JACOBSEN V. KATZER: THE FEDERAL CIRCUIT WEIGHS IN ON THE ENFORCEABILITY OF FREE AND OPEN SOURCE SOFTWARE LICENSES

By Hersh R. Reddy

"Open Source" and "Free Software" are terms that elicit strong opinions from both the software industry and the legal profession. Proponents of open source attribute its openness and collaborative workflow for the creation of more robust software packages at a low overall cost to society.¹ On the other hand, some extreme opponents of open source claim that it usurps the constitutional provisions for the promotion of intellectual property by the use of "viral" licenses that forcibly open up proprietary systems.²

Many people (especially those who politically distrust free markets) would expect a culture of self-directed egoists to be fragmented, territorial, wasteful, secretive, and hostile. But this expectation is clearly falsified by (to give just one example) the stunning variety, quality, and depth of Linux documentation. It is a hallowed given that programmers *hate* documenting; how is it, then, that Linux hackers generate so much documentation? Evidently Linux's free market in egoboo works better to produce virtuous, other-directed behavior than the massively-funded documentation shops of commercial software producers.

Id. at http://www.catb.org/~esr/writings/cathedral-bazaar/cathedral-bazaar/ar01s11.html.

However, there is a group of software developers in the United States, and other parts of the world, that do not believe in the approach to copyright protection mandated by Congress. In the past 20 years, the Free Software Foundation and others in the Open Source software movement have set out to actively and intentionally undermine the U.S. and European systems of copyrights and patents. Leaders of the FSF have spent great efforts, written numerous articles and sometimes enforced the provisions of the GPL as part of a deeply held belief in the need to undermine or eliminate software patent and copyright laws.

Id.

^{© 2009} Hersh R. Reddy. The author hereby permits the reproduction of this Note subject to the Creative Commons Attribution 3.0 License, the full terms of which can be accessed at http://creativecommons.org/licenses/by/3.0/legalcode, and provided that the following notice be preserved: "Originally published in the Berkeley Technology Law Journal 24:1 (2009)."

^{1.} See, e.g., ERIC STEVEN RAYMOND, THE CATHEDRAL AND THE BAZAAR (3d ed. 2002), http://www.catb.org/~esr/writings/cathedral-bazaar/cathedral-bazaar/.

^{2.} See Letter from Dan McBride, President & CEO, The SCO Group, Inc., Open Letter on Copyrights (Dec. 4, 2003), http://www.sco.com/copyright/

The Federal Circuit acknowledged the former view in Jacobsen v. Katzer.³ In Jacobsen an open source licensor sued an alleged infringer who had appropriated material from the open source project without adhering to the terms of the public license.⁴ In holding for the defendant and alleged infringer, the District Court interpreted the specific open source license at issue (known as the Artistic License) as granting a right to use the copyrighted material, encumbered only by contractual covenants, but not preconditions.⁵ The Federal Circuit reversed and held that the license had several preconditions to its grant.⁶ In doing so, the Federal Circuit explicitly acknowledged the value that open source projects bring to society⁷ and reaffirmed the copyright holder's freedom to license his property on his own terms.⁸ The holding also confirmed the enforceability of open source licenses under copyright law. Ultimately, however, the scope of the Jacobsen decision may be limited by the emphasis placed by the court on contract construction. Since contract law varies from jurisdiction to jurisdiction, Jacobsen v. Katzer cannot stand for the universal enforceability of the Artistic License, let alone open source licenses in general.

This Note examines the Federal Circuit's *Jacobsen* decision. Part I provides a brief background on open source software and explains the important role copyright law plays in protecting the incentives that drive the creation of open source. Part II explores the legal background on the issues that the Federal Circuit relied on in its decision, including: (1) the difference between a bare license and a contract, (2) the implications of treating an open source license as a contract, (3) the remedies that are typically pursued by open source licensors, and (4) why licensors prefer copyright remedies to contract remedies. Part III concludes with a discussion of the implications of this decision and why it may be less important outside of California than many open source advocates hope.

8. Id. at 1381-82.

^{3.} Jacobsen v. Katzer, 535 F.3d 1373, 1378-79 (Fed. Cir. 2008).

^{4.} Id. at 1376.

^{5.} Jacobsen v. Katzer, No. C 06-01905 JSW, 2007 WL 2358628, at *6-7 (N.D. Cal. Aug. 17, 2007).

^{6.} Jacobsen, 535 F.3d at 1381-82.

^{7.} *Id.* at 1378 (noting the 1,800 MIT courses available at OpenCourseWare, the 100,000,000 works licensed under Creative Commons licenses, the GNU/Linux operating system, Firefox web browser, PERL programming language, Apache web server, and the 9,000,000 articles of Wikipedia).

I. BACKGROUND

The appeal in *Jacobsen v. Katzer* garnered a great deal of attention, despite being a fairly straightforward copyright license dispute, because the specific license at issue in the case was not a standard copyright agreement—it was an open source license known as the Artistic License. *Jacobsen* represents the first time a U.S. court has opined on the enforceability of an open source license.

This Part provides a brief background on open source, which gives necessary context to the case. Section I.A is a description of open source and how it provides an alternative software development model to proprietary software. Section I.B describes some of the motivations that drive open source developers and examines various incentives, which play an important part in making open source a viable software development model. This lays a background for section I.C, which explains why copyright protection is necessary to protect the incentives and motivations that drive open source development.

A. Open Source

"Open Source" and "Free Software" have precise definitions promulgated by open source advocacy groups,⁹ but perhaps their most defining

- 1. The freedom to run the program, for any purpose.
- 2. The freedom to study how the program works, and adapt it to your needs. Access to the source code is a precondition for this.
- 3. The freedom to redistribute copies so you can help your neighbor.
- 4. The freedom to improve the program, and release your improvements to the public, so that the whole community benefits. Access to the source code is a precondition for this.

^{9.} Though most people are quite sure what they mean when they call something "Open Source" or "Free Software," the official definitions are sometimes a surprise. The terms "Free Software" and "Open Source Software" are often used interchangeably, but they have slightly different meanings. GNU, one of the better known Free Software groups, famous for the GNU/Linux operating system, defines Free Software as software which provides users with four freedoms:

GNU.org, The Free Software Definition, http://www.gnu.org/philosophy/free-sw.html (last visited Apr. 14, 2009).

The Open Source Initiative, a public interest organization, maintains the Open Source Definition, which details ten criteria that must be met before a software package can be called "Open Source." Many of the criteria overlap with the four freedoms listed by the Free Software foundation, but there are at least two nontrivial departures. First, the Open Source Definition requires that any Open Source license "must not place restrictions on other software that is distributed along with the licensed software. For example, the license must not insist that all other programs distributed on the same medium must be open-source software." And second, the definition requires that "[t]he license must allow modifications and derived works, and must allow them to be distributed under the same

characteristic is that they make source code available to the general public.¹⁰ Source code is the human-readable version of software, which is used to construct software applications.¹¹ Most proprietary software packages provide only a machine-readable "executable" to their users, while the human-readable source is kept secret to prevent duplication by wouldbe competitors.¹² The executable is sufficient to run the application and take advantage of its features, but the lack of source code prevents users from fixing bugs or making modifications on their own—or at least it prevents the implementation of these changes in a practical or efficient way. The freedom to access the source code of one's software applications gives users the ability to fix or customize their own software.¹³

At first glance this may seem like a freedom that is not terribly important, akin perhaps to the freedom that one has to modify one's automobile engine—a freedom that even when given to the public, is rarely exercised. However, software source freedom is fundamentally different from other freedoms to tinker.

Tinkering with and modifying software is a cumulative activity across the entire community of users. Once an improvement is made, as long as everyone has access to the software source code, anyone can incorporate the change. These changes, when aggregated across a large population of developers—though they may be of varying skill levels—can lead to a significant boost in the quality and stability of open source software applications.¹⁴

terms as the license of the original software." Open Source Initiative, The Open Source Definition, http://www.opensource.org/docs/osd (last visited Apr. 14, 2009). But it should be noted that GNU's own GPL license protects downstream rights by using Copyleft, in effect fulfilling one of the additional criteria of Open Source software. *See* GNU Operating System, What is Copyleft?, http://www.gnu.org/copyleft/copyleft.html (last visited Apr. 14, 2009).

^{10.} *See, e.g., supra* note 9 ("4. The freedom to improve the program, and release your improvements to the public, so that the whole community benefits. Access to the source code is a precondition for this.").

^{11.} For a brief overview of software code, see generally The Linux Information Project, Source Code Definition, http://www.linfo.org/source_code.html (last visited Apr. 14, 2009).

^{12.} *Id.*

^{13.} *Id*.

^{14.} See RAYMOND, supra note 1, at Release Early Release Often ("More users find more bugs because adding more users adds more different ways of stressing the program. This effect is amplified when the users are co-developers. Each one approaches the task of bug characterization with a slightly different perceptual set and analytical toolkit, a different angle on the problem.").

Open source has been credited by some software engineers with providing a more efficient model of software development than the closed and proprietary model preferred by commercial software companies.¹⁵ Open source is said to do this by increasing the effectiveness of the debugging and development model by empowering users with source code information that they would not have under a proprietary model.¹⁶ With source code in hand, users are able to communicate bug reports to the core development team with a level of detail that is impossible for users of proprietary software. Armed with this detailed information from a wide community of users, open source developers are more efficiently able to hone in on the flaws in their software. Their proprietary software counterparts are limited by the ambiguity in their users' bug reports, which results from the lack of transparency in a proprietary system.

The effectiveness of open source development methods—as an alternative to the conventional proprietary method of developing software—is illustrated by the contributions made by open source projects to our information economy. Although proprietary software will continue to play a vital role in our economy, open source software has made major inroads into many markets. For example, GNU/Linux, an open source operating system, was estimated to have 12.7% of the server market share in 2007¹⁷—an industry worth nearly fourteen billion dollars in the second

We get tremendous efficiency in our development. The size of our research and development team is very small compared to our competitors'. We use a lot of open source tools, we interact with our community, and have people who are long-time open source users who work here. We use it consistently; it helps reduce costs and achieve a lot of economy. I can't imagine how expensive it would have been to build this company without the open source world. We wouldn't have had the community hungry for the solution when it finally came to market.

Id.

^{15.} See Tina Gasperson, Award-Winning Snort Creator Roesch Shares Secrets of His Success, LINUX.COM, Nov. 20, 2007, http://www.linux.com/feature/121377.

^{16.} See RAYMOND, supra note 1, at The Importance of Having Users. Another strength of the Unix tradition, one that Linux pushes to a happy extreme, is that a lot of users are hackers too. Because source code is available, they can be *effective* hackers. This can be tremendously useful for shortening debugging time. Given a bit of encouragement, your users will diagnose problems, suggest fixes, and help improve the code far more quickly than you could unaided.

Id.

^{17.} Linux-Watch.com, Linux Server Market Share Keeps Growing, May 29, 2007, http://www.linux-watch.com/news/NS5369154346.html (relying on market research from IDC, WORLDWIDE QUARTERLY SERVER TRACKER (2007), available at www. idctracker.com).

quarter of 2008 alone.¹⁸ Apache, an open source web server, was estimated to run over 45% of active websites on the Internet in August 2008.¹⁹ MySQL, an open source database application, has 25% market share among software developers.²⁰ Sourceforge.net, an archive for open source projects, now lists literally thousands of open source projects under every category from Networking to Games.²¹ Thus, there is a substantial public interest in ensuring that the incentives and structure that enable open source to function are protected.

B. Incentives to Create Open Source Software

Open source software developers, although not always compensated by monetary rewards, are nonetheless often motivated by self-interest. The rewards and incentives that participation in an open source project provides to developers can be critical to the success of the project.

Open source developers, while not technically prevented from charging for their software, are limited by the very nature of open source from charging the same rates that proprietary software companies do. Because the source code of an open source project is freely available, modifiable, and distributable, users have little incentive to pay a lot for it. If a developer charges a price a user is unwilling to pay, the user can simply download the source code and build the project herself, or obtain it from a third party for less—sometimes even for free. In order to compensate for this, some enterprises have integrated open source software into business models that generate profit by selling ancillary services and support, rather than by software sales.²²

^{18.} Press Release, IDC, Second Quarter Server Market Continues to Accelerate, Future Growth Remains Uncertain, According to IDC (Aug. 27, 2008), http://www.idc.com/getdoc.jsp?containerId=prUS21399008.

^{19.} Netcraft.com, August 2008 Web Server Survey (Aug. 29, 2008), http://news. netcraft.com/archives/2008/08/29/august_2008_web_server_survey.html.

^{20.} MySQL.com, Market Share, http://www.mysql.com/why-mysql/marketshare/ (last visited Feb. 8, 2009).

^{21.} Sourceforge.net, Find Software, http://sourceforge.net/ (last visited Feb. 8, 2009).

^{22.} Open-Source Business: Open, But Not as Usual, THE ECONOMIST, March 18, 2006, at 73 ("[MySQL], founded in 1995, has a hybrid business model. It gives away its software under an open-source licence. At the same time, it sells its software along with maintenance and support contracts."); see also Posting of Matt Asay to Open Sources, Red Hat: The Mother of All Business Models, http://weblog.infoworld.com/open resource/archives/2006/01/red_hat_the_mot.html (Jan. 15, 2006 05:49 EST) (discussing the Red Hat business model where open source software is used to drive the sales of profitable services).

The lack of direct software sales sometimes creates the misunderstanding that open source software does away with self-interest altogether.²³ It is more accurate to say that open source software satisfies developer selfinterest in ways not strictly limited to compensation derived from software sales. Instead, open source developers are motivated by alternative reasons,²⁴ including enhanced professional status, personal beliefs that source code should be open, reputation within the open source community, and dislike of proprietary software.²⁵ In addition, a significant portion of open source developers are paid by private parties to contribute to specific projects.²⁶ Even without direct monetary rewards, self-interest can play a part in motivating many open source contributors since the prospect of enhanced reputation and professional status can translate into increased monetary compensation in the market.²⁷

Because these incentives can be so important to the success of an open source project, and because so many of them are tied to the enforcement of the underlying license protecting the code, judicial protection of the requirements of an open source license can be critical. For example, provisions that require author attribution are essential in preserving the author information, which allows the developer to gain reputational benefits from her contributions to the open source project. Provisions that require disclosure of source modifications allow open source developers to benefit from the bug fixes and modifications from other developers in their community, thus giving them the benefit of the labor and ingenuity of a wider population of contributors.

C. Copyright and Open Source

Since developers are making source code widely available either for free or for a nominal charge, it may seem like open source software requires no copyright protection. However, making source code freely avail-

^{23.} See Richard A. Epstein, *Why Open Source is Unsustainable*, FINANCIAL TIMES, Oct. 21, 2004, *available at* http://www.ft.com/cms/s/2/78d9812a-2386-11d9-aee5-00000e2511c8.html (comparing open source software groups to idealistic workers' communes, and predicting their failure for the same reason those idealistic groups fail).

^{24.} See generally Karim R. Lakhani & Robert G. Wolf, Why Hackers Do What They Do: Understanding Motivation Effort in Free/Open Source Software Projects (MIT Sloan Sch. of Mgmt., Working Paper No. 4425-03, 2003). The study conducted by the MIT Sloan School of Management surveyed 687 software developers from 287 different Open Source projects to compile a picture of what motivates Open Source contributors. *Id.*

^{25.} *Id.* at 23, T.6.

^{26.} *Id.* at 9.

^{27.} See Josh Lerner & Jean Tirole, *The Simple Economics of Open Source* 14-15 (Harvard Business Sch. & NBER, Working Paper No. 00-059, 2000), *available at* http://www.hbs.edu/research/facpubs/workingpapers/papers2/9900/00-059.pdf.

able to the public is not the same as dedicating the source code to the public domain. Putting source code in the public domain can create situations that may be at odds with the open source development model by allowing proprietary software developers to co-opt the source code. Once integrated into a proprietary package, author information could be removed from the open source software and future improvements could be withheld from the public.

Source code that is dedicated to the public domain is available for anyone to use and modify. However, if a third party changes the code with copyrightable modifications, thus creating a copyrightable derivative work, there is no obligation to make this derivative work available to the public as open source—or even to the developer of the original material herself. Nor is there any obligation to give attribution to the authors of the original work. In this way public software can be appropriated into proprietary and closed packages.²⁸ The conversion of downstream work, like bug fixes, into proprietary software reduces many of the benefits of open source—such as cumulative software improvement and user transparency described supra in Section I.A.

Copyright is important in that it gives software developers an exclusive property right to their creation. Once given this right, developers are then free to give the public a copyright license to use the material, subject to conditions that enforce open source values like attribution and source availability. This use of copyright law to keep derivative works available to the public is often called copyleft.²⁹

II. LEGAL BACKGROUND

This section discusses the differences between a bare copyright license and a contractual copyright license, and the implications of treating an open source license as a contract. It also discusses the remedies available to a licensor when an open source contract is breached, and the difference between contract law remedies and copyright law remedies.

A. License Versus Contract

Treating an open source agreement as a contract rather than as a license has repercussions on both its enforceability and the applicable remedies for breach.³⁰ A license is defined as a "permission, [usually] re-

^{28.} See Dr. José J. González de Alaiza Cardona, Open Source, Free Software, and Contractual Issues, 15 TEX. INTELL. PROP. L.J. 157, 173 (2007).

^{29.} See GNU Operating System, supra note 9.

^{30.} See Cardona, supra note 28, at 186-88 (noting the differences between copyright and contract, especially the uniformity that is present in copyright law and the require-

vocable, to commit some act that would otherwise be unlawful."³¹ A contract on the other hand is "[a]n agreement between two or more parties creating obligations that are enforceable or otherwise recognizable at law."³²

The mutual obligations of a contract require formalities during the formation of the agreement that are not required for a license.³³ There must be a bargain in which an offer for exchange is made and mutually accepted,³⁴ and there must be some consideration or valuable exchange between the parties.³⁵

Copyright licenses are not always contracts. A license is merely the unilateral permission to do something.³⁶ For instance, when a property owner grants someone permission to enter his private property, that permission is a license, not a contract. In the case of a copyright license, contract law does not enter the picture unless some obligations are imposed on the licensee beyond the exclusive rights granted by copyright law.³⁷ Once obligations are imposed on a licensee, courts tend to analyze the copyright license as a contractual instrument.³⁸

31. BLACK'S LAW DICTIONARY 938 (8th ed. 2004).

32. Id. at 341.

33. See Hietanen, supra note 30, at 8-9.

34. RESTATEMENT (SECOND) OF CONTRACTS § 17 (1981) ("[T]he formation of a contract requires a bargain in which there is a manifestation of mutual assent to the exchange and a consideration.").

35. Id. § 71.

36. BLACK'S LAW DICTIONARY, *supra* note 31; Diane Rowland & Andrew Campbell, *Supply of Software: Copyright and Contract Issues*, 10 INT'L J.L. & INFO. TECH. 23, 26 (2002).

37. See Lulirama Ltd.. v. Axcess Broad. Servs., Inc., 128 F.3d 872, 882 (5th Cir. 1997) ("a nonexclusive license supported by consideration is a contract"); I.A.E., Inc. v. Shaver, 74 F.3d 768, 772 (7th Cir. 1996); Avtec Sys., Inc. v. Peiffer, 21 F.3d 568, 574 n.12 (4th Cir. 1994); Keane Dealer Servs., Inc. v. Harts, 968 F. Supp. 944, 947 (S.D.N.Y. 1997); Johnson v. Jones, 885 F. Supp. 1008, 1012 n.6 (E.D. Mich. 1995); see also Rowland, supra note 36, at 26 ("A non-contractual copyright licence is a licence to do, or authorise the doing of, any of the acts restricted by copyright. Effectively then, the term 'licence' in the copyright context can be regarded as interchangeable with 'consent' or 'permission.''') (citations omitted).

38. See Lulirama, 128 F.3d at 882.

ment of privity between the parties in contract); see also Herkko A. Hietanen, A License or a Contract, Analyzing the Nature of Creative Commons Licenses, 76 NORDISKT IM-MATERIELLT RÄTTSSKYDD (NORDIC INTELLECTUAL PROPERTY LAW REVIEW) at 17 (forthcoming 2007), available at http://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID-1029366_code896196.pdf?abstractid=1029366&mirid=1 (noting that copyright law criminalizes infringement in many countries, giving licensors the option of sharing some of their litigation costs with the state when pursuing infringers).

B. Enforceability of Open Source Licenses as Contracts

Open source licenses are a special type of copyright license that generally grant the licensee a nonexclusive right to use the copyrighted material, subject to specific obligations.³⁹ These obligations may include giving proper attribution to the original authors, refraining from distributing modified versions of the copyrighted material, making the modified version's source code available to the public, or any combination of these requirements.⁴⁰

The manner by which users obtain open source software presents some unique circumstances not usually seen in other software transactions. Developers typically download open source software from online archives such as SourceForge.net.⁴¹ These archives provide the developer with not only the source code for the software in question, but also details about who the author or authors are, what license applies, and what the development history of the package is.⁴² The software source code itself is most often downloaded from the online archive in a compressed file format, which contains all the necessary source code and documentation needed for a developer to build the software package.⁴³ When the compressed file is decompressed onto the developer's hard drive it creates not only the source code and documentation files, but also typically a license file that contains the terms of the open source license which applies to that particu-

^{39.} See generally Open Source Initiative, Open Source Initiative OSI—The Artistic License: Licensing, Oct. 31, 2006, http://www.opensource.org/licenses/artistic-license-1.0.php [hereinafter The Artistic License]; GNU Operating System, GNU General Public License, http://www.gnu.org/licenses/gpl-3.0.html (last updated Jan. 18, 2009) [hereinafter GPL 3.0].

^{40.} *See* The Artistic License, *supra* note 39, ¶¶ 1, 3-4; GPL 3.0, *supra* note 39, ¶¶ 4-6.

^{41.} *See, e.g.*, SourceForge.net: Open Source Software, http://sourceforge.net/ (last updated Feb., 2009). SourceForge.net is an online source code repository, which provides a simple centralized interface where multiple developers can work simultaneously on one project. Similar sites include Tigris.org, RubyForge (http://www.rubyforge.org), and GNU Savannah (http://savannah.gnu.org).

^{42.} See, e.g., JMRI Model Railroad Interface—Details, http://sourceforge.net/projects/jmri/ (last updated Jan. 13, 2009).

^{43.} For example, see the download and decompress production release files of the JMRI project v. 2.4A. *Id.* Upon decompressing the archive observe that the directory contains sub-directories such as "lib" which contain the project source files, as well as a "help" directory. The "help" directory contains documentation pertaining to the project, which guides developers who seek to build the project themselves as opposed to using the premade executables. The file called "COPYING" is also included in every directory. This file contains the terms of the license that applies to this particular open source project.

lar package. A generally suggested licensing practice for open source is to place a message at the top of the source code files drawing the developer's attention to the existence of the license file.⁴⁴ Through this mechanism of a license file and a message in each source file, the authors of open source software provide notice to their developers about the existence of a copyright license, which governs usage of their software.⁴⁵

Despite this notice, there are still doubts as to whether the standard contractual requirements of offer, acceptance, and consideration have been met. Some scholars have argued that a developer who uses open source code has entered into a valid contract, despite the fact that the licensee's acceptance and consideration are not overtly present.⁴⁶ Consideration on the part of the licensor is obvious—the source code is clearly valuable. On the other hand, consideration on the licensee's side is less clear; some scholars have argued that adherence to the open source license itself is sufficient consideration for the contract.⁴⁷

The closest analogy to open source licensing has been "shrinkwrap" licensing, used commonly in the commercial software industry.⁴⁸ In the seminal case *ProCD*, *Inc. v. Zeidenberg*, the 7th Circuit ruled that the license notice on the outside of a software package, the actual license contained within, and the right to return the software if the user decided not to accept the terms constituted an offer and acceptance for the purposes of contract, and thus created a valid and enforceable agreement.⁴⁹ This mechanism of software licensing has been called "shrinkwrap licensing."⁵⁰ Although

^{44.} *See* GNU Operating System, How To Use GNU Licenses For Your Own Software, http://www.gnu.org/licenses/gpl-howto.html (last updated Oct. 30, 2008) (suggesting licensing practices recommended by the Free Software Foundation).

^{45.} *Id*.

^{46.} See Cardona, supra note 28, at 193-94 ("[I]t seems more reasonable to understand that the licensee's consideration is his promise to abide by the copyleft clause."); Jason B. Wacha, *Taking the Case: Is the GPL Enforceable*, 21 SANTA CLARA COMPUTER & HIGH TECH. L.J. 451, 475 (2005) ("The reliance of each party on the promise of the other constitutes the consideration. The licensee's promise to abide by the GPL induces the licensor to make the offer. The licensor's grant of otherwise restricted rights induces the licensee to make her promise.").

^{47.} See Wacha, supra note 46, at 474-75 ("The licensee, as consideration, agrees to keep all copyright notices intact, to insert certain required notices, and to redistribute code only under certain conditions."); In re Owen, 303 S.E.2d 351, 353 (N.C. Ct. App. 1983) ("[C]onsideration exists when the promissee, in exchange for the promise, does anything he is not legally bound to do, or refrains from doing anything he has a right to do").

^{48.} See Wacha, supra note 46, at 488.

^{49.} ProCD, Inc. v. Zeidenberg, 86 F.3d 1447, 1451 (7th Cir. 1996).

^{50.} Cardona, *supra* note 28, at 195-96.

court decisions have not been completely uniform in evaluating the enforceability of shrinkwrap licenses, there have been enough decisions upholding these licenses to support a strong presumption of validity.⁵¹ These courts generally require that the licensor provide proper notice and allow the prospective licensee to turn down the agreement if the terms are unfavorable.⁵²

Similar to shrinkwrap licenses, open source licenses are typically made available as text files that accompany the source code. In addition, attention is usually called to the license text file within the source code files themselves. Although this method of including a license file and notice of that file in the source files is closely analogous to the shrinkwrap licensing scheme, it had not been directly tested in court before *Jacobsen v. Katzer*.

C. Infringement of a Copyright Licensing Contract

In a copyright infringement action that includes a contract dispute, establishing the existence and validity of a licensing agreement is only the first step. Even if a valid contract exists, infringement can be found if the licensee acted outside the bounds of her grant.⁵³ Courts must scrutinize the copyright agreement in question to discern not only the scope of the rights granted by the licensor, but also what elements of the agreement are preconditions to the copyright license and what elements are merely contractual promises or covenants. If there are preconditions to the copyright license that have not been met by the would-be licensee, there is no license

Id.

^{51.} See Wacha, supra note 46, at 489.

The trend in U.S. courts is to uphold shrinkwrap and clickwrap agreements. Thus, the courts have given a legal stamp of approval to one of the fastest growing methods of software distribution: via the Internet. In fact, U.S. courts have not only expressly upheld both shrinkwrap and clickwrap agreements, they have gone as far as to actually affirmatively recommend the use of a clickwrap license.

^{52.} Cardona, *supra* note 28, at 198-99. An example of proper notice would be a label on the outside of packaging which draws consumers' attention to the existence of a printed license enclosed within.

^{53.} See S.O.S., Inc. v. Payday, Inc., 886 F.2d 1081, 1087 (9th Cir. 1989) ("A licensee infringes the owner's copyright if its use exceeds the scope of its license.") (citing Gilliam v. Am. Broad. Cos., 538 F.2d 14, 20 (2d Cir. 1976)); MELVILLE NIMMER & DA-VID NIMMER, NIMMER ON COPYRIGHT, 3-10, § 10.15 (2008) ("[W]hen a license is limited in scope, exploitation of the copyrighted work outside the specified limits constitutes infringement.").

and infringement will be found even if the remainder of the agreement describes a broad grant of rights.⁵⁴

On the other hand, if the licensor grants a license without preconditions, or if those preconditions are met, a violation of other terms in the copyright licensing agreement will not give the licensor the right to bring a copyright infringement action against the licensee.⁵⁵ The licensor may still have a cause for action under contract law for violation of contractual covenants, but her license grant will function as the equivalent of a promise not to sue for copyright infringement.⁵⁶

In interpreting a copyright license, courts rely on state law to guide contractual construction.⁵⁷ However, the application of state law is limited when it leads to an outcome that is contrary to the purposes of federal copyright law.⁵⁸ For instance, courts have set aside the California rule of construction that interprets the contract against the drafter when the drafter is a copyright holder who did not explicitly retain rights.⁵⁹ Interpreting a contract to grant rights simply because those rights were not explicitly retained would be contrary to federal copyright law, which presumes that copyright licenses prohibit any use not explicitly authorized.⁶⁰

Id. (citations omitted).

^{54.} See Graham v. James, 144 F.3d 229, 237 (2d Cir. 1998) (""[I]f the nature of a licensee's violation consists of a failure to satisfy a condition to the license . . . , it follows that the rights dependent upon satisfaction of such condition have not been effectively licensed, and therefore any use by the licensee is without authority from the licensor and may therefore, constitute an infringement of copyright."") (citations omitted).

^{55.} *See* Fantastic Fakes, Inc. v. Pickwick Int'l, Inc., 661 F.2d 479, 483-84 (5th Cir. Unit B Nov. 1981) ("A mere breach of covenant may support a claim of damages for breach of contract but will not disturb the remaining rights and obligations under the license including the authority to use copyrighted material.").

^{56.} See Jacob Maxwell, Inc. v. Veeck, 110 F.3d 749, 753 (11th Cir. 1997) (stating that implicit in a nonexclusive license is the promise not to sue for copyright infringement).

^{57.} *See* Fantastic Fakes, 661 F.2d at 483 (ruling that state law is not displaced merely because a contract relates to intellectual property).

^{58.} See Sears, Roebuck & Co. v. Stiffel Co., 376 U.S. 225, 229 (1964). Sears states: [Federal patent and copyright laws,] like other laws of the United States enacted pursuant to constitutional authority, are the supreme law of the land. When state law touches upon the area of these federal statutes, it is "familiar doctrine" that the federal policy "may not be set at naught, or its benefits denied" by the state law.

^{59.} S.O.S., Inc. v. Payday, Inc., 886 F.2d 1081, 1088 (9th Cir. 1989).

^{60.} *Id.* at 1088 ("The district court applied the California rule that the contract should be interpreted against the drafter, thereby deeming S.O.S. to have granted to Payday any right which it did not expressly retain. This result is contrary to federal copyright

D. Remedies for Breach of an Open Source License

As described in Section II.C, a failure to comply with a precondition to the license gives rise to copyright infringement, while a failure to perform a covenant of the contract may only give rise to breach of contract. Whether a particular requirement of the license is a precondition or covenant can have great bearing on the outcome of a case because of the differing remedies available under copyright law versus under contract law. Naturally, as a legal instrument, there may be some ambiguities in the interpretation of a copyright license, which leave unclear whether specific provisions are preconditions to the license or merely contractual promises.

Depending on the nature of the copyright license and the circumstances of the infringement, a copyright holder may find adequate remedy in either contract or copyright law. However, in the case of open source licenses, there are several reasons why the licensor may find contract remedies insufficient. Perhaps the most compelling reason from a developer's point of view is simply that copyright law presents a level of international and national harmonization that contract law lacks. International treaties such as the Berne Convention have brought a degree of international homogenization to copyright law that contract law has yet to match.⁶¹ Even within the United States, contract law varies considerably from state to state. In theory, the uniformity in copyright law gives open source developers a more predictable set of rules on which to rely, which in turn gives them a more predictable set of remedies for breach.

In addition, contract law's preference for granting monetary damages in the case of breach creates difficulties for open source developers. As mentioned supra, open source developers rarely sell their software directly, but instead hope for some non-monetary advantage from distributing their software.⁶² Regardless of whether the goal is to foster a developer community or to sell other commercial ancillary services, the nonmonetary nature of open source transactions makes it difficult to quantify the monetary damages associated with a particular breach of an open source license. Injunctions and specific performance—such as courtordered release of source code—are more difficult to obtain under contract law.⁶³ However, it is these latter remedies that are usually of greater inter-

63. MURRAY ON CONTRACTS, 1-9, § 127 (2001) (noting that there are many cases where an injunction or specific performance was not granted because there was an ade-

policy: copyright licenses are assumed to prohibit any use not authorized.") (citations omitted).

^{61.} See Berne Convention Implementation Act, Pub. L. No. 100-568, 102 Stat. 2853-2861 (1988).

^{62.} See supra Section I.I.B.

est to an open source developer given the difficulty they have estimating their money damages for a particular breach.

Because of the ambiguity in calculating money damages in an open source license infringement, copyright law gives licensors at least two advantages that contract law does not. First, copyright law has provision for statutory damages that can amount to up to \$30,000 per infringement, or up to \$150,000 in the case of willful infringement.⁶⁴

Second, copyright law is much more generous in its application of injunctions in favor of the copyright holder. In the 2006 case *eBay Inc. v. MercExchange* the Supreme Court reaffirmed the four-factor test used to determine when a court should issue an injunction.⁶⁵ The Court stated:

According to well-established principles of equity, a plaintiff seeking a permanent injunction must satisfy a four-factor test before a court may grant such relief. A plaintiff must demonstrate: (1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; and (4) that the public interest would not be disserved by a permanent injunction. The decision to grant or deny permanent injunctive relief is an act of equitable discretion by the district court, reviewable on appeal for abuse of discretion.⁶⁶

Until *eBay*, copyright holders merely had to show a likelihood of success on the merits in their infringement suit in order to obtain a preliminary injunction from the courts, on the basis of presumed irreparable harm.⁶⁷ Some commentators posit that this practice could change due to

67. See, e.g., Sun Microsystems, Inc. v. Microsoft Corp., 188 F.3d 1115, 1119 (9th Cir. 1999) ("Under federal copyright law, however, a plaintiff that demonstrates a likelihood of success on the merits of a copyright infringement claim is entitled to a presumption of irreparable harm."); *id.* ("The standard for a preliminary injunction balances the plaintiff's likelihood of success against the relative hardships to the parties"); Triad Sys. Corp. v. Se. Exp. Co., 64 F.3d 1330, 1335 (9th Cir. 1995); Sega Enters. v. Accolade, Inc., 977 F.2d 1510, 1517 (9th Cir. 1992) (stating that in order to receive a preliminary injunction a copyright holder is required to show "either a likelihood of success on the merits and the possibility of irreparable injury, or that serious questions going to the merits were raised and the balance of hardships tips sharply in its favor"); Nat'l Ctr. for Immigrants Rights v. I.N.S., 743 F.2d 1365, 1369 (9th Cir. 1984) ("The greater the relative hardship of the moving party, the less probability of success must be shown."); Apple

quate remedy at law, as well as cases where courts found the terms of a contract sufficiently certain to grant damages, but too uncertain to grant an injunction).

^{64. 17} U.S.C. § 504(c) (2006).

^{65. 547} U.S. 388 (2006).

^{66.} Id. at 391.

eBay.⁶⁸ However, the change wrought by eBay has yet to fully materialize, as there have so far been only a few cases that have explicitly applied the eBay-mandated factors in a copyright injunction scenario.⁶⁹ Meanwhile, despite eBay, the open source licensor in *Jacobsen v. Katzer* pursued an injunction through copyright law under the time-tested theory that a like-lihood of success on the merits gives rise to a presumption of irreparable harm in a copyright suit.⁷⁰

III. THE JACOBSEN V. KATZER DECISION

In *Jacobsen v. Katzer*, an open source licensor attempted to enforce the terms of an open source license against a commercial developer who refused to obey the obligations in the license document.⁷¹ Section III.A provides a detailed factual background of the case. Section III.B summarizes the District Court's decision and Section III.C describes the Federal Circuit's analysis and ruling.

A. Factual Background

Plaintiff Jacobsen ran an open source software group, the Java Model Railroad Interface project (JMRI), which created an application called DecoderPro that enabled hobbyists to control their model trains using a personal computer.⁷² The DecoderPro source files were available for free download under the terms of the Artistic License.⁷³ The Artistic License

69. Jacobs & Melaugh, *supra* note 68 ("[O]nly time will tell *eBay*'s true effect. The first decision in its wake—*z4 Techs*—suggests perhaps that instead of copyright jurisprudence acting to insure patent injunctive relief remains common, patent jurisprudence may work to make copyright injunctions less so."); *see also* Tillery v. Leonard & Sciolla, LLP, 437 F. Supp. 2d 312 (E.D. Pa. 2006); Disney Enters., Inc. v. Delane, 446 F. Supp. 2d 402 (D. Md. 2006); Busch v. Seahawk Software Dev., L.L.C., No. CV 04-0425-PHX-PGR, 2006 U.S. Dist. LEXIS 39484, at *13-14 (D. Ariz. June 12, 2006).

70. See infra Section III.A.

71. 535 F.3d 1373, 1376 (Fed. Cir. 2008).

72. See Jacobsen v. Katzer, 535 F.3d 1373, 1376 (Fed. Cir. 2008). See also Second Am. Compl. for Declaratory Judgment, Violations of Copyright and Federal Trademark Laws, and State Law Breach of Contract at ¶¶ 229-37, Jacobsen v. Katzer, No. C06-1905-JSW, 2007 WL 5138282 (N.D. Cal. Dec. 12, 2007).

73. See Jacobsen, 535 F.3d at 1376.

Computer, Inc. v. Franklin Computer Corp., 714 F.2d 1240, 1254 (3d Cir. 1983) ("A copyright plaintiff who makes out a prima facie case of infringement is entitled to a preliminary injunction without a detailed showing of irreparable harm.").

^{68.} *eBay*, 547 U.S. at 391; *see also* Michael A. Jacobs & David E. Melaugh, eBay Inc. v. MercExchange: *Copyright's Promise for Patent Injunctions*, SANTA CLARA UNI-VERSITY TECHLAW FORUM, Nov. 5, 2006, http://www.techlawforum.net/patentreform/articles/ebay-v-mercexchange-patent-injunctions/ ("*eBay* could signal an end to the easy ride copyright plaintiffs have gotten.").

set forth certain preconditions to be fulfilled before a user could redistribute or modify the DecoderPro files, including that the downstream copier retain the author's name and website information and that any modifications to the program be described if not disclosed.⁷⁴

As part of the DecoderPro project the JMRI developers created what are called "decoder definition files," which are interface specifications for the various types of available model railway hardware.⁷⁵ These specifications enabled the DecoderPro software to control equipment from different manufacturers. The decoder definitions appear to have been assembled through significant effort—Jacobsen alleged that the JMRI wrote definitions for over 350 decoders, assembled in over 100 files.⁷⁶ Each individual manufacturer's equipment required gathering information specific to that manufacturer.

Defendant Katzer sold a commercial product, Decoder Commander, which was similar to the DecoderPro.⁷⁷ Katzer allegedly incorporated material into Decoder Commander that was directly copied from Decoder-Pro's decoder definition files,⁷⁸ but failed to adhere to the terms of the Artistic License. In particular, Katzer failed to acknowledge the inclusion of DecoderPro definition files, failed to give credit to Jacobsen, failed to describe modifications he had made to the DecoderPro files, and failed to include Jacobsen's website information—all conditions laid out explicitly in the Artistic License.⁷⁹

Initially, Jacobsen was allegedly not even aware of the potentially infringing content in Decoder Commander. Jacobsen claimed that the contents of Decoder Commander only came to his attention after Katzer himself first threatened Jacobsen with a patent infringement lawsuit.⁸⁰ Katzer, as the holder of several patents relating to Model Railway control software, had been seeking ways to monetize his intellectual property for some time. Some early lawsuits brought against other commercial competitors did not succeed, allegedly because there were significant questions

- 77. See Jacobsen, 535 F.3d at 1376.
- 78. See Second Am. Compl., supra note 72, ¶ 244.
- 79. See Jacobsen, 535 F.3d at 1376.
- 80. See Second Am. Compl., supra note 72, ¶ 313.

315

^{74.} See The Artistic License, supra note 39, ¶¶ 1, 3-4 (requiring that downstream users include original copyright holder's information in any verbatim distribution and that any public distribution of a modified version include either the modified source or clear documentation of modifications along with information about where to get the standard version).

^{75.} See Jacobsen, 535 F.3d at 1376. See also Second Am. Compl., supra note 72, ¶ 223.

^{76.} See Second Am. Compl., supra note 72, ¶ 223.

about the validity or enforceability of the asserted patents.⁸¹ According to Jacobsen, after Katzer's early actions against commercial entities failed, Katzer went after noncommercial actors, one of which was the JMRI project.⁸²

Jacobsen discovered the allegedly infringing material in Katzer's product while gathering information to invalidate Katzer's patents during the course of a declaratory judgment action.⁸³ Jacobsen then moved for a preliminary injunction arguing that the violation of the Artistic License terms constituted copyright infringement and that irreparable harm could be presumed. The District Court disagreed and found that the violated terms were covenants giving rise only to an action for breach of contract.⁸⁴ Without the presumption of irreparable harm, the District Court found no basis for allowing a preliminary injunction.⁸⁵ Jacobsen appealed the denial of the preliminary injunction to the Federal Circuit.

B. The District Court's Analysis

The District Court dismissed Jacobsen's motion for preliminary injunction after determining that he had no cause of action under copyright law. The court acknowledged that the plaintiff's copyrighted material had been incorporated in the defendant's software package, but interpreted the terms of the Artistic License such that this taking was a contract rather than copyright violation.⁸⁶

In coming to this conclusion the District Court implicitly treated the restrictions of the Artistic License as covenants of the license, rather than as preconditions to it, and held that there was a cause of action under copyright law only if the defendant's use was beyond the scope of the grant in the copyright license.⁸⁷ The court stated:

The condition that the user insert a prominent notice of attribution does not limit the scope of the license. Rather, Defendants' alleged violation of the conditions of the license may have constituted a breach of the nonexclusive license, but does not create

85. Id. at 7.

86. Id.

87. Id. at 6-7.

^{81.} See id. ¶¶ 364-70.

^{82.} See id. ¶¶ 371-77.

^{83.} See id. ¶ 313.

^{84.} Jacobsen v. Katzer, No. C 06-01905 JSW, 2007 WL 2358628, at *6-7 (N.D. Cal. Aug. 17, 2007).

liability for copyright infringement where it would not otherwise exist. $^{\rm 88}$

The District Court's decision is somewhat puzzling since the language of the Artistic License is quite clear in stating that its terms are conditions, not covenants: "The intent of this document is to state the conditions under which a Package may be copied"⁸⁹

Despite the explicit language found in the Artistic License, the district court found that the "[p]laintiff has chosen to distribute his decoder definition files by granting the public a nonexclusive license to use, distribute and copy the files . . . [I]mplicit in a nonexclusive license is the promise not to sue for copyright infringement."⁹⁰

Without the possibility of success on the merits of the copyright claim, Jacobsen could not be presumed to have suffered irreparable harm, and thus the district court denied him an injunction.⁹¹

C. The Federal Circuit's Analysis

On appeal, the Federal Circuit considered two arguments against the injunction. First, Katzer argued that there was no cause for action under copyright law because the rights protected by the Artistic License were noneconomic, and therefore unprotected by copyright law, which seeks to vindicate economic rather than moral rights.⁹² Second, mirroring the district court's reasoning, Katzer argued that the requirements in the Artistic License were merely covenants and not conditions that would limit the scope of rights granted by the copyright owner.⁹³

Dismissing the first argument, the Federal Circuit found that there were certainly nonmonetary economic interests protected by the Artistic License. The court briefly acknowledged the valuable role that open source has played in developing several important public projects, including Linux, Firefox, Wikipedia, Perl, and the Creative Commons.⁹⁴ It then went on to describe how an open source license, even if not granting monetary rights, could still protect valuable economic interests by growing market share, enhancing the author's reputation, and allowing for rapid development.⁹⁵ The court decided that these objectives, although not mon-

^{88.} *Id.* at 7.

^{89.} The Artistic License, supra note 39, Preamble.

^{90.} Jacobsen, 2007 WL 258628 at *6.

^{91.} *Id.* at 7.

^{92.} Jacobsen v. Katzer, 535 F.3d 1373, 1381 (Fed. Cir. 2008).

^{93.} Id. at 1380.

^{94.} Id. at 1378.

^{95.} Id. at 1379.

etary, were economic interests worthy of protection under U.S. copyright law.⁹⁶

The defendant's second argument was that the Artistic License's requirements were merely covenants, not preconditions that constrained the scope of the copyright grant. The Federal Circuit disagreed. It examined the language of the license and concluded that the agreement created conditions that were prerequisites to the grant, and that their violation created a cause of action for copyright infringement.⁹⁷ The court pointed out that there was explicit language indicating the creation of preconditions to the grant: "The intent of this document is to state the *conditions* under which a Package may be copied."⁹⁸ Citing *Diepenbrock v. Luiz*,⁹⁹ the court also noted that the phrase "provided that," which appears before every requirement in the Artistic License, typically denotes a condition under California state law, rather than a covenant.¹⁰⁰

The court then explained that treating the requirements as conditions was critical to achieving copyright law's purpose of protecting the economic interests of the author, and recognized that when the author's objective is nonmonetary, the injunctive relief available under copyright is critical:

Copyright licenses are designed to support the right to exclude; money damages alone do not support or enforce that right. The choice to exact consideration in the form of compliance with the open source requirements of disclosure and explanation of changes, rather than as a dollar-denominated fee, is entitled to no less legal recognition.¹⁰¹

IV. CONCLUSION

Although the Artistic License is not a very popular open source license in the developer community—even the JMRI has moved on to GNU GPL¹⁰²—the *Jacobsen v. Katzer* decision has important implications for the future enforceability of open source licenses.

^{96.} *Id.* ("The lack of money changing hands in open source licensing should not be presumed to mean that there is no economic consideration, however.")

^{97.} *Id.* at 1381.

^{98.} Id. (citing the Artistic License) (emphasis in original).

^{99. 115} P. 743 (1911).

^{100.} Jacobsen, 535 F.3d at 1381.

^{101.} Id. at 1381-82.

^{102.} See JMRI Model Railroad Interface—Details, http://sourceforge.net/projects/ jmri/ (last updated Jan. 13, 2009). Note that the project is now licensed under GNU GPL 1.0. GNU GPL 1.0 is an open source license promulgated by the Free Software Founda-

In California, it would now appear that many open source licenses, like the GNU GPL, have a good chance of being valid and enforceable under copyright law. GNU GPL versions 1, 2, and 3 use language very similar to that highlighted by the Federal Circuit in *Jacobsen v. Katzer*. The phrase "provided that" found in the Artistic License is present before every requirement in the GPL licenses as well.¹⁰³ And the GPL licenses also state in their preamble that "[t]he precise terms and conditions for copying, distribution and modification follow."¹⁰⁴ This is similar to the language from the Artistic License preamble, which states, "The intent of this document is to state the conditions under which a Package may be copied."¹⁰⁵ In California, an open source license similar to the Artistic License—at least to the degree that GNU GPL is—would likely be found enforceable under copyright law under *Jacobsen v. Katzer*.¹⁰⁶

In other jurisdictions the picture is not as clear. Despite copyright licensors' pursuit of jurisdictional uniformity through copyright law, the reality appears to be that the jurisdictional variation of contract law is unavoidable. Although a copyright violation is determined under copyright law, the license itself is interpreted under state contract law. Because of this, the licensor is at the mercy of local contract rules despite copyright law's supremacy. The rules, which govern what language creates a covenant versus a condition, vary from jurisdiction to jurisdiction, leaving the *Jacobsen v. Katzer* court's critical discussion of covenants and conditions somewhat toothless in other states.

However, the court's acknowledgement that the requirements of an open source license have economic value, despite being nonmonetary, is a model for future decisions concerning open source licenses.¹⁰⁷ The *Jacobsen* court's reasoning on this subject would be hard for a licensee to refute,

107. See supra Section III.C.

tion. GNU Operating System, GNU General Public License, version 1, http://www. gnu.org/licenses/gpl-1.0.html (last modified Sept. 9, 2008) [hereinafter GPL 1.0]. GNU GPL is one of the most popular open source licenses—a quick search on Sourceforge.net reveals that over 115,000 projects use the license.

^{103.} *See* GPL 3.0, *supra* note 39; GNU Operating System, GNU General Public License, version 2, http://www.gnu.org/licenses/gpl-2.0.html (last updated Jan. 30, 2009) [hereinafter GPL 2.0]; GPL 1.0, *supra* note 102.

^{104.} GPL 3.0, *supra* note 39, at Preamble; GPL 2.0, *supra* note 103, at Preamble; GPL 1.0, *supra* note 102, at Preamble.

^{105.} The Artistic License, supra note 39, Preamble.

^{106.} *See Jacobsen*, 535 F.3d at 1381-82 (finding that the Artistic License's use of the words "provided that" coupled with the phrase "the intent of this document is to state conditions" strongly supported the conclusion that the requirements in the license were conditions and not covenants).

making future arguments based on the theory that there are no economic rights at issue in an open source license harder to sustain.

The Jacobsen v. Katzer decision is less significant on the issue of software contract formation in general. Typically, copyright infringement actions assume that, when there is a license, there is a valid copyright contract between the parties. That contract then dominates the discussion of the parties' rights, as it did in Jacobsen. However, the court in this case never explicitly analyzed whether a valid contract had been formed—whether the formalities of offer/acceptance and consideration had been observed. The licensee himself never raised the argument that the Artistic License was inapplicable, because his only rights to use the material derived from that license. Without the Artistic License, it would have been much more difficult for Katzer to argue that he had any permission at all to use the copied material.

Because of the lack of discussion on the subject of contract formation, the existence of a valid contract formed through the common open source method—including the license file in the distribution and giving notice in the source files—would appear to carry little weight in future disputes. The licensee did not dispute that he had notice in this case, and in a future case where the formation of the open source contract itself was at issue, the licensee could very well do that to avoid being bound by the license. However, in that case, the would-be licensee would have no permission to use the software and would have to rely on some other defense, such as fair use.

Ultimately, *Jacobsen v. Katzer* faced fundamental issues about the interpretation and enforcement of open source licenses. Although the Artistic License is only one of many open source licenses, the precedent set in this case has confirmed the enforceability of at least one open source license under copyright law. Although *Jacobsen v. Katzer* can be considered a victory for the open source movement, it is but a modest one whose eventual scope in other jurisdictions remains to be seen.