Patents in Open Source

[TOC]

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:

- Explicit licenses: Express language in open source licenses granting patent licenses;
- 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

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:

- 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

 under Patent Claims infringed by Covered Software in the absence of its
 Contributions.

Discussion

- 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: The Open Invention Network Agreement

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

"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 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

implied patent license.

De Forest Radio Telephone Co. v. United States

United States Supreme Court (1927)[DeForestHeadnote]

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

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

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.

and 808.

Judgment affirmed.

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

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

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.

$[\ldots]$

...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© (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

The findings that Wang bestowed "a right to use the SIMM invention" and that

patents.

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^[19]

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

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

... 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

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 [21]

[...]

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,^[22] 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

Statutory Law

an express patent license.

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.

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,

- 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.

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

The licenses below are some of the shortest and most permissive open source

licenses available. As you read the licenses below, note any use of language

that may implicate the reserved rights under patent law (to make, use, offer

to sell, sell, and import).

The BSD License

The 2-Clause BSD License[^BSD4], 1999.

Note: The "original" BSD License had four clauses. The 4-clause version was superseded by 3-Clause and 2-Clause BSD licenses, each removing

one of

the original conditions. The preamble has remained the same in all versions of the license.

Copyright © \

- 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.
- 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) \leftarrow
- 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-

- 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/deforest-co-v-united-states ←
- 18. 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 ↔
- 19. 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/ ↔
- 20. State Contr. & Eng'g Corp. v. Florida, 258 F.3d 1329 (2001), available at https://caselaw.findlaw.com/us-federal-circuit/1215827.html ←
- 21. Hilgraeve Corp. v. Symantec Corp., 265 F.3d 1336 (2001), available at https://caselaw.findlaw.com/us-federal-circuit/1040027.html ←

22. See generally the section on "Limitations on Implicit Patent Licenses," supra. \hookrightarrow