "different categories of conduct which lead to the same conclusion," namely, "a patentee's waiver of the statutory right to exclude others from making, using, or selling the patented invention." *Wang Labs., Inc. v. Mitsubishi Electronics Am., Inc.*, 103 F.3d 1571, 1580 (Fed.Cir.1997). "[C]ourts and commentators relate that implied licenses arise by acquiescence, by conduct, by equitable estoppel (estoppel in pais), or by legal estoppel." *Id*. These distinctions as to implied licenses are not relevant for purposes of the instant motions.

[FN12]: Plaintiffs "move for summary judgment of no license—either express or implied." Because I find that the plain terms of the 1998 Supply Agreement do not, as a matter of law, necessarily foreclose an implied license to the

'427 patent, I do not address whether they foreclose an express license to the patent.

In re Davidson Hydrant Techs., Inc.

In re Davidson Hydrant Techs., Inc., 2012 Bankr. LEXIS 1120, (Bankr. N.D. Ga. 2012).[30]

ORDER

W. H. DRAKE, Bankruptcy Judge

Before the Court is the Motion to Reject Exclusive Marketing Agreement with Windsor Distribution Corporation, filed by Davidson Hydrant Technologies, Inc. (hereinafter the "Debtor"). Windsor Technologies Corporation, f/k/a Windsor Distribution Corporation (hereinafter "Windsor") objects to the Motion. Windsor asserts that section 365(n)(1) of the Bankruptcy Code applies to permit Windsor to retain certain rights allegedly provided under the agreement between the parties. This matter is a core proceeding, pursuant to 28 U.S.C. § 157(b)(2)(A), over which this Court has subject matter jurisdiction. See 28 U.S.C. § 1334.

BACKGROUND AND PROCEDURAL HISTORY

Debtor owns patents in fire hydrant technology and manufactures and sells the patented products to both end-users and manufacturers. Debtor signed marketing agreements in 2003 and 2005 with Windsor before entering into the current marketing agreement in 2007 (hereinafter the "Agreement"). By its terms, the Agreement will last through December 2018, with a five-year right of renewal granted to Windsor at the end of the stated term.

The pertinent aspects of the Agreement are as follows:

> - Davidson hereby engages Windsor, and Windsor hereby accepts such engagement, to market and promote the Products, Davidson's training, and installation services within the Territory, all strictly in accordance with the terms and conditions of this Agreement. Subject to Section 10,

> Davidson engages Windsor on an exclusive basis within the Territory during the Term.
> Agreement, § 2A.

...

...Essentially, the parties disagree over whether Windsor is a licensee of a right to Debtor's intellectual property, either expressly under the Agreement, or by virtue of an implied license arising from the parties' conduct.

Debtor argues that Windsor's sole duty and right under the Agreement was to market and promote Debtor's products and services, which did not require or result in a license of a right to use, sell, or offer to sell Debtor's intellectual property. In support of its position, Debtor states that the Agreement provided Debtor the right to accept or reject any purchase order submitted by Windsor, and the Agreement only provided Windsor with a license to use Debtor's trademarks, which are excluded from the Bankruptcy Code's definition of intellectual property. The Debtor further submits that no implied license to offer the products for sale arose because Debtor lacked the requisite intent to grant Windsor a license and Windsor gave no consideration for the alleged implied license.

In response, Windsor argues that the Agreement grants Windsor a right to use intellectual property because it permits Windsor to offer for sale Debtor's products and gives Windsor the right to use and create works of authorship owned by Debtor. In the alternative, Windsor submits that the parties mutually departed from the written terms of the Agreement, thus resulting in a modified contract, under which Windsor had the authority to directly sell products to customers, or that Debtor's conduct gave rise to an implied license of the right to offer for sale and sell Debtor's products.

...

The Bankruptcy Code does not define the terms "licensor" or "license." According to federal law applicable to patents, a "license" is essentially permission to use, make, or sell intellectual property and a "promise by the licensor not to sue the licensee." *A. Natterman & CIE Gmbh v. Bayer Corp.*, 428 F.Supp.2d 253, 258 (E.D. Pa. 2006); *In re Spansion, Inc.*, 2011

3268084, * 7 (D. Del. July 26, 2011). Under the Bankruptcy Code, "intellectual property" includes a trade secret; invention, process, design, or plant protected under title 35; patent application; plant variety; work of authorship protected under title 17; or mask work protected under chapter 9 of title 17, "to the extent protected by applicable nonbankruptcy law." 11 U.S.C. § 101(35A). Accordingly, a "licensor of a right to intellectual property" within the meaning of section 365(n)(1), is a party who has been authorized to use, make, or sell a trade secret, a patented invention, process, design, or plant, a plant variety, a copyrighted work of authorship, or a mask work. *Spansion*, 2011 WL 3268084 at *7.

Further, under federal patent law, a patent is considered to be a "bundle of rights." See *Carborundum Co. v. Molten Metal Equip. Innovations*, 72 F.3d 872, 878 (Fed. Cir. 1995). Each "stick" in the bundle can be licensed to another party. Here, Windsor asserts that the right to offer for sale a patented product is such a "stick" in the bundle of rights. This assertion is consistent with patent law, which permits the holder of a patent to sue a party for patent infringement if the party offers to sell a product using the patent holder's patent without authorization. See 35 U.S.C. § 271(a).

Windsor contends that the Agreement permits Windsor to offer Debtor's products for sale. If so, the authorization to offer the products for sale without being subject to suit for infringement of Debtor's patent constitutes the license of a right in the patent. For purposes of determining whether particular conduct constitutes an "offer to sell," the term "offer to sell" is "interpreted according to its ordinary meaning in contract law, as revealed by traditional sources of authority." *Rotec Indus., Inc. v. Mitsubishi Corp.*, 215 F.3d 1246 (Fed. Cir. 2000)....

B. Whether the Agreement Grants a License of Intellectual Property

Under federal patent law, a license of intellectual property can be either express or implied. See Bayer Corp., 428 F.Supp. at 258. "An express license is merely '[o]ne which is granted in direct terms.'" *Id, n.8 (quoting BLACK'S LAW DICTIONARY 920 (6th ed. 1990)). Whether a contract includes a license to intellectual property is a matter of contract interpretation. *Wisconsin AlumniResearch Foundation v. Intel Corp.*, 656 F.Supp.2d 898, 910

(W.D. Wis. 2009)
(citing *State Contracting & Engineering Corp. v. Florida*, 258 F.3d 1329, 1339 (Fed. Cir. 2001)). Here, the parties agree that Georgia contract law applies.

Under Georgia law, "the cardinal rule of contract interpretation is to determine the intent of the parties. . . ." *Flynt v. Life of the South Ins. Co.*, 2011 WL 5305431, *4 (Ga. App. 2011) (citations omitted). To ascertain the intent of the parties, the Court must first determine "'if the contract language is unambiguous, and if so the court enforces the contract's clear terms.'" *NW Parkway, LLC v. Lemser*, 709 S.E.2d 858, 861 (Ga. App. 2011) (quoting *Eckerd Corp. v. Alterman Properties, Ltd.*, 589 S.E.2d 660 (Ga. App. 2003)). In determining a contract's nature, a court looks at the plain meaning of the contract provisions. *Id*. (quoting *Ga. Real Estate Properties, v. Lindwall*, 692 S.E.2d 690 (Ga. App. 2010)). "'[A]ll the contract terms must be considered together in arriving at the construction of any part, and a construction upholding the contract in whole and every part is preferred.'" *Flynt*, 2011 WL 5305431 at *4 (citations omitted). "'Words generally bear their usual and common signification; but technical words, words of art, or words used in a particular trade or business will be construed, generally, to be used in reference to this peculiar meaning. The local usage or understanding of a word may be proved in order to arrive at the meaning intended by the parties[.]'" NW Parkway, 709 S.E.2d at 861 (quoting O.C.G.A. § 13-2-2(2)).

The plain language of the Agreement does not grant a license of intellectual property protected under section 365(n)(1). Windsor first asserts that the Agreement includes an express license of a right to intellectual property, either in the form of a right to offer for sale and to sell a patented product, or the right to use works of authorship. While the Agreement expressly grants to Windsor a non-exclusive license to use Debtor's trademarked name and logo, it is silent as to a right to use Debtor's patents or patents pending.

The Agreement authorizes Windsor "to market and promote" Debtor's products. Windsor asserts that the use of the word "market" is the grant of an authorization to offer for sale Debtor's products. Windsor submits that the terms "market" and "promote" must have different meanings in order for each term in the Agreement to have meaning. Thus, relying on one dictionary definition of the verb "to market," Windsor asserts that "to promote" means to advertise and "to market" means to sell or offer for sale. However, the verb "to market" is also defined as "to expose for sale in a market." WESBTER'S THIRD NEW INTERNATIONAL DICTIONARY, Merriam-Webster (1993). Exposing a product for sale is more akin to advertising than to offering a product for sale. Read as whole, the Agreement suggests a more synonymous meaning for the words "market" and "promote," as if they form one phrase — to make the products known to customers in the market for the purchase of Debtor's products.

This interpretation is supported by the rights actually granted to Windsor under the Agreement. Every provision of the Agreement suggests Debtor intended to engage Windsor for the sole purpose of generating interest in the product and finding customers, rather than concluding sales on Debtor's behalf. If the parties intended Windsor to have the right to sell or offer the products for sale, one would expect Windsor to have the right to bind Debtor to the sale. To the contrary, the Agreement does not give Windsor authority to bind Debtor to any sales. Furthermore, customers were on notice of this relationship, as Debtor's Term Sheet, which was provided to Debtor's customers, expressly states that "[a] Purchase Order will be binding on [Debtor] only after accepted in writing . . . by [Debtor]." Agreement, Exhibit B, § 1. Therefore, under Georgia contract law and general principles of patent law, Windsor could not offer the products for sale....

XimpleWare, Inc. v. Versata Software, Inc

XimpleWare, Inc. v. Versata Software, Inc, 2014 U.S. Dist. LEXIS 68515 (N.D.Cal 2014).[31]

The GNU General Public License, version 2, is unique in that it mentions patents but does not include a specific patent grant. In this holding from the *Ximpleware* court, the court evaluates whether the GNU GPL, version 2's also includes a patent license.

Opinion by: PAUL S. GREWAL

Opinion

ORDER GRANTING-IN-PART DEFENDANTS' MOTIONS TO DISMISS

Think of the millions of lines of source code licensed in this country and around the world under the terms of version 2 of Richard Stallman's GNU General Public License. And yet it appears that only one court has yet to weigh in on an elementary question arising from the license: what does it mean to distribute? Before the court are four motions to dismiss that place that question front-and-center. The motions are brought by Defendants: (1) Ameriprise Financial, Inc. and Ameriprise Financial Services, Inc.; (2) United HealthCare Services, Inc.; (3) Pacific Life Ins. Co., the Prudential Ins. Co. of America, Wellmark, Inc. and Aviva USA Corp., and (4) Versata Software, Inc., Trilogy Development Group, Inc. and Aurea Software, Inc. Plaintiff XimpleWare, Inc. opposes each motion, and the parties appeared for a hearing.5Link to the text of the note After considering the arguments, both at the hearing and in the papers, the court adopts in its entirety Judge Ilston's recent conclusion that the kind of source code distribution alleged here can establish a breach of the GPL sufficient to render the use of code unlicensed. But distribution by one customer is not distribution by all. The motions are therefore GRANTED, but only IN-PART.

I. BACKGROUND

A. The Parties

Plaintiff XimpleWare is a California corporation based in Milpitas engaged in the design, development and distribution of computer software. XimpleWare spent over a decade developing and fine-tuning its copyrighted software product, known as "VTD-XML" or "VTD XML Extended" (collectively, the "Product"), which reads and parses XML code more efficiently and faster than alternative XML parsers. Efficiency and speed are critical in many applications of XML, especially in large scale enterprise data interchange applications where entire server computers are dedicated to handling streams of XML data. If XML data can be processed faster, then fewer servers are needed, less leased space in data centers is needed for those servers, and less energy is required to power those servers—altogether greatly reducing computing needs and costs.

XimpleWare made the business decision to license the Product and related source code under an "open source" license known as the GNU General Public License version 2. The GPL requires, among other things, that: (1) any changes made to the code carry notices stating that the files were changed, and the dates of all changes; (2) any code created or derived from GPL-protected code must also be licensed under the GPL; (3) copyright notices must print or display when the code is run; and (4) when distributed, the program must be accompanied by the complete machine-readable source code. All four conditions must be met, and the GPL requires strict compliance.

XimpleWare is the owner of all right, title, and interest in various patents related to the Product and related source code, including U.S. Patent Nos. 7, 133,857, 7620,652, and 7,761,459. The first patent at issue (the '857 Patent), filed in 2002 and issued in 2006, is titled "Processing Structured Data," and contains 43 claims (including 7 independent claims) covering methods, apparatuses, and program storage devices for "efficiently processing a structured data file" or "efficiently processing structured data"—including XML. The '652 Patent, filed in 2006 and issued in 2009, contains 35 claims (including 8 independent claims) for methods, apparatuses, and program storage devices, and focuses on efficiently processing structured data like XML. The '459 Patent, filed in 2006 and issued in 2010, contains 24 claims (including 4 independent claims) for methods, apparatuses, hardware devices, and program storage devices, and again focuses on efficiently processing structured data like XML....

B. XimpleWare's Patent Infringement Claims

This case spawned from earlier litigation between Versata and Ameriprise. During that litigation, Ameriprise reached out to XimpleWare to support its defense of the pending litigation and informed XimpleWare that it had discovered XimpleWare VTM-XML source code throughout Versata's DCM product. In violation of Versata's license under the GNU. XimpleWare then filed this suit against the Versata Defendants, Ameriprise and other Versata customers. XimpleWare's complaint asserts claims for (1) direct infringement of the '857, '459 and '652 patents under 35 U.S.C. § 271(a) against all defendants; (2) inducement under 35 U.S.C. § 271(b) against Versata and its corporate parents Aurea and Trilogy; and (3) declaratory relief that the asserted patents are valid and enforceable.

...

III. DISCUSSION

A. The Versata Customers' Motions to Dismiss

The court starts with the customers' motions challenging XimpleWare's allegations of direct infringement [of Ximpleware's patents] pursuant to Section 271(a).

Because an express license is a defense to patent infringement, XimpleWare's direct infringement claims against Versata's customers turn on whether the customers' distribution is licensed under the GPL. The reason is that the GPL provides that even if the original licensee — here, one of the Versata entities — breaches its license for whatever reason, third-party customers of that original license retain the right to use XimpleWare's software so long as the customer does not itself breach the license by "distributing" XimpleWare's software without satisfying an attendant conditions. Because XimpleWare has plainly alleged that the customers did not satisfy these attendant conditions, the only real issue to resolve is whether XimpleWare has sufficiently alleged that its software was "distributed" by the customers when they shared the software with their independent contractors, franchisees, and producers.

The customers marshal two primary arguments against such a conclusion. First, the customers argue that any independent contractor or the like working for the customers has no need for the software because the software is designed to calculate the commissions owed by the customers on various financial transactions. In short, there is no need in the field to use what is back office software. Second, the complaint does not allege Versata's customers shared the software with independent contractors who then themselves copied, distributed or used it, and sharing the software with independent contractors working with the customers alone does not constitute distribution. Put another way, this is effectively internal distribution, and internal distribution is not enough to breach the GPL.

The customers, or rather certain customers, are correct: XimpleWare's allegation that the Versata customers distributed XimpleWare's software without specificity is insufficient. The bundling of customer defendants into a conclusory statement does not in any way provide adequate notice. This is classic Iqbal and Twombly territory. Because XimpleWare has not sufficiently alleged the customers other than Ameriprise distributed the Versata software to any unrelated third party, no distribution-related conditions were triggered.

With respect to Amerirprise, XimpleWare has alleged enough to clear the bar set by Rule 8. To understand why, one need only look to Judge Illston's recent decision in a parallel copyright infringement case between XimpleWare and Ameriprise. As Judge Illston explains, "[a]ccepting as true the facts alleged in the amended complaint and drawing all reasonable inferences in favor of XimpleWare, as it must, the Court finds that XimpleWare has alleged Ameriprise reproduced and distributed the software outside of Ameriprise and to non-employees, thereby acting outside the scope of the GPL. XimpleWare has therefore stated a claim of copyright infringement." While Ameriprise has cited two Fifth Circuit cases suggesting that sharing code with contractors is not distribution, neither case was before the court on a motion to dismiss, when all allegations must be accepted as true. In sum, Paragraph 85 of the amended complaint fails to state a claim for patent infringement against any Versata customer, except as to Ameriprise.

In re Spansion, Inc.

Excerpt from *In re Spansion, Inc.*, 507 F. App'x 125, 128 (3d Cir. 2012), internal citations omitted.[32]

"[A] license ... [is] a mere waiver of the right to sue by the patentee." A license need not be a formal grant, but is instead a "consent[] to [the] use of the patent in making or using it, or selling it ... and a defense to an action for a tort." The Court of Appeals for the Federal Circuit explained that the inquiry focuses on what the agreement authorizes, not whether the language is couched in terms of a license or a covenant not to sue; effectively the two are equivalent.

Discussion

1. As noted by both the *Natterman* and *Davidson* courts, the existence of a patent grant given ambiguous language is interpreted according to state contract law. Does that mean that the existence of a patent license may vary from state to state?
2. The *Davidson* court found that there was no express patent license because Windsor did not have the power to bind the patent owner. The rights granted by open source licenses, however, are intentionally broad. Would the rule described by the *Spansion* court (look to "what the agreement authorizes") make a court more likely to find an express patent grant?
3. The *Ximpleware* court found that because internal use by the Defendant was licensed under the GPL version 2, that internal use was also subject to an "express license" to the associated patents. On what basis do you think that the judge found the express license?

Patent Exhaustion

Patent exhaustion is a U.S. common law doctrine limiting the scope of control that a patent holder can have after the "authorized sale" of a patented object. Under the doctrine, an authorized sale "exhausts" and thus entirely removes the ability of the patent older to use the threat of patent infringement to control the use and sale of the sold object. The purchaser is free to *use* or *resell* the patented object without restrictions based in patent law.[33]
This right to use and resell the object extends to subsequent purchasers, even those that acquire the patented object from a third party rather than from the patent holder herself.

Patent exhaustion is different than licensing. "Exhaustion doctrine, following the common-law limitation on servitudes on chattels, creates an implied-in-law property right based on an authorized acquisition, beyond what an implied-in-fact analysis would support under 'implied license' principles."[34] A license can be limited in scope, so that acting beyond the bounds contemplated in the license is an infringement on the rights of the patent owner. However, as soon as an object "embodying" the patent claims is sold by the patent holder or an authorized licensee, the exhaustion doctrine prevents lawsuits against any subsequent users "downstream" in the stream of commerce.

The law regarding patent exhaustion has been substantially clarified in recent years by the Supreme Court, writing in both *Quanta Computer, Inc. v. LG Electronics, Inc.* ("Quanta") and *Impression Products, Inc. v. Lexmark International,Inc.* ("Lexmark"). As you read the following cases, consider both how computer code might partially or fully "embody" a patented system or method, and how distribution occurs in an open source context, where code is freely passed from person to person.

Quanta Computer, Inc. v. LG Electronics, Inc.

United States Supreme Court (2008)[35]

Justice Thomas delivered the opinion of the Court.

For over 150 years this Court has applied the doctrine of patent exhaustion to limit the patent rights that survive the initial authorized sale of a patented item. In this case, we decide whether patent exhaustion applies to the sale of components of a patented system that must be combined with additional components in order to practice the patented methods. The Court of Appeals for the Federal Circuit held that the doctrine does not apply to method patents at all and, in the alternative, that it does not apply here because the sales were not authorized by the license agreement. We disagree on both scores. Because the exhaustion doctrine applies to method patents, and because the license authorizes the sale of components that substantially embody the patents in suit, the sale exhausted the patents.

I

Respondent LG Electronics, Inc. (LGE), purchased a portfolio of computer technology patents in 1999, including the three patents at issue here: U. S. Patent Nos. 4,939,641 ('641); 5,379,379 ('379); and 5,077,733 ('733) (collectively LGE Patents)....

LGE licensed a patent portfolio, including the LGE Patents, to Intel Corporation (Intel). The cross-licensing agreement (License Agreement) permits Intel to manufacture and sell microprocessors and chipsets that use the LGE Patents (the Intel Products). The License Agreement authorizes Intel to "'make, use, sell (directly or indirectly), offer to sell, import or otherwise dispose of'" its own products practicing the LGE Patents. Brief for Petitioners 8 (quoting App. 154).[36] Notwithstanding this broad language, the License Agreement contains some limitations. Relevant here, it stipulates that no license

> "'is granted by either party hereto … to any third party for the combination by a third party of Licensed Products of either party with items, components, or the like acquired … from sources other than a party hereto, or for the use, import, offer for sale or sale of such combination.'"
> (quoting App. 164).

The License Agreement purports not to alter the usual rules of patent exhaustion, however, providing that, "'[n]otwithstanding anything to the contrary contained in this Agreement, the parties agree that nothing herein shall in any way limit or alter the effect of patent exhaustion that would otherwise apply when a party hereto sells any of its Licensed Products.'" (quoting App. 164).

In a separate agreement (Master Agreement), Intel agreed to give written notice to its own customers informing them that, while it had obtained a broad license "'ensur[ing] that any Intel product that you purchase is licensed by LGE and thus does not infringe any patent held by LGE,'" the license "'does not extend, expressly or by implication, to any product that you make by combining an Intel product with any non-Intel product.'" (emphasis deleted) (quoting App. 198). The Master Agreement also provides that "'a breach of this Agreement shall have no effect on and shall not be grounds for termination of the Patent License.'" (quoting App. 176).

Petitioners, including Quanta Computer (collectively Quanta), are a group of computer manufacturers. Quanta purchased microprocessors and chipsets from Intel and received the notice required by the Master Agreement. Nonetheless, Quanta manufactured computers using Intel parts in combination with non-Intel memory and buses in ways that practice the LGE Patents. Quanta does not modify the Intel components and follows Intel's specifications to incorporate the parts into its own systems.

LGE filed a complaint against Quanta, asserting that the combination of the Intel Products with non-Intel memory and buses infringed the LGE Patents. The District Court granted summary judgment to Quanta, holding that, for purposes of the patent exhaustion doctrine, the license LGE granted to Intel resulted in forfeiture of any potential infringement actions against legitimate purchasers of the Intel Products. *LG Electronics, Inc. v. Asustek Computer, Inc.*, 65 USPQ 2d 1589, 1593, 1600 (ND Cal. 2002). The court found that, although the Intel Products do not fully practice any of the patents at issue, they have no reasonable noninfringing use and therefore their authorized sale exhausted patent rights in the completed computers under *United States v. Univis Lens Co.*, 316 U. S. 241 (1942). *Asustek*, *supra*, at 1598–1600. In a subsequent order limiting its summary judgment ruling, the court held that patent exhaustion applies only to apparatus or composition-of-matter claims that describe a physical object, and does not apply to process, or method, claims that describe operations to make or use a product. *LG Electronics, Inc. v. Asustek Computer, Inc.*, 248 F. Supp. 2d 912, 918 (ND Cal. 2003). Because each of the LGE Patents includes method claims, exhaustion did not apply.

The Court of Appeals for the Federal Circuit affirmed in part and reversed in part. It agreed that the doctrine of patent exhaustion does not apply to method claims. In the alternative, it concluded that exhaustion did not apply because LGE did not license Intel to sell the Intel Products to Quanta for use in combination with non-Intel products. 453 F. 3d, at 1370.

We granted certiorari, 551 U. S. ___ (2007).

II

The longstanding doctrine of patent exhaustion provides that the initial authorized sale of a patented item terminates all patent rights to that item. This Court first applied the doctrine in 19th-century cases addressing patent extensions on the Woodworth planing machine. Purchasers of licenses to sell and use the machine for the duration of the original patent term sought to continue using the licenses through the extended term. The Court held that the extension of the patent term did not affect the rights already secured by purchasers who bought the item for use "in the ordinary pursuits of life." *Bloomer v. McQuewan*, 14 How. 539, 549 (1853); see also *ibid*. ("[W]hen the machine passes to the hands of the purchaser, it is no longer within the limits of the monopoly"); *Bloomer v. Millinger*, 1 Wall. 340, 351 (1864). In *Adams v. Burke*, 17 Wall. 453 (1873), the Court affirmed the dismissal of a patent holder's suit alleging that a licensee had violated postsale restrictions on where patented coffin-lids could be used. "[W]here a person ha[s] purchased a patented machine of the patentee or his assignee," the Court held, "this purchase carrie[s] with it the right to the use of that machine so long as it [is] capable of use." *Id*., at 455.

Although the Court permitted postsale restrictions on the use of a patented article in *Henry v. A. B. Dick Co.*, 224 U. S. 1 (1912),[FN2] that decision was short lived. In 1913, the Court refused to apply *A. B. Dick* to uphold price-fixing provisions in a patent license. See *Bauer & Cie v. O'Donnell*, 229 U. S. 1, 14–17 (1913). Shortly thereafter, in *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U. S. 502, 518 (1917), the Court explicitly overruled *A. B. Dick*. In that case, a patent holder attempted to limit purchasers' use of its film projectors to show only film made under a patent held by the same company. The Court noted the "increasing frequency" with which patent holders were using *A. B. Dick*-style licenses to limit the use of their products and thereby using the patents to secure market control of related, unpatented items. 243 U. S., at 509, 516–517. Observing that "the primary purpose of our patent laws is not the creation of private fortunes for the owners of patents but is 'to promote the progress of science and useful arts,'" id., at 511 (quoting U. S. Const., Art. I, §8, cl. 8), the Court held that "the scope of the grant which may be made to an inventor in a patent, pursuant to the [patent] statute, must be limited to the invention described in the claims of his patent." 243 U. S., at 511. Accordingly, it reiterated the rule that "the right to vend is exhausted by a single, unconditional sale, the article sold being thereby carried outside the monopoly of the patent law and rendered free of every restriction which the vendor may attempt to put upon it." *Id*., at 516.

This Court most recently discussed patent exhaustion in *Univis*, 316 U. S. 241, on which the District Court relied. Univis Lens Company, the holder of patents on eyeglass lenses, licensed a purchaser to manufacture lens blanks by fusing together different lens segments to create bi- and tri-focal lenses and to sell them to other Univis licensees at agreed-upon rates.... The Court granted certiorari to determine whether Univis' patent monopoly survived the sale of the lens blanks by the licensed manufacturer and therefore shielded Univis' pricing scheme from the Sherman Act.

The Court assumed that the Univis patents containing claims for finished lenses were practiced in part by the wholesalers and finishing retailers who ground the blanks into lenses, and held that the sale of the lens blanks exhausted the patents on the finished lenses. *Univis*, 316 U. S., at 248–249. The Court explained that the lens blanks "embodi[ed] essential features of the patented device and [were] without utility until … ground and polished as the finished lens of the patent." *Id*., at 249. The Court noted that:

> "where one has sold an uncompleted article which, because it embodies essential features of his patented invention, is within the protection of his patent, and has destined the article to be finished by the purchaser in conformity to the patent, he has sold his invention so far as it is or may be embodied in that particular article." *Id*., at 250–251.

In sum, the Court concluded that the traditional bar on patent restrictions following the sale of an item applies when the item sufficiently embodies the patent—even if it does not completely practice the patent—such that its only and intended use is to be finished under the terms of the patent.

With this history of the patent exhaustion doctrine in mind, we turn to the parties' arguments.

III

A

LGE argues that the exhaustion doctrine is inapplicable here because it does not apply to method claims, which are contained in each of the LGE Patents. LGE reasons that, because method patents are linked not to a tangible article but to a process, they can never be exhausted through a sale. Rather, practicing the patent—which occurs upon each use of an article embodying a method patent—is permissible only to the extent rights are transferred in an assignment contract. Quanta, in turn, argues that there is no reason to preclude exhaustion of method claims, and points out that both this Court and the Federal Circuit have applied exhaustion to method claims. It argues that any other rule would allow patent holders to avoid exhaustion entirely by inserting method claims in their patent specifications.

Quanta has the better of this argument. Nothing in this Court's approach to patent exhaustion supports LGE's argument that method patents cannot be exhausted. It is true that a patented method may not be sold in the same way as an article or device, but methods nonetheless may be "embodied" in a product, the sale of which exhausts patent rights. Our precedents do not differentiate transactions involving embodiments of patented methods or processes from those involving patented apparatuses or materials. To the contrary, this Court has repeatedly held that method patents were exhausted by the sale of an item that embodied the method. In *Ethyl Gasoline Corp. v. United States*, 309 U. S. 436, 446, 457 (1940), for example, the Court held that the sale of a motor fuel produced under one patent also exhausted the patent for a method of using the fuel in combustion motors. Similarly, as previously described, *Univis* held that the sale of optical lens blanks that partially practiced a patent exhausted the method patents that were not completely practiced until the blanks were ground into lenses. 316 U. S., at 248–251.

These cases rest on solid footing. Eliminating exhaustion for method patents would seriously undermine the exhaustion doctrine. Patentees seeking to avoid patent exhaustion could simply draft their patent claims to describe a method rather than an apparatus.[FN5] Apparatus and method claims "may approach each other so nearly that it will be difficult to distinguish the process from the function of the apparatus." *United States ex rel. Steinmetz v. Allen*, 192 U. S. 543, 559 (1904). By characterizing their claims as method instead of apparatus claims, or including a method claim for the machine's patented method of performing its task, a patent drafter could shield practically any patented item from exhaustion.

This case illustrates the danger of allowing such an end-run around exhaustion. On LGE's theory, although Intel is authorized to sell a completed computer system that practices the LGE Patents, any downstream purchasers of the system could nonetheless be liable for patent infringement. Such a result would violate the longstanding principle that, when a patented item is "once lawfully made and sold, there is no restriction on [its] use to be implied for the benefit of the patentee." *Adams*, 17 Wall., at 457. We therefore reject LGE's argument that method claims, as a category, are never exhaustible.

B

We next consider the extent to which a product must embody a patent in order to trigger exhaustion. Quanta argues that, although sales of an incomplete article do not necessarily exhaust the patent in that article, the sale of the microprocessors and chipsets exhausted LGE's patents in the same way the sale of the lens blanks exhausted the patents in *Univis*. Just as the lens blanks in *Univis* did not fully practice the patents at issue because they had not been ground into finished lenses, Quanta observes, the Intel Products cannot practice the LGE Patents—or indeed, function at all—until they are combined with memory and buses in a computer system. If, as in *Univis*, patent rights are exhausted by the sale of the incomplete item, then LGE has no postsale right to require that the patents be practiced using only Intel parts. Quanta also argues that exhaustion doctrine will be a dead letter unless it is triggered by the sale of components that essentially, even if not completely, embody an invention. Otherwise, patent holders could authorize the sale of computers that are complete with the exception of one minor step—say, inserting the microprocessor into a socket—and extend their rights through each downstream purchaser all the way to the end user.

LGE, for its part, argues that *Univis* is inapplicable here for three reasons. First, it maintains that *Univis* should be limited to products that contain all the physical aspects needed to practice the patent. On that theory, the Intel Products cannot embody the patents because additional physical components are required before the patents can be practiced. Second, LGE asserts that in

Univis there was no "patentable distinction" between the lens blanks and the patented finished lenses since they were both subject to the same patent. Brief for Respondent 14 (citing *Univis*, *supra*, at 248–252). In contrast, it describes the Intel Products as "independent and distinct products" from the systems using the LGE Patents and subject to "independent patents." Brief for Respondent 13. Finally, LGE argues that *Univis* does not apply because the Intel Products are analogous to individual elements of a combination patent, and allowing sale of those components to exhaust the patent would impermissibly "ascrib[e] to one element of the patented combination the status of the patented invention in itself." *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 365 U. S. 336, 344–345 (1961).

We agree with Quanta that *Univis* governs this case. As the Court there explained, exhaustion was triggered by the sale of the lens blanks because their only reasonable and intended use was to practice the patent and because they "embodie[d] essential features of [the] patented invention." 316 U.S., at 249–251. Each of those attributes is shared by the microprocessors and chipsets Intel sold to Quanta under the License Agreement.

First, *Univis* held that "the authorized sale of an article which is capable of use only in practicing the patent is a relinquishment of the patent monopoly with respect to the article sold." *Id*., at 249. The lens blanks in *Univis* met this standard because they were "without utility until [they were] ground and polished as the finished lens of the patent." *Ibid*. Accordingly, "the only object of the sale [was] to enable the [finishing retailer] to grind and polish it for use as a lens by the prospective wearer." *Ibid*. Here, LGE has suggested no reasonable use for the Intel Products other than incorporating them into computer systems that practice the LGE Patents.[FN6] Nor can we can discern one: A microprocessor or chipset cannot function until it is connected to buses and memory. And here, as in *Univis*, the only apparent object of Intel's sales to Quanta was to permit Quanta to incorporate the Intel Products into computers that would practice the patents.

Second, the lens blanks in *Univis* "embodie[d] essential features of [the] patented invention." *Id*., at 250–251. The essential, or inventive, feature of the Univis lens patents was the fusing together of different lens segments to create bi- and tri-focal lenses. The finishing process performed by the finishing and prescription retailers after the fusing was not unique. As the United States explained:

> "The finishing licensees finish Univis lens blanks in precisely the same manner as they finish all other bifocal lens blanks. Indeed, appellees have never contended that their licensing system is supported by patents covering methods or processes relating to the finishing of lens blanks. Consequently, it appears that appellees perform all of the operations which contribute any claimed element of novelty to Univis lenses." Brief for United States in *United States v. Univis Lens Co.*, O. T. 1941, No. 855 et al., p. 10 (footnote and citations omitted).

While the Court assumed that the finishing process was covered by the patents, *Univis*, *supra*, at 248–249, and the District Court found that it was necessary to make a working lens, *United States v. Univis Lens Co.*, 41 F. Supp. 258, 262–263 (SDNY 1941), the grinding process was not central to the patents. That standard process was not included in detail in any of the patents and was not referred to at all in two of the patents. Those that did mention the finishing process treated it as incidental to the invention, noting, for example, that "[t]he blank is then ground in the usual manner," U. S. Patent No. 1,876,497, p. 2, or simply that the blank is "then ground and polished," U. S. Patent No. 1,632,208, p. 1, Tr. of Record in *United States v. Univis Lens Co.*, O. T. 1941, No. 855 et al., pp. 516, 498.

Like the *Univis* lens blanks, the Intel Products constitute a material part of the patented invention and all but completely practice the patent. Here, as in *Univis*, the incomplete article substantially embodies the patent because the only step necessary to practice the patent is the application of common processes or the addition of standard parts. Everything inventive about each patent is embodied in the Intel Products. They control access to main and cache memory, practicing the '641 and '379 patents by checking cache memory against main memory and comparing read and write requests. They also control priority of bus access by various other computer components under the '733 patent. Naturally, the Intel Products cannot carry out these functions unless they are attached to memory and buses, but those additions are standard components in the system, providing the material that enables the microprocessors and chipsets to function. The Intel Products were specifically designed to function only when memory or buses are attached; Quanta was not required to make any creative or inventive decision when it added those parts. Indeed, Quanta had no alternative but to follow Intel's specifications in incorporating the Intel Products into its computers because it did not know their internal structure, which Intel guards as a trade secret. Intel all but practiced the patent itself by designing its products to practice the patents, lacking only the addition of standard parts.

We are unpersuaded by LGE's attempts to distinguish *Univis*. First, there is no reason to distinguish the two cases on the ground that the articles in *Univis* required the removal of material to practice the patent while the Intel Products require the addition of components to practice the patent. LGE characterizes the lens blanks and lenses as sharing a "basic nature" by virtue of their physical similarity, while the Intel Products embody only some of the "patentably distinct elements and steps" involved in the LGE Patents. Brief for Respondent 26–27. But we think that the nature of the final step, rather than whether it consists of adding or deleting material, is the relevant characteristic. In each case, the final step to practice the patent is common and noninventive: grinding a lens to the customer's prescription, or connecting a microprocessor or chipset to buses or memory. The Intel Products embody the essential features of the LGE Patents because they carry out all the inventive processes when combined, according to their design, with standard components.

With regard to LGE's argument that exhaustion does not apply across patents, we agree on the general principle: The sale of a device that practices patent A does not, by virtue of practicing patent A, exhaust patent B. But if the device practices patent A while substantially embodying patent B, its relationship to patent A does not prevent exhaustion of patent B. For example, if the *Univis* lens blanks had been composed of shatter-resistant glass under patent A, the blanks would nonetheless have substantially embodied, and therefore exhausted, patent B for the finished lenses. This case is no different. While each Intel microprocessor and chipset practices thousands of individual patents, including some LGE patents not at issue in this case, the exhaustion analysis is not altered by the fact that more than one patent is practiced by the same product.

The relevant consideration is whether the Intel Products that partially practice a patent—by, for example, embodying its essential features—exhaust that patent.

Finally, LGE's reliance on *Aro* is misplaced because that case dealt only with the question whether replacement of one part of a patented combination infringes the patent. First, the replacement question is not at issue here. Second, and more importantly, *Aro* is not squarely applicable to the exhaustion of patents like the LGE Patents that do not disclose a new combination of existing parts. *Aro* described combination patents as "cover[ing] only the totality of the elements in the claim [so] that no element, separately viewed, is within the grant." 365 U. S., at 344; see also *Mercoid Corp. v. Mid-Continent Investment Co.*, 320 U. S. 661, 667–668 (1944) (noting that, in a combination patent, "the combination is the invention and it is distinct from any" of its elements). *Aro*'s warning that no element can be viewed as central to or equivalent to the invention is specific to the context in which the combination itself is the only inventive aspect of the patent. In this case, the inventive part of the patent is not the fact that memory and buses are combined with a microprocessor or chipset; rather, it is included in the design of the Intel Products themselves and the way these products access the memory or bus.

C

Having concluded that the Intel Products embodied the patents, we next consider whether their sale to Quanta exhausted LGE's patent rights. Exhaustion is triggered only by a sale authorized by the patent holder. *Univis*, 316 U. S., at 249.

LGE argues that there was no authorized sale here because the License Agreement does not permit Intel to sell its products for use in combination with non-Intel products to practice the LGE Patents. It cites *General Talking Pictures Corp. v. Western Elec. Co.*, 304 U. S. 175 (1938), and *General Talking Pictures Corp. v. Western Elec. Co.*, 305 U. S. 124 (1938), in which the manufacturer sold patented amplifiers for commercial use, thereby breaching a license that limited the buyer to selling the amplifiers for private and home use. The Court held that exhaustion did not apply because the manufacturer had no authority to sell the amplifiers for commercial use, and the manufacturer "could not convey to petitioner what both knew it was not authorized to sell." General Talking Pictures, supra, at 181. LGE argues that the same principle applies here: Intel could not convey to Quanta what both knew it was not authorized to sell, i.e., the right to practice the patents with non-Intel parts.

LGE overlooks important aspects of the structure of the Intel-LGE transaction. Nothing in the License Agreement restricts Intel's right to sell its microprocessors and chipsets to purchasers who intend to combine them with non-Intel parts. It broadly permits Intel to "'make, use, [or] sell'" products free of LGE's patent claims. To be sure, LGE did require Intel to give notice to its customers, including Quanta, that LGE had not licensed those customers to practice its patents. But neither party contends that Intel breached the agreement in that respect. In any event, the provision requiring notice to Quanta appeared only in the Master Agreement, and LGE does not suggest that a breach of that agreement would constitute a breach of the License Agreement. Hence, Intel's authority to sell its products embodying the LGE Patents was not conditioned on the notice or on Quanta's decision to abide by LGE's directions in that notice.

LGE points out that the License Agreement specifically disclaimed any license to third parties to practice the patents by combining licensed products with other components. But the question whether third parties received implied licenses is irrelevant because Quanta asserts its right to practice the patents based not on implied license but on exhaustion. And exhaustion turns only on Intel's own license to sell products practicing the LGE Patents.

Alternatively, LGE invokes the principle that patent exhaustion does not apply to postsale restrictions on "making" an article. But this is simply a rephrasing of its argument that combining the Intel Products with other components adds more than standard finishing to complete a patented article. As explained above, making a product that substantially embodies a patent is, for exhaustion purposes, no different from making the patented article itself. In other words, no further "making" results from the addition of standard parts—here, the buses and memory—to a product that already substantially embodies the patent.

The License Agreement authorized Intel to sell products that practiced the LGE Patents. No conditions limited Intel's authority to sell products substantially embodying the patents. Because Intel was authorized to sell its products to Quanta, the doctrine of patent exhaustion prevents LGE from further asserting its patent rights with respect to the patents substantially embodied by those products.[FN7]

IV

The authorized sale of an article that substantially embodies a patent exhausts the patent holder's rights and prevents the patent holder from invoking patent law to control postsale use of the article. Here, LGE licensed Intel to practice any of its patents and to sell products practicing those patents. Intel's microprocessors and chipsets substantially embodied the LGE Patents because they had no reasonable noninfringing use and included all the inventive aspects of the patented methods. Nothing in the License Agreement limited Intel's ability to sell its products practicing the LGE Patents. Intel's authorized sale to Quanta thus took its products outside the scope of the patent monopoly, and as a result, LGE can no longer assert its patent rights against Quanta. Accordingly, the judgment of the Court of Appeals is reversed.

It is so ordered.

Selected footnotes from Quanta Computer, Inc. v. LG Electronics, Inc:

[FN2]: The A. B. Dick Company sold mimeograph machines with an attached license stipulating that the machine could be used only with ink, paper, and other supplies made by the A. B. Dick Company. The Court rejected the notion that a patent holder “can only keep the article within the control of the patent by retaining the title,” *A. B. Dick*, 224 U. S., at 18, and held that "any … reasonable stipulation, not inherently violative of some substantive law" was "valid and enforceable," *id*., at 31. The only requirement, the Court held, was that "the purchaser must have notice that he buys with only a qualified right of use," so that a sale made without conditions resulted in "an unconditional title to the machine, with no limitations upon the use."

Id., at 26.

[FN5]: One commentator recommends this strategy as a way to draft patent claims that "will survive numerous transactions regarding the patented good, allowing the force of the patent to intrude deeply into the stream of commerce." Thomas, *Of Text, Technique, and the Tangible: Drafting Patent Claims Around Patent Rules*, 17 J. Marshall J. Computer & Info. L. 219, 252 (1998); see also *id*., at 225–226 (advocating the conversion of apparatus claims into method claims and noting that "[e]ven the most novice claims drafter would encounter scant difficulty in converting a patent claim from artifact to technique and back again").

[FN6]: LGE suggests that the Intel Products would not infringe its patents if they were sold overseas, used as replacement parts, or engineered so that use with non-Intel Products would disable their patented features. Brief for Respondent 21–22, n. 10. But *Univis* teaches that the question is whether the product is "capable of use only in *practicing* the patent," not whether those uses are infringing. 316 U.S., at 249 (emphasis added). Whether outside the country or functioning as replacement parts, the Intel Products would still be practicing the patent, even if not infringing it. And since the features partially practicing the patent are what must have an alternative use, suggesting that they be disabled is no solution. The disabled features would have no real *use*.

[FN7]: We note that the authorized nature of the sale to Quanta does not necessarily limit LGE's other contract rights. LGE's complaint does not include a breach-of-contract claim, and we express no opinion on whether contract damages might be available even though exhaustion operates to eliminate patent damages. *See Keeler v. Standard Folding Bed Co.*, 157 U. S. 659, 666 (1895) ("Whether a patentee may protect himself and his assignees by special contracts brought home to the purchasers is not a question before us, and upon which we express no opinion. It is, however, obvious that such a question would arise as a question of contract, and not as one under the inherent meaning and effect of the patent laws").

Impression Products v. Lexmark International

United States Supreme Court (2017)[37]

Chief Justice Roberts delivered the opinion of the Court.

A United States patent entitles the patent holder (the "patentee"), for a period of 20 years, to "exclude others from making, using, offering for sale, or selling [its] invention throughout the United States or importing the invention into the United States." 35 U. S. C. §154(a). Whoever engages in one of these acts "without authority" from the patentee may face liability for patent infringement. §271(a).

When a patentee sells one of its products, however, the patentee can no longer control that item through the patent laws--its patent rights are said to "exhaust." The purchaser and all subsequent owners are free to use or resell the product just like any other item of personal property, without fear of an infringement lawsuit.

This case presents two questions about the scope of the patent exhaustion doctrine: First, whether a patentee that sells an item under an express restriction on the purchaser's right to reuse or resell the product may enforce that restriction through an infringement lawsuit. And second, whether a patentee exhausts its patent rights by selling its product outside the United States, where American patent laws do not apply. We conclude that a patentee's decision to sell a product exhausts all of its patent rights in that item, regardless of any restrictions the patentee purports to impose or the location of the sale.

I

The underlying dispute in this case is about laser printers-or, more specifically, the cartridges that contain the powdery substance, known as toner, that laser printers use to make an image appear on paper. Respondent Lexmark International, Inc. designs, manufactures, and sells toner cartridges to consumers in the United States and around the globe. It owns a number of patents that cover components of those cartridges and the manner in which they are used.

When toner cartridges run out of toner they can be refilled and used again. This creates an opportunity for other companies-known as remanufacturers-to acquire empty Lexmark cartridges from purchasers in the United States and abroad, refill them with toner, and then resell them at a lower price than the new ones Lexmark puts on the shelves.

Not blind to this business problem, Lexmark structures its sales in a way that encourages customers to return spent cartridges. It gives purchasers two options: One is to buy a toner cartridge at full price, with no strings attached. The other is to buy a cartridge at roughly 20-percent off through Lexmark's "Return Program." A customer who buys through the Return Program still owns the cartridge but, in exchange for the lower price, signs a contract agreeing to use it only once and to refrain from transferring the empty cartridge to anyone but Lexmark. To enforce this single-use/no-resale restriction, Lexmark installs a microchip on each Return Program cartridge that prevents reuse once the toner in the cartridge runs out.

Lexmark's strategy just spurred remanufacturers to get more creative. Many kept acquiring empty Return Program cartridges and developed methods to counteract the effect of the microchips. With that technological obstacle out of the way, there was little to prevent the re-manufacturers from using the Return Program cartridges in their resale business. After all, Lexmark's contractual single-use/no-resale agreements were with the initial customers, not with downstream purchasers like the remanufacturers.

Lexmark, however, was not so ready to concede that its plan had been foiled. In 2010, it sued a number of remanufacturers, including petitioner Impression Products, Inc., for patent infringement with respect to two groups of cartridges. One group consists of Return Program cartridges that Lexmark sold within the United States. Lexmark argued that, because it expressly prohibited reuse and resale of these cartridges, the remanufacturers infringed the Lexmark patents when they refurbished and resold them. The other group consists of all toner cartridges that Lexmark sold abroad and that remanufacturers imported into the country. Lexmark claimed that it never gave anyone authority to import these cartridges, so the remanufacturers ran afoul of its patent rights by doing just that.

Eventually, the lawsuit was whittled down to one defendant, Impression Products, and one defense: that Lexmark's sales, both in the United States and abroad, exhausted its patent rights in the cartridges, so Impression Products was free to refurbish and resell them, and to import them if acquired abroad. Impression Products filed separate motions to dismiss with respect to both groups of cartridges. The District Court granted the motion as to the domestic Return Program cartridges, but denied the motion as to the cartridges Lexmark sold abroad. Both parties appealed.

The Federal Circuit considered the appeals en banc and ruled for Lexmark with respect to both groups of cartridges....

We granted certiorari to consider the Federal Circuit's decisions with respect to both domestic and international exhaustion, 580 U. S. ___ (2016), and now reverse.

II

A

First up are the Return Program cartridges that Lexmark sold in the United States. We conclude that Lexmark exhausted its patent rights in these cartridges the moment it sold them. The single-use/no-resale restrictions in Lexmark's contracts with customers may have been clear and enforceable under contract law, but they do not entitle Lexmark to retain patent rights in an item that it has elected to sell.

The Patent Act grants patentees the "right to exclude others from making, using, offering for sale, or selling [their] invention[s]." 35 U. S. C. §154(a). For over 160 years, the doctrine of patent exhaustion has imposed a limit on that right to exclude. See *Bloomer v. McQuewan*, 14 How. 539 (1853). The limit functions automatically: When a patentee chooses to sell an item, that product "is no longer within the limits of the monopoly" and instead becomes the "private, individual property" of the purchaser, with the rights and benefits that come along with ownership. *Id*., at 549-550. A patentee is free to set the price and negotiate contracts with purchasers, but may not, "by virtue of his patent, control the use or disposition" of the product after ownership passes to the purchaser. *United States v. Univis Lens Co.*, 316 U. S. 241, 250 (1942) (emphasis added). The sale "terminates all patent rights to that item." *Quanta Computer, Inc. v. LG Electronics, Inc.*, 553 U. S. 617, 625 (2008).

This well-established exhaustion rule marks the point where patent rights yield to the common law principle against restraints on alienation. The Patent Act "promote[s] the progress of science and the useful arts by granting to [inventors] a limited monopoly" that allows them to "secure the financial rewards" for their inventions. *Univis*, 316 U. S., at 250. But once a patentee sells an item, it has "enjoyed all the rights secured" by that limited monopoly. *Keeler v. Standard Folding Bed Co.*, 157 U. S. 659, 661 (1895). Because "the purpose of the patent law is fulfilled . . . when the patentee has received his reward for the use of his invention," that law furnishes "no basis for restraining the use and enjoyment of the thing sold." *Univis*, 316 U. S., at 251.

We have explained in the context of copyright law that exhaustion has "an impeccable historic pedigree," tracing its lineage back to the "common law's refusal to permit restraints on the alienation of chattels." *Kirtsaeng v. John Wiley & Sons, Inc.*, 568 U. S. 519, 538 (2013). As Lord Coke put it in the 17th century, if an owner restricts the resale or use of an item after selling it, that restriction "is voide, because . . . it is against Trade and Traffique, and bargaining and contracting betweene man and man." 1 E. Coke, Institutes of the Laws of England §360, p. 223 (1628); see J. Gray, Restraints on the Alienation of Property §27, p. 18 (2d ed. 1895) ("A condition or conditional limitation on alienation attached to a transfer of the entire interest in personalty is as void as if attached to a fee simple in land").

This venerable principle is not, as the Federal Circuit dismissively viewed it, merely "one common-law jurisdiction's general judicial policy at one time toward anti-alienation restrictions." 816 F. 3d, at 750. Congress enacted and has repeatedly revised the Patent Act against the backdrop of the hostility toward restraints on alienation. That enmity is reflected in the exhaustion doctrine. The patent laws do not include the right to "restrain[ ] . . . further alienation" after an initial sale; such conditions have been "hateful to the law from Lord Coke's day to ours" and are "obnoxious to the public interest." *Straus v. Victor Talking Machine Co.*, 243 U. S. 490, 501 (1917). "The inconvenience and annoyance to the public that an opposite conclusion would occasion are too obvious to require illustration." *Keeler*, 157 U. S., at 667.

But an illustration never hurts. Take a shop that restores and sells used cars. The business works because the shop can rest assured that, so long as those bringing in the cars own them, the shop is free to repair and resell those vehicles. That smooth flow of commerce would sputter if companies that make the thousands of parts that go into a vehicle could keep their patent rights after the first sale. Those companies might, for instance, restrict resale rights and sue the shop owner for patent infringement. And even if they refrained from imposing such restrictions, the very threat of patent liability would force the shop to invest in efforts to protect itself from hidden lawsuits. Either way, extending the patent rights beyond the first sale would clog the channels of commerce, with little benefit from the extra control that the patentees retain. And advances in technology, along with increasingly complex supply chains, magnify the problem. *See* Brief for Costco Wholesale Corp. et al. as Amici Curiae 7-9; Brief for Intel Corp. et al. as Amici Curiae 17, n. 5 ("A generic smartphone assembled from various high-tech components could practice an estimated 250,000 patents").

This Court accordingly has long held that, even when a patentee sells an item under an express restriction, the patentee does not retain patent rights in that product. In *Boston Store of Chicago v. American Graphophone Co.*, for example, a manufacturer sold graphophones--one of the earliest devices for recording and reproducing sounds--to retailers under contracts requiring those stores to resell at a specific price. 246 U. S. 8, 17-18 (1918). When the manufacturer brought a patent infringement suit against a retailer who sold for less, we concluded that there was "no room for controversy" about the result: By selling the item, the manufacturer placed it "beyond the confines of the patent law, [and] could not, by qualifying restrictions as to use, keep [it] under the patent monopoly." Id., at 20, 25.

Two decades later, we confronted a similar arrangement in United States v. Univis Lens Co. There, a company that made eyeglass lenses authorized an agent to sell its products to wholesalers and retailers only if they promised to market the lenses at fixed prices. The Government filed an antitrust lawsuit, and the company defended its arrangement on the ground that it was exercising authority under the Patent Act. We held that the initial sales "relinquish[ed] . . . the patent monopoly with respect to the article[s] sold," so the "stipulation . . . fixing resale prices derive[d] no support from the patent and must stand on the same footing" as restrictions on unpatented goods. 316 U. S., at 249-251.

It is true that Boston Store and Univis involved resale price restrictions that, at the time of those decisions, violated the antitrust laws. But in both cases it was the sale of the items, rather than the illegality of the restrictions, that prevented the patentees from enforcing those resale price agreements through patent infringement suits. And if there were any lingering doubt that patent exhaustion applies even when a sale is subject to an express, otherwise lawful restriction, our recent decision in *Quanta Computer, Inc. v. LG Electronics, Inc.* settled the matter. In that case, a technology company-with authorization from the patentee-sold microprocessors under contracts requiring purchasers to use those processors with other parts that the company manufactured. One buyer disregarded the restriction, and the patentee sued for infringement. Without so much as mentioning the lawfulness of the contract, we held that the patentee could not bring an infringement suit because the "authorized sale . . . took its products outside the scope of the patent monopoly." 553 U. S., at 638.

Turning to the case at hand, we conclude that this well-settled line of precedent allows for only one answer: Lexmark cannot bring a patent infringement suit against Impression Products to enforce the single-use/no-resale provision accompanying its Return Program cartridges. Once sold, the Return Program cartridges passed outside of the patent monopoly, and whatever rights Lexmark retained are a matter of the contracts with its purchasers, not the patent law.

B

The Federal Circuit reached a different result largely because it got off on the wrong foot. The "exhaustion doctrine," the court believed, "must be understood as an interpretation of" the infringement statute, which prohibits anyone from using or selling a patented article "without authority" from the patentee. 816 F. 3d, at 734 (quoting 35 U. S. C. §271(a)). Exhaustion reflects a default rule that a patentee's decision to sell an item "presumptively grant[s] 'authority' to the purchaser to use it and resell it." 816 F. 3d, at 742. But, the Federal Circuit explained, the patentee does not have to hand over the full "bundle of rights" every time. *Id.*, at 741 (internal quotation marks omitted). If the patentee expressly withholds a stick from the bundle-perhaps by restricting the purchaser's resale rights-the buyer never acquires that withheld authority, and the patentee may continue to enforce its right to exclude that practice under the patent laws.

The misstep in this logic is that the exhaustion doctrine is not a presumption about the authority that comes along with a sale; it is instead a limit on "the scope of the patentee's rights."_ United States v. General Elec. Co._, 272 U. S. 476, 489 (1926) (emphasis added). The right to use, sell, or import an item exists independently of the Patent Act. What a patent adds-and grants exclusively to the patentee-is a limited right to prevent others from engaging in those practices. See *Crown Die & Tool Co. v. Nye Tool & Machine Works*, 261 U. S. 24, 35 (1923). Exhaustion extinguishes that exclusionary power. See *Bloomer*, 14 How., at 549 (the purchaser "exercises no rights created by the act of Congress, nor does he derive title to [the item] by virtue of the . . . exclusive privilege granted to the patentee"). As a result, the sale transfers the right to use, sell, or import because those are the rights that come along with ownership, and the buyer is free and clear of an infringement lawsuit because there is no exclusionary right left to enforce.

The Federal Circuit also expressed concern that preventing patentees from reserving patent rights when they sell goods would create an artificial distinction between such sales and sales by licensees. Patentees, the court explained, often license others to make and sell their products, and may place restrictions on those licenses. A computer developer could, for instance, license a manufacturer to make its patented devices and sell them only for non-commercial use by individuals. If a licensee breaches the license by selling a computer for commercial use, the patentee can sue the licensee for infringement. And, in the Federal Circuit's view, our decision in *General Talking Pictures Corp. v. Western Elec. Co.*, 304 U. S. 175, aff'd on reh'g, 305 U. S. 124 (1938), established that-when a patentee grants a license "under clearly stated restrictions on post-sale activities" of those who purchase products from the licensee-the patentee can also sue for infringement those purchasers who knowingly violate the restrictions. 816 F. 3d, at 743-744. If patentees can employ licenses to impose post-sale restrictions on purchasers that are enforceable through infringement suits, the court concluded, it would make little sense to prevent patentees from doing so when they sell directly to consumers.

The Federal Circuit's concern is misplaced. A patentee can impose restrictions on licensees because a license does not implicate the same concerns about restraints on alienation as a sale. Patent exhaustion reflects the principle that, when an item passes into commerce, it should not be shaded by a legal cloud on title as it moves through the marketplace. But a license is not about passing title to a product, it is about changing the contours of the patentee's monopoly: The patentee agrees not to exclude a licensee from making or selling the patented invention, expanding the club of authorized producers and sellers. *See General Elec. Co.*, 272 U. S., at 489-490. Because the patentee is exchanging rights, not goods, it is free to relinquish only a portion of its bundle of patent protections.

A patentee's authority to limit licensees does not, as the Federal Circuit thought, mean that patentees can use licenses to impose post-sale restrictions on purchasers that are enforceable through the patent laws. So long as a licensee complies with the license when selling an item, the patentee has, in effect, authorized the sale. That licensee's sale is treated, for purposes of patent exhaustion, as if the patentee made the sale itself. The result: The sale exhausts the patentee's rights in that item. See *Hobbie v. Jennison*, 149 U. S. 355, 362-363 (1893). A license may require the licensee to impose a restriction on purchasers, like the license limiting the computer manufacturer to selling for non-commercial use by individuals. But if the licensee does so-by, perhaps, having each customer sign a contract promising not to use the computers in business-the sale nonetheless exhausts all patent rights in the item sold. See *Motion Picture Patents Co. v. Universal Film Mfg. Co.*, 243 U. S. 502, 506-507, 516 (1917). The purchasers might not comply with the restriction, but the only recourse for the licensee is through contract law, just as if the patentee itself sold the item with a restriction.

General Talking Pictures involved a fundamentally different situation: There, a licensee "knowingly ma[de] . . . sales . . . outside the scope of its license." 304 U. S., at 181-182 (emphasis added). We treated the sale "as if no license whatsoever had been granted" by the patentee, which meant that the patentee could sue both the licensee and the purchaser-who knew about the breach-for infringement. *General Talking Pictures Corp. v. Western Elec. Co.*, 305 U. S. 124, 127 (1938). This does not mean that patentees can use licenses to impose post-sale restraints on purchasers. Quite the contrary: The licensee infringed the patentee's rights because it did not comply with the terms of its license, and the patentee could bring a patent suit against the purchaser only because the purchaser participated in the licensee's infringement. *General Talking Pictures*, then, stands for the modest principle that, if a patentee has not given authority for a licensee to make a sale, that sale cannot exhaust the patentee's rights.

In sum, patent exhaustion is uniform and automatic. Once a patentee decides to sell-whether on its own or through a licensee--that sale exhausts its patent rights, regardless of any post-sale restrictions the patentee purports to impose, either directly or through a license.

III

Our conclusion that Lexmark exhausted its patent rights when it sold the domestic Return Program cartridges goes only halfway to resolving this case. Lexmark also sold toner cartridges abroad and sued Impression Products for patent infringement for "importing [Lexmark's] invention into the United States." 35 U. S. C. §154(a). Lexmark contends that it may sue for infringement with respect to all of the imported cartridges-not just those in the Return Program--because a foreign sale does not trigger patent exhaustion unless the patentee "expressly or implicitly transfer[s] or license[s]" its rights. Brief for Respondent 36-37. The Federal Circuit agreed, but we do not. An authorized sale outside the United States, just as one within the United

States, exhausts all rights under the Patent Act.

...

Exhaustion does not arise because of the parties' expectations about how sales transfer patent rights. More is at stake when it comes to patents than simply the dealings between the parties, which can be addressed through contract law. Instead, exhaustion occurs because, in a sale, the patentee elects to give up title to an item in exchange for payment. Allowing patent rights to stick remora-like to that item as it flows through the market would violate the principle against restraints on alienation. Exhaustion does not depend on whether the patentee receives a premium for selling in the United States, or the type of rights that buyers expect to receive. As a result, restrictions and location are irrelevant; what matters is the patentee's decision to make a sale.

* * *

The judgment of the United States Court of Appeals for the Federal Circuit is reversed, and the case is remanded for further proceedings consistent with this opinion.

It is so ordered.

The cases above dealt with "authorized sales," which don't always occur in an open source context. Usually, open source code is simply downloaded for free, either directly from the licensor or (more frequently) from a third party distributor or aggregator of open source code. The following two cases present situations analogous to many situations that occur when using open source code.

Lifescan Scotland, Ltd. v. Shasta Technologies

Excerpt from *LifeScan Scot., Ltd. v. Shasta Techs., LLC.*, 734 F.3d 1361, 1374-1375 (Fed. Cir. 2013), some internal citations omitted.[38]

LifeScan's final argument is that even if its meters substantially embody the asserted claims, patent exhaustion is nevertheless inapplicable to the 60% of its meters that are not sold but instead distributed for free. LifeScan asserts that it received no "reward" for distributing them (because they were distributed without charge), and that the district court therefore properly found that patent exhaustion did not apply. We are therefore asked to decide, as a matter of first impression, whether patent exhaustion applies to a product distributed for free. We conclude that, in the case of an authorized and unconditional transfer of title, the absence of consideration is no barrier to the application of patent exhaustion principles.

Although the Supreme Court has often discussed exhaustion in terms of a "sale" and a "purchaser," see, e.g., *Bowman v. Monsanto Co.*, 133 S. Ct. 1761, 1766, 185 L. Ed. 2d 931 (2013); *Adams*, 84 U.S. at 456, the Court has never confined the application of patent exhaustion to that context. The Court explained the rationale underlying the doctrine of patent exhaustion in *Bloomer v. McQuewan*, 55 U.S. (14 How.) 539, 14 L. Ed. 532 (1853). See also *Quanta*, 553 U.S. at 625. *McQuewan* involved the effect of a patent term extension on patent licensees holding licenses to use the patented planing machine during the original patent term. The Court held that "the purchaser of the . . . machine for the purpose of using it in the ordinary pursuits of life" was entitled to continue using the machine during the extended term. The Court explained that

> when the machine *passes to the hands* of the purchaser, it is no longer within the limits of the [patent] monopoly. It passes outside of it, and is no longer under the protection of the act of Congress. . . . The implement or machine *becomes [the purchaser's] private, individual property*, not protected by the laws of the United States, but by the laws of the State in which it is situated.

Id. at 549-50 (emphases added). In other words, the patentee's transfer of the right to use the machines "exhaust[ed]" his rights as to those machines. See *Univis*, 316 U.S. at 250 (citing *McQuewan*, 55 U.S. (14 How.) at 549-50).

Thus, despite frequent references to "sales" and "purchasers," the Court has more fundamentally described exhaustion as occurring when the patented product "passes to the hands" of a transferee and when he "legally acquires a title" to it. *Millinger*, 68 U.S. (1 Wall.) at 351 ("legally acquires a title"); *Chaffee v. Boston Belting Co.*, 63 U.S. (22 How.) 217, 223, 16 L. Ed. 240 (1859) ("passes to the hands," "legally acquires a title"); *McQuewan*, 55 U.S. (14 How.) at 549-50 ("passes to the hands"). Similarly, the Court has stated that exhaustion can occur by a transfer "from any other person . . . authorized [by the patentee] to convey it." Millinger, 68 U.S. (1 Wall.) at 351 (emphasis added); Chaffee, 63 U.S. (22 How.) at 223 (same); see Black's Law Dictionary 273 (1st ed. 1891) (defining "convey" to mean "[t]o pass or transmit the title to property from one to another"). So too, in *Univis*, the Court stated that the patentee's "monopoly remains so long as he *retains the ownership* of the patented article." 316 U.S. at 250 (emphasis added). Each of these formulations is broad enough to include a transfer of title that does not amount to a sale. A "sale" limitation would indeed be inconsistent with the Supreme Court's decision in *McQuewan*, where the particular machines at issue had never been sold, but had instead been manufactured by the accused infringer with the permission of the patentee. See 55 U.S. (14 How.) at 548. Yet that lack of a "sale" was no barrier to the application of patent exhaustion. See *id*. at 549-50. Because the machines had been constructed with the patentee's authorization and were the "private, individual property" of the accused infringer, they were "no longer under the protection of" the Patent Act. *Id*. The narrow application of patent exhaustion urged by LifeScan would be inconsistent with the doctrine's underlying rationale—to permit the owner of an item who received it in an authorized transfer to use it.

LifeScan relies on language in Supreme Court exhaustion decisions mentioning the receipt of "consideration" or "reward" by the patentee as supporting exhaustion. See, e.g., *Univis*, 316 U.S. at 251 ("[T]he patentee has received his reward for the use of the invention by the sale of the article . . . ."); *Adams*, 84 U.S. (17 Wall.) at 456 ("[W]hen the patentee . . . sells a machine . . . whose sole value is in its use, he receives the consideration for its use and he parts with the right to control that use."). But none of the cases cited by LifeScan involved any suggestion that exhaustion could be avoided by showing the absence or inadequacy of the patentee's reward in a transfer by gift.

At bottom, a patentee has a choice as to how to secure its reward. A patentee may "demand[]" a particular price in exchange for an "article and the invention which it embodies." See *Univis*, 316 U.S. at 251; see also *McQuewan*, 55 U.S. (14 How.) at 552. Alternately, a patentee may choose to give that article away for free in the hope of obtaining a future benefit, as LifeScan did here. But a patentee cannot evade patent exhaustion principles by choosing to give the article away rather than charging a particular price for it. Where a patentee unconditionally parts with ownership of an article, it cannot later complain that the approach that it chose results in an inadequate reward and that therefore ordinary principles of patent exhaustion should not apply.

...

In summary, we hold that patent exhaustion principles apply equally to all authorized transfers of title in property, regardless of whether the particular transfer at issue constituted a gift or a sale. We further conclude that LifeScan's OneTouch Ultra meters substantially embody the methods claimed in the '105 patent and that their distribution therefore exhausts LifeScan's patent rights. We therefore reverse the district court's grant of a preliminary injunction and remand for further proceedings consistent with this opinion.

Cascades Computer Innovation, LLC v. Samsung Electronics Co.

Excerpt from *Cascades Computer Innovation, LLC v. Samsung Elecs. Co.*, 70 F. Supp. 3d 863 (N.D.Ill, 2014)[39]

Under the doctrine of patent exhaustion, the initial authorized sale of a patented item terminates the patent holder's rights to that item, and the patent holder may not sue a downstream user of the item for infringement. Patent exhaustion also applies to method patents. If the holder of a method patent authorizes another to practice the patented method, the patent holder cannot successfully sue for infringement those who acquire from the authorized user a product that substantially embodies the patented method.

In these cases, Cascades Computer Innovation LLC has sued Samsung Electronics Co. Ltd. and HTC Corporation for infringement of U.S. Patent

7,065,750 (the '750 patent). Cascades contends that defendants manufacture and sell products that practice the method claimed in the patent. Samsung and HTC have moved for summary judgment. They contend that Cascades authorized Google to practice the patented method in its Android operating system and that their claimed infringement arises from their use of that same operating system, which they acquired from Google. Thus, Samsung and HTC contend, the doctrine of patent exhaustion bars Cascades's claims against them.

Background

Because the defendants have moved for summary judgment, the Court "constru[es] all facts and reasonable inferences in the light most favorable to the nonmoving party," in this case, Cascades. *Ellis v. DHL Exp. Inc.*, 33 F.3d 522, 525 (7th Cir.2011).

The '750 patent is entitled "Method and Apparatus for Preserving Precise Exceptions in Binary Translated Code." Pl.'s Third Am. Compl. ¶ 11. In general terms, it describes a method for efficiently executing on one system architecture computer programming code that is intended for a different architecture. Until 2014, Cascades was an exclusive licensee under the '750 patent, with an exclusive right to sue for the patent's past, present, and future infringement.

In 2011, Cascades filed patent infringement suits against certain parties, including Samsung and HTC. Cascades contends that Samsung and HTC infringe the '750 patent by manufacturing and selling smartphones and tablets that use the Dalvik JIT Compiler, which is part of the Android operating system distributed by Google. According to Cascades, "[t]he claimed method is performed when a user of the cellular phones operates the device for their intended purpose using the Android operating system, e.g., allowing the Dalvik Virtual Machine to optimize the byte code for each application." *Id*. ¶ 14.

On January 29, 2014, Cascades entered into a settlement and license agreement with Google, the parent of Motorola Mobility LLC, previously a defendant in one of Cascades's suits. In exchange for a one-time fee, Cascades granted Google:

> a worldwide, non-exclusive, fully paid up and perpetual and irrevocable license under Cascades Patents to practice and undertake any of and all of the rights granted a patent owner under 35 U.S.C. 101, et seq., and under their counterparts, under the laws of foreign jurisdictions including, but not limited to, the right to make, have made, use, sell, offer to sell, export, import, and otherwise practice and/or have practiced for Google or a Google Affiliate, any and all claims of the Cascades Patents *in any Google Product.*

Defs.' Ex. 1 at 2 (emphasis added). The license agreement provides that the term "Google Products" includes "products of Google, Motorola and/or Google Affiliates, including all Motorola and Nexus devices, but ... excludes mobile devices manufactured by third parties and running the Android OS except any Nexus-branded devices." *Id*.

As indicated earlier, Cascades's claims of infringement focus on the use of a feature of the Android operating system called the Dalvik JIT Compiler. Cascades has identified no other feature of the defendants' devices or the operating system they use that infringes the '750 patent. The quoted term of the license agreement between Cascades and Google entitles Google to use, sell, or practice the patented method in any "Google Product." It is undisputed that the Android operating system is a Google product; no reasonable fact finder could find otherwise. The same is true of the Dalvik JIT Compiler. Thus the license agreement authorized Google, from that day forward, to convey the Android operating system—including the Dalvik JIT Compiler—without fear of a claim of infringement by Cascades. The agreement's definition of "Google products," however, purported to limit this to certain types of devices, *not* including those made by Samsung and HTC.

The settlement and license agreement between Cascades and Google also included a release and a covenant not to sue. The release provides that Cascades

> releases and discharges Google, Motorola, Google Affiliates, Google

> Partners ... from any and all claims, demands, debts, liabilities, actions, causes of actions or suits of whatever kind of nature, asserted or not asserted, known or unknown, arising out of the claims or matters that have been or could have been asserted by Cascades in the Actions relating to the same facts and circumstances therein, provided that such release and discharge shall not extend to any other defendant in the Actions.

Defs.' Ex. 1 at 4. The covenant not to sue states that Cascades covenants not to sue Google, Motorola, Google Affiliates and/or Google Partners for any infringement or any other violation of the Cascades Patents based upon any licensed activity, permitted pursuant to this Section, related to any Google Product; provided this covenant does not extend to any other defendant in the Patent Suit. *Id*. at 3.

Google provides the Android open source code to all sorts of device manufacturers, including Samsung and HTC. Samsung and HTC make and sell devices that use the Android operating system. As indicated, that operating system embodies the allegedly infringing Dalvik JIT Compiler.

Samsung and HTC contend that by virtue of the license agreement between Cascades and Google, the doctrine of patent exhaustion bars Cascades from pursuing its patent infringement claims against them. They contend that despite the license agreement's limitations regarding its scope, Cascades's grant to Google of a license to convey the Android operating system to others enables those who so acquire the operating system to use it as they wish, without risk of liability for infringement of the '750 patent. Samsung and HTC contend that Cascades's agreement with Google—specifically, the release and/or the covenant not to sue—also bars Cascades from suing them for past infringement.

Discussion

Summary judgment is appropriate "if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). "Patent exhaustion is an affirmative defense to a claim of patent infringement ... and like other issues in which there are no disputed factual questions, may be properly decided on summary judgment." *Keurig, Inc. v. Sturm, Foods, Inc.*, 732 F.3d 1370, 1373 (Fed.Cir.2013).

As the Court has indicated, the doctrine of patent exhaustion "provides that the initial authorized sale of a patented item terminates all patent rights to that item." *Quanta Computer Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 625, 128 S.Ct. 2109, 170 L.Ed.2d 996 (2008). The rationale behind this doctrine is that the sale of a patented device "exhausts the patentee's right to control the purchaser's use of that item ... because the patentee has bargained for and received full value for the goods." *Keurig*, 732 F.3d at 1373. In short, the doctrine of patent exhaustion prevents a patent holder from benefitting multiple times from a single conveyance by claiming that downstream users infringe the patent when they use the item they acquired.

Application of the doctrine of patent exhaustion does not depend on the existence of a sale for consideration. In *LifeScan Scotland, Ltd. v. Shasta Technologies, LLC*, 734 F.3d 1361, 1377 (Fed.Cir.2013), the Federal Circuit concluded that patent exhaustion applied even though plaintiff had given away the items at issue rather than sold them. The court noted that "in the case of an authorized and unconditional transfer of title, the absence of consideration is no barrier to the application of patent exhaustion principles." *Id*. at 1374. Thus the fact that Google gives away the Android operating system is no barrier to application of the doctrine of patent exhaustion.

Patent exhaustion applies to patented methods just as it applies to patented devices. *Quanta*, 553 U.S. at 621, 128 S.Ct. 2109; *United States v. Univis Lens Co.*, 316 U.S. 241, 250–51, 62 S.Ct. 1088, 86 L.Ed. 1408 (1942). A method claim is exhausted by an authorized sale of an item—even an unpatented item—"that substantially embodies the [patented] method if the item (1) has no reasonable noninfringing use and (2) includes all inventive aspects of the claimed method." *Keurig*, 732 F.3d at 1373. And "alternative uses are relevant to the exhaustion inquiry under *Quanta* only if they are both reasonable and intended by the patentee or its authorized licensee." *LifeScan Scotland*, 734 F.3d at 1369 (internal quotation marks omitted).

A. Effect of the limitations in the license agreement

As the Court has indicated, Samsung and HTC argue that via the settlement and license agreement, Cascades gave Google the right to convey the Android operating system (including the Dalvik JIT Compiler) to others, leaving Google free to provide the technology to whomever it chose, including Cascades and HTC. Cascades and HTC argue that they were then free to use the technology in whichever way they chose, free from any claim of infringement of Cascades's patent.

In response, Cascades relies on the principle that "[e]xhaustion is triggered only by a sale authorized by the patent holder." *Quanta*, 553 U.S. at 636, 128 S.Ct. 2109 (citing *Univis*, 316 U.S. at 249, 62 S.Ct. 1088). It argues that the plain language of the license agreement clearly "excludes Android as it is used in Defendants' devices."
Pl.'s Resp. Br. at 5. Cascades argues, in other words, that the conveyance of the Android operating system by Google to Samsung and HTC was not an "authorized" sale that exhausted Cascades's patent rights in the operating system. Specifically, Cascades says, "[e]ven accepting for the sake of argument that Android is a product made by Google, the definition of 'Products' in the Motorola Agreement was modified by the definition of 'Google Product'...." *Id*. at 6. Samsung and HTC maintain that the agreement's exclusion of their products is ineffective, because "Cascades' license to Google creates exhaustion with respect to Defendants' downstream products that incorporate Google's licensed products."
Defs.' Opening Br. at 10.

...

By way of its license agreement with Cascades, Google was authorized to convey to others, including Samsung and HTC, products—including the Android operating system—that practiced Cascades's patents. As a result, Cascades could no longer assert patent rights with respect to those products. As was the case in *Quanta*, use of the restriction in the Cascades/Google license agreement to limit how those who thereafter acquired the Android operating system from Google could use it would in effect allow Cascades to circumvent the patent exhaustion doctrine and reap multiple gains from a single sale.
See *Keurig*, 732 F.3d at 1374. The license authorized Google to convey the

Android operating system to others, and thus the conveyance of the operating system to Samsung and HTC was an authorized sale. The agreement's attempt to carve out downstream users' own mobile devices is ineffective under *Quanta*.

For these reasons, the Court concludes that Samsung and HTC have established that there was an authorized sale of the Android operating system (and the Dalvik JIT Compiler) to them; no reasonable fact-finder could determine otherwise. The Court therefore proceeds to consider whether Samsung and HTC have met the remaining requirements for patent exhaustion.

B. Substantial embodiment and reasonable noninfringing uses

As the Court has indicated, to establish their patent exhaustion defense, Samsung and HTC must show that the Android operating system as it was conveyed to them "substantially embodies" Cascades's patented method in that the operating system "(1) has no reasonable noninfringing use and (2) includes all inventive aspects of the claimed method." *Keurig*, 732 F.3d at 1373.

Cascades maintains that the Android operating system does not substantially embody the '750 patent because it has a reasonable noninfringing use. It argues that "[t]he Kit Kat version of Android [which Samsung purportedly uses in its devices] does not require the use of the JIT compiler and instead allows a user to switch runtimes from the JIT default to ART (Android Run Time)." Pl.'s Resp. Br. at 6. Cascades also says that one can "remove the claimed inventions from the Accused Devices" by" redesign[ing] and modify[ing] the JIT Compiler to use a Kelly-style method of handling precision exceptions." *Id*. at 10. Cascades says these should be considered intended uses, because "the Accused Devices ... would likely still function with unchanged performance...." *Id*. (internal quotation marks omitted).

The question, however, is whether there is a reasonable alternative noninfringing use of the Dalvik JIT Compiler—itself a "Google product" under the Cascades–Google agreement—not whether defendants could avoid liability by enabling its non-use. As defendants argue, this argument is foreclosed by *Quanta*, in which the Court noted that evidence that patented features of certain products could be disabled did not show a reasonable noninfringing use of those features, because "[t]he disabled features would have no real *use*." *Quanta*, 553 U.S. at 632 n.6, 128 S.Ct. 2109.

That aside, Cascades has offered no admissible evidence from which a reasonable finding could be made that a user's ability to enable Android Run Time rather than the Dalvik JIT Compiler constitutes a *reasonable* noninfringing use. One of Cascades's experts reports that "the official Android website warns its KitKat users about the risks of running ART: *Important: Dalvik must remain the default runtime or your risk breaking your Android implementations and third-party applications.*" Defs.' Ex. 21 ¶ 141. The same expert reports that "Android suggests that Dalvik remains as the default runtime against the risk of malfunctioning regarding Android implementations." Id. ¶ 52 (internal quotation marks omitted). It is difficult to see how purported noninfringing uses that run this sort of a risk could be considered reasonable.

For these reasons, the Court concludes that defendants have established that the Cascades–Google license brings the doctrine of patent exhaustion into play; no reasonable fact finder could determine otherwise. Defendants are therefore entitled to summary judgment on infringement from the date of the Cascades–Google agreement forward.

Intel Corp. v. ULSI System Technology, Inc.

Excerpt from *Intel Corp. v. ULSI System Technology, Inc.*, 995 F. 2d 1566 (Fed. Cir. 1993)[40].

BACKGROUND

Intel is the assignee of U.S. Patent Re. 33,629 to John F. Palmer, et al., entitled "Numerical Data Processor."[41] The claims of the '629 patent are directed to the design and operation of a floating-point arithmetic processor capable of mixed precision calculations, mixed mode arithmetic calculations, and rounding operations. Intel has developed a line of math coprocessors covered by the patent, including the Intel 8087, 80287, and 80387 coprocessors.

On January 10, 1983, Intel and the Hewlett-Packard Company (HP) entered into a cross-licensing agreement to "increase their freedom of design by obtaining a license under present and future patents and patent applications owned or controlled by the other." Under that agreement, Intel and HP each granted to the other an "irrevocable, retroactive, nonexclusive, world-wide, royalty-free license" under all patents and patent applications "having an effective filing date prior to January 1, 2000, said license to be effective until the expiration of said patents."

ULSI sells a math coprocessor known as the US83C87 ('C87 coprocessor) which is compatible with the Intel 80386 microprocessor and competes commercially with the Intel 80387 coprocessor. Since September 22, 1989, ULSI has purchased the 'C87 coprocessors from HP under an agreement entered into on August 2, 1988, in which HP agreed to manufacture the coprocessors for ULSI. As is apparently common in such "foundry" arrangements in the semiconductor industry, ULSI supplied HP with proprietary design specifications and HP then manufactured and shipped completed coprocessor chips to ULSI, which resold them as ULSI products.

Intel first became aware of ULSI's 'C87 coprocessor sales on February 4, 1991. On July 29, 1991, Intel brought an action in the U.S. District Court for the District of Oregon alleging infringement of the '629 patent by ULSI's "making and selling, and inducing others to make, sell and use, the 'US83C87' [coprocessor]."

...

DISCUSSION

...

In opposition to the motion, ULSI maintained that HP was permitted under the licensing agreement to act as a foundry for ULSI and that the sale of the coprocessors by HP to ULSI was a "first sale" that extinguished Intel's patent rights with respect to those products. The district court, however, rejected ULSI's argument because it determined that the licensing agreement did not grant HP the "power to sublicense" the '629 patent. On appeal, ULSI claims that the district court erred in concluding that the "patent exhaustion" or "first sale" doctrine did not shield ULSI from Intel's claim of infringement.

The law is well settled that an authorized sale of a patented product places that product beyond the reach of the patent. See *Bloomer v. Millinger*, 68 U.S. (1 Wall.) 340, 350-51, 17 L.Ed. 581 (1864). The patent owner's rights with respect to the product end with its sale, *United States v. Univis Lens Co.*, 316 U.S. 241, 252, 62 S.Ct. 1088, 1094, 86 L.Ed. 1408, 53 USPQ 404, 408 (1942), and a purchaser of such a product may use or resell the product free of the patent, *id*. at 250, 62 S.Ct. at 1093, 53 USPQ at 408. This longstanding principle applies similarly to a sale of a patented product manufactured by a licensee acting within the scope of its license. See *Unidisco, Inc. v. Schattner*, 824 F.2d 965, 968, 3 USPQ2d 1439, 1441 (Fed.Cir.1987), cert. denied, 484 U.S. 1042, 108 S.Ct. 774, 98 L.Ed.2d 860 (1988).

In the instant case, the issue as to whether ULSI is free from infringement liability turns on whether there was a sale of 'C87 coprocessors by HP to ULSI. Intel argues that the "patent exhaustion" doctrine does not apply because HP never sold a product to ULSI. Although Intel claims, as it must, that the 'C87 coprocessor infringes the '629 patent, it maintains that what was actually sold by HP under the foundry agreement was its fabrication services with an ancillary sale of wafers and chemicals. Intel asserts that HP could not have sold a product covered by the '629 patent because HP never had or retained any ownership rights in the 'C87 coprocessors. Thus, according to Intel, no sale ever took place that could support ULSI's "first sale" defense. That argument is incorrect.

Interpretation of a contract is a question of law which we review *de novo*. *See Interstate Gen. Gov't Contractors, Inc. v. Stone*, 980 F.2d 1433, 1434 (Fed.Cir.1992). After reviewing the HP-ULSI contract, we cannot accept Intel's characterization of that agreement as one in which HP merely provided fabrication services to ULSI. That agreement, entitled "Terms and Conditions of Sale," is replete with references to the sale of semiconductor wafers (i.e., chips) that incorporate the 'C87 coprocessor design. For example, the section of the agreement headed "Section 2: Production Fabrication" provided that HP "will sell CMOS34 wafers to" ULSI. That section recites prices for the chips and includes a delivery schedule for shipments of the chips to ULSI. Although the agreement also includes a section delineating the "engineering services" to be provided by HP, the agreement clearly involved the sale of chips, not merely the sale of fabrication services.

Nor, as Intel contends, must the licensed seller of a patented product own intellectual property rights to the product in order for there to be a sale. Intel makes much of the fact that the 'C87 chip was based on a design provided by ULSI. Intel confuses the issue of design origin with the issue of sale. Who designed the chip and whether it embodies inventions other than Intel's have no bearing on the controlling issue whether the 'C87 coprocessors were sold by HP to ULSI and thus extinguished Intel's patent rights relating to those products.

That ULSI, rather than HP, might have owned any existing intellectual property rights to the chips was a matter between ULSI and HP, and did not concern Intel. Intel does not dispute that HP was authorized under the broad terms of the licensing agreement to sell the chips at issue. To the extent that Intel had a patent covering the chips, HP's conceded right to sell the chips deprives Intel of any claim of infringement, as long as HP sold the chips. If it had not granted that license or if the license had been limited in some relevant way, that would be a different case from the one before us. Intel might thereby have retained its right to proceed against those who entered into foundry agreements such as the present one. While Intel may not in retrospect be pleased with the deal that it made permitting HP to make unrestricted sales, it nevertheless granted HP that right in 1983, presumably for consideration it believed to be of value at that time. It cannot now renege on that grant to avoid its consequences.

...

Relatedly, we do not agree with the district court's conclusion that the sale of chips by HP to ULSI was not a "first sale" because HP was not authorized to sublicense ULSI to design products covered by the '629 patent. That HP did not have the authority to sublicense the '629 patent to ULSI is irrelevant. The agreement between HP and ULSI was not a sublicense, but a contract for the manufacture and sale of chips. Thus, HP did not grant a sublicense; it sold a product, albeit one designed by its purchaser. ULSI is immune from infringement, not because it was a sublicensee, which it was not, but because HP was a licensed and therefore legitimate source of the chips. Moreover, ULSI was not required to be sublicensed in order to provide its chip design to HP.

Discussion

1. The *Quanta* court notes that "methods ... may be 'embodied' in a product, the sale of which exhausts patent rights." To what extent does software "embody" possible patent claims, including claims for systems that may involve the use of many different components?
2. The *Lexmark* court draws a distinction between agreements to license alone as opposed to distributions of goods: "Because the patentee is exchanging rights, not goods, it is free to relinquish only a portion of its bundle of patent protections." (*Lexmark* at 1539.) Does the common practice of including the license grant (the "rights") *with* the code itself (the "goods") imply that every distribution of the source code implicates exhaustion?
3. As discussed above, open source has *self-executing* licenses: Anybody who receives a copy of the code automatically is licensed for the use of that code by the applicable upstream licensor. In the context of patent exhaustion, is there a logical distinction between licenses received through a direct download from a licensor, and those that are received via a third party? Does the rule from *General Talking Pictures* ("if a patentee has not given authority for a licensee to make a sale, that sale cannot exhaust the patentee's rights") mean that someone receiving a non-compliant distribution of source code is in a different situation than someone receiving a compliant distribution?
4. On occasion, companies have distributed source code subject to an open source license accompanied by an explicit disclaimer of a patent license. For example *see* the PARC CCNS3Sim License, below.[42] Even assuming that the explicit disclaimer of patent rights prevents the automatic grant of a patent license (explicit or implict), does the distribution of the source code exhaust any applicable patents regardless of the disclaimer?

LICENSE

> file). This BSD License does not make any patent claims and as such, does not act as a patent grant. The purpose of this section is for each contributor to define their intentions with respect to intellectual property.
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> Each contributor to this source code is encouraged to state their patent claims and licensing mechanisms for any contributions made. At the end of this section contributors may each make their own statements. Contributor's claims and grants only apply to the pieces (source code, programs, text, media, etc) that they have contributed directly to this software.
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5. The *Cascades* court identified the code that should be evaluated as having a significant noninfringing use as being the exact code implementing the claimed function (e.g. the JIT in Dalvik), not the project as a whole (e.g. "Android"). Given this analysis, how likely is it that any code that implicates a patent would be found to have a significant noninfringing use?

6. The *Intel* court states that "Who designed the chip and whether it embodies inventions other than Intel's have no bearing on the controlling issue whether the 'C87 coprocessors were sold by HP to ULSI and thus extinguished Intel's patent rights relating to those products." Under this analysis, any authorized sale or distribution of a product will exhaust implicated patents, even if the patent owner is not the source of the product. How might this analysis affect incidental distribution of open source code from third parties by a patent owner?

Notes

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1. The exact scope of what is patentable within a software program is subject to debate, and has changed over time. This discussion, however, assumes that there is some software, released under open source licenses, that is both patent-eligible and implicates one or more valid patent claims. ↩?
2. *See* the text of 35 U.S.C. 271 and discussion *infra*, laying out the scope of the unique rights granted to a patent owner. ↩?
3. *See* the examples of explicit patent grants and discussion *infra*. ↩?
4. *See The Open Source Definition - Annotated*, elements one and seven:
   1. *Free Redistribution*: The license shall not restrict any party from selling or giving away the software as a component of an aggregate software distribution containing programs from several different sources. The license shall not require a royalty or other fee for such sale.
   7. *Distribution of License*: The rights attached to the program must apply to all to whom the program is redistributed without the need for execution of an additional license by those parties. Open Source Initiative, https://opensource.org/osd-annotated (Open Source Definition-Annotated) (CC-BY 4.0) ↩?
5. *Academic Free License, Version 3.0*, Lawrence Rosen, 2002, *available at* [https://opensource.org/licenses/AFL-3.0] (https://opensource.org/licenses/AFL-3.0) (2002). *See also* Rosen, "OSL 3.0: A Better License for Open Source Software," (2007), *available at* http://rosenlaw.com/OSL3.0-explained.htm ↩?
6. *Apache License, Version 2.0*, Apache Foundation, *available at* https://www.apache.org/licenses/LICENSE-2.0 (Jan. 2004). ↩?

7. *Eclipse Public License, Version 2.0*, *available at* [https://opensource.org/licenses/EPL-2.0] (https://opensource.org/licenses/EPL-2.0) (2017). ↩?
8. *GNU General Public License, Version 2.0*, 1991, *available at* [https://opensource.org/licenses/GPL-2.0] (https://opensource.org/licenses/GPL-2.0). ↩?
9. *GNU General Public License, Version 3.0*, *available at* [https://opensource.org/licenses/GPL-3.0] (https://opensource.org/licenses/GPL-3.0) (2007). *See also* Smith, "A Quick Guide to GPLv3," (2007), *available at* https://www.gnu.org/licenses/quick-guide-gplv3.html and Stallman, "Why Upgrade to GPLv3," (2007), *available at* https://www.gnu.org/licenses/rms-why-gplv3.html. ↩?
10. *Mozilla Public License, Version 2.0*, *available at* [https://opensource.org/licenses/MPL-2.0] (https://opensource.org/licenses/MPL-2.0) (2012). ↩?
11. The current list of OIN licensees is maintained at https://www.openinventionnetwork.com/community-of-licensees/. ↩?
12. The official definition of the Linux System is defined by the definition at https://www.openinventionnetwork.com/joining-oin/linux-system/ and ↩?
13. *See* Table 0 at https://www.openinventionnetwork.com/joining-oin/linux-system/linux-system-table/?cat_id=2&type=table) ↩?
14. *See* the most recent list of packages in Table 8 at https://www.openinventionnetwork.com/joining-oin/linux-system/linux-system-table/?cat_id=14&type=table ↩?
15. *OIN License Agreement*, *available at* https://www.openinventionnetwork.com/joining-oin/oin-license-agreement/. ↩?
16. *See, e.g.*, section 10 of the GNU General Public License, version 3: 10. *Automatic Licensing of Downstream Recipients.* Each time you convey a covered work, the recipient automatically receives a license from the original licensors, to run, modify and propagate that work, subject to this License. ↩?
17. *De Forest Radio Telephone Co. v. United States*, 273 U.S. 236, 241 (1927), *available at* https://casetext.com/case/de-forest-co-v-united-states ↩?
18. *De Forest Radio Telephone Co. v. United States*, 273 U.S. 236, 47 S. Ct. 366 (1927), *available at* https://casetext.com/case/de-forest-co-v-united-states ↩?
19. *Wang Labs., Inc. v. Mitsubishi Elecs. Am., Inc.*, 103 F.3d 1571, 1583 (Fed. Cir. 1997), *available at* https://caselaw.findlaw.com/us-federal-circuit/1201198.html ↩?
20. *A. C. Aukerman Co. v. R. L. Chaides Constr. Co.*, 960 F.2d 1020, 1041-1043 (1992), *reversed on other grounds*, *available at* https://law.justia.com/cases/

federal/appellate-courts/F2/960/1020/350110/ ↩?

21. *State Contr. & Eng'g Corp. v. Florida*, 258 F.3d 1329 (2001), *available at* https://caselaw.findlaw.com/us-federal-circuit/1215827.html ↩?
22. *Hilgraeve Corp. v. Symantec Corp.*, 265 F.3d 1336 (2001), *available at* https://caselaw.findlaw.com/us-federal-circuit/1040027.html ↩?
23. *See generally* the section on "Limitations on Implicit Patent Licenses," *supra.* ↩?
24. *The 2-Clause BSD License*, Regents of the University of California, *available at* [https://opensource.org/licenses/BSD-2-Clause] (https://opensource.org/licenses/BSD-2-Clause) (1999). ↩?
25. *The Fair License*, *available at* [https://opensource.org/licenses/Fair] (https://opensource.org/licenses/Fair) (2004). ↩?
26. *Free Public License, Version 1.0*, Rob Landley, *available at* https://opensource.org/licenses/FPL-1.0.0 (2006). Also called the "Zero Clause BSD License." ↩?
27. *The MIT License*, Massachusetts Institute of Technology, *available at* https://opensource.org/licenses/MIT (1988). ↩?
28. *A. Natterman & CIE GmbH v. Bayer Corp.*, 428 F. Supp. 2d 253, E.D.Pa, (2006), *available at* https://www.leagle.com/decision/2006681428fsupp2d2531659 ↩?
29. Some footnotes and cites to the record have been omitted. ↩?
30. *In re Davidson Hydrant Techs., Inc.*, 2012 Bankr. LEXIS 1120, (Bankr. N.D. Ga. 2012), *available at* https://www.leagle.com/decision/inbco20120327726 ↩?
31. *XimpleWare, Inc. v. Versata Software, Inc*, 2014 U.S. Dist. LEXIS 68515 (N.D.Cal 2014), *available at* https://advance.lexis.com/api/permalink/e29c4c06-bb22-4928-a9e6-5eb36f910ca2/?context=1000516 ↩?
32. *In re Spansion, Inc.*, 507 F. App'x 125, 128 (3d Cir. 2012), *available at* http://www.ca3.uscourts.gov/opinarch/113323np.pdf ↩?
33. But note, under the repair and reconstruction doctrine, an authorized sale does not automatically grant the ability for purchasers to "make" the patented object. A new making can occur in the context of extensive reconstruction or repair, or due to the result of self-replicating technology (such as patented plants). *See, e.g. Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476 (1964); *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 365 U.S. 336 (1961); *Morgan Envelope Co. v. Albany Perforated Wrapping Paper Co.*, 152 U.S. 425 (1894); *Cotton-Tie Co. v. Simmons*, 106 U.S. 89 (1882). *See also Bowman v. Monsanto Co.*, 569 U.S. 278 (2013) for a discussion of the exhaustion doctrine relative to plants. However, the right to make can be granted via license; *see* discussion, *infra.* ↩?

34. *Helferich Patent Licensing, Ltd. Liab. Co. v. N.Y. Times Co.*, 778 F.3d 1293, 1311 (Fed. Cir. 2015). ↩?
35. *Quanta Comput., Inc. v. LG Elecs., Inc.*, 553 U.S. 617, 128 S. Ct. 2109 (2008), *available at* https://supreme.justia.com/cases/federal/us/553/617/ ↩?
36. Some footnotes and cites to the record have been omitted. ↩?
37. *Impression Prods. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523, 1526 (2017), *available at* https://caselaw.findlaw.com/us-supreme-court/15-1189.html ↩?
38. *LifeScan Scot., Ltd. v. Shasta Techs., LLC.*, 734 F.3d 1361, 1374-1375 (Fed. Cir. 2013), *available at* https://www.leagle.com/decision/infco20131104107 ↩?
39. *Cascades Computer Innovation, LLC v. Samsung Elecs. Co.*, 70 F. Supp. 3d 863 (N.D.Ill, 2014), *available at* https://www.casemine.com/judgement/us/5914fa77add7b049349a8497 ↩?
40. *Intel Corp. v. ULSI System Technology, Inc.*, 995 F. 2d 1566 (Fed. Cir. 1993), *available at* https://scholar.google.com/scholar_case?case=2822821090682871319 ↩?
41. Some footnotes and cites to the record have been omitted. ↩?
42. CCNx Module for NS3 License text, *available at* https://github.com/PARC/ccns3Sim. ↩?