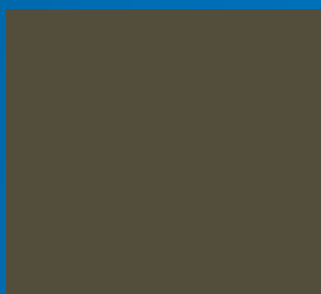
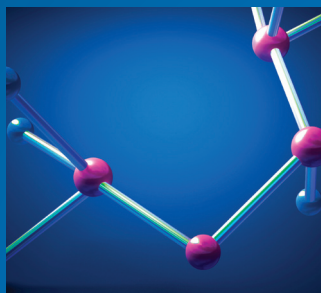
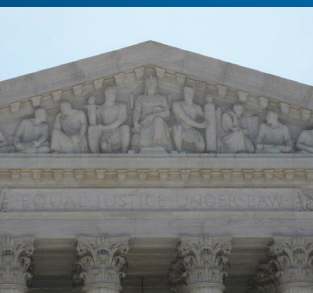
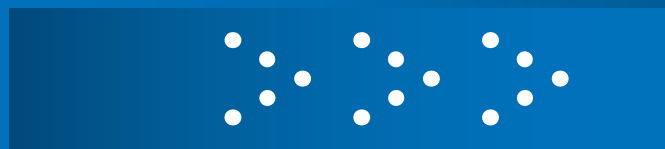


# Milbank



## Intellectual Property Year in Review

# 2011



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is a recipient of the 2011 ALA/Burton Award for “Best Law Firm Publication”

– The Burton Awards for Legal Achievement in association with The Library of Congress

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■ IPO 2011 Annual Meeting, Los Angeles, CA IP practice group leader Christopher E. Chalsen moderated the panel “Compulsory Licensing in the U.S.”	
■ NYC Bar: City Bar Center for CLE Program [and the <i>Copyright &amp; Literary Property, Information Technology Law &amp; Patents</i> committees], New York NY IP associate James R. Klaiber served as a program co-chair for “Protecting IP in Contracts with the U.S. Government: The Minotaur in the Regulatory Maze.”	
■ Fordham Intellectual Property Law Institute & Emily C. and John E. Hansen Intellectual Property Law Institute’s 19th Annual Conference on Intellectual Property Law & Policy, New York, NY IP partner Christopher J. Gaspar participated in the US Patent Developments panel.	
■ AIPLA Mid-Winter Institute, Orlando, FL IP associate Chris L. Holm presented on “Protecting Pioneering Inventions in a Wild, Wild World – Bilski’s Implications for Claiming Concept and Discoveries.”	
■ INTA Annual Meeting 2011, San Francisco, California IP associate Jennifer Miremadi participated in a panel discussion on “Careers in Trademark Law.”	



# INTRODUCTION

We are proud to present the 2011 edition of Milbank's *Intellectual Property Year in Review*, the third annual compilation of articles by Milbank IP attorneys and published in various legal and business publications this past year. Our 2010 edition was recognized by The Burton Foundation and received the 2011 ALA/Burton Award for "Best Law Firm Publication." This award, which honors excellence in writing, underscores our team's continued commitment to keep abreast of important developments in intellectual property law as they happen and to analyze the impact of those developments on our clients' legal and business concerns.

2011 was a significant year for intellectual property (IP) law, one that will have effects for years to come. Long anticipated changes to the Patent Act, and decisions substantially affecting IP rights in biopharma, software, business methods, cloud computing, bankruptcy, and others were among these developments.

Milbank attorneys continually analyze and evaluate the changing landscape to provide clients with unparalleled service and advice. Our IP group leverages multi-jurisdictional resources and capabilities to provide comprehensive and sophisticated IP services. We also work with our colleagues to apply our IP expertise to our world renowned project finance, clean energy and bankruptcy practices. Our lawyers, most of whom are technically trained, have a wealth of expertise in a diverse array of technologies. As a result, the articles in this review reflect the authors' depth of understanding and their diversity of expertise.

The following is a summary of the four areas we focus on in this year's IP annual review:

## Section I: Pharmaceuticals and Biotechnology

Throughout the year, Milbankers explored and analyzed the evolution of pharmaceutical litigation. In "Focusing Only on

Active Ingredient Patents Ignores Case Law Success Rates: Formulation & Method-of-Use Patents Provide Significant Protection for Medicines," partners Errol B. Taylor and Fredrick M. Zullo and associate Anna Brook performed a survey of all Federal Circuit and district court decisions in pharmaceutical litigations since *KSR v. Teleflex*. The survey showed that an overemphasis on active ingredient patents may result in a failure to appreciate real value in formulation and method of use patents. These other patent cases account for nearly half of brand name successes at the trial level and Federal Circuit. In an article for the *Westlaw Journal of Intellectual Property*, partner Fredrick M. Zullo and associates James R. Klaiber and Ethan Lee explored the Supreme Court decision in *Board of Trustees of the Leland Stanford Junior University v. Roche Molecular Systems Inc.* on whether the provisions of the Bayh-Dole Act automatically grant ownership of federally funded inventions to research institutions rather than to the inventor.

Several other important developments for pharmaceuticals and biotechnology also arose in 2011. The most significant of these decisions impacting all patent law cases is arguably the Federal Circuit's decision in *Therasense Inc. v. Becton, Dickinson & Co.* Partner Lawrence T. Kass and associate Nathaniel T. Browand analyze the significant changes to the law on inequitable conduct under this decision, which tightens the analytical framework and requisite proofs to render a patent unenforceable. In "The Biosimilar Ballet: Patent Litigation Under the 2010 Health Care Reform Act," associate Arie M. Michelsohn explores the complex "dance" that biologic innovators and generics must perform in the prelude to an FOB litigation under the new legislation.

## Section II: Software and Business Methods

Milbankers also continued to explore intersections of IP law with software and computing, including the ever-increasing use and reliance on cloud computing and open-source software. In an article for *Corporate Counsel*, partner Richard Sharp and associate Michael Kurzer analyzed the regulatory requirements and oversight of

cloud computing. Michael Kurzer also provided practical considerations for using cloud computing to maintain broker records in “Keeping Broker Records in the Cloud.” Partner Christopher J. Gaspar, in an article presented to the AIPLA, provided insights on how European court decisions can provide a road-map to the future of U.S. open source litigation. In an article for *Intellectual Property Magazine*, associates Miguel Ruiz and Ashlee Lin examined a line of Federal Circuit decisions relating to joint liability and indirect liability. And, based on guidance from the USPTO, the Federal Circuit, and the ITC, Chris Gaspar provided tips for practitioners on patent eligibility under Section 101.

### Section III: Bankruptcy

Milbank attorneys leverage their expertise in navigating IP issues in bankruptcy proceedings and restructuring transactions to advise clients. In an article in *Norton Journal of Bankruptcy Law and Practice*, Milbank associate Bradley Scott Friedman provided a comprehensive overview of the law related to the licensing of intellectual property in a Chapter 11 bankruptcy case.

### Section IV: Other Hot Issues

Among the hot issues in 2011 were the Patent Reform Act. Hard on the heels of the passage of the Act, Christopher E. Chalsen and Nathaniel T. Browand provided Milbank clients with an insightful Client Alert entitled “Patent

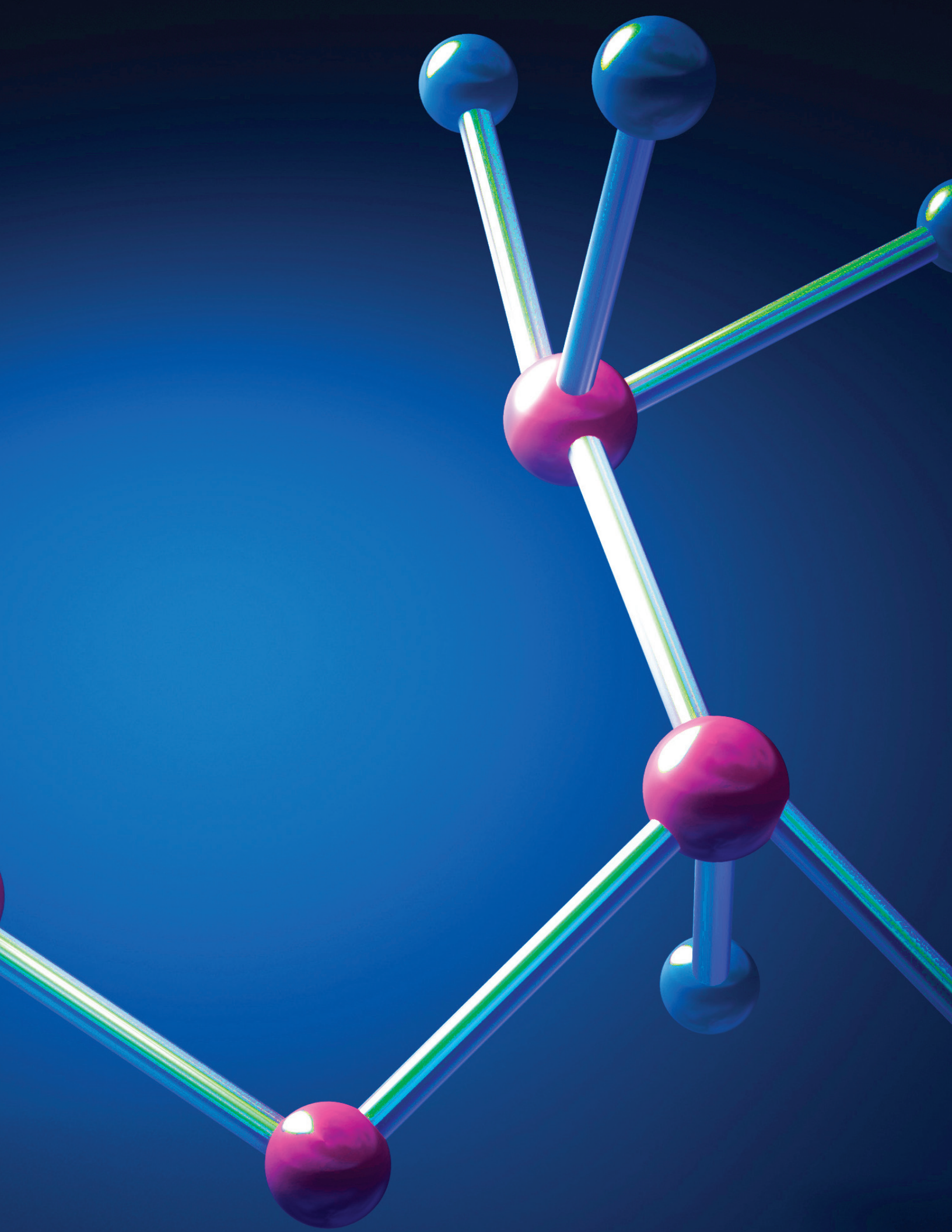
Reform Legislation Has Passed: What You Need to Know Now.” Among hot issues for 2012, Chris Chalsen contributed an *InsideCounsel.com* article exploring venue transfer and the Federal Circuit’s rising interest in reviewing such motions without providing a bright line rule to guide practitioners. Chris Chalsen and James Klaiber wrote an article in the *Bloomberg Law Reports* examining the equitable defense of prosecution laches.

Mark C. Scarsi penned various articles for *InsideCounsel.com* on topics ranging from the Federal Circuit’s termination of the 25 percent rule of thumb in patent law damages calculations, to the interplay among species of IP. Examples included everything from patent, copyright and trademark law, to an exploration of a tattoo artist’s claim of copyright infringement against movie studio Warner Bros. for the use of a unique facial tattoo that was designed for former heavyweight boxing champion Mike Tyson in the movie *The Hangover II*.

Christopher Gaspar wrote an article in the *New York Law Journal* examining the recent decision in *Global-Tech Appliances Inc. v. SEB S.A.*, bringing clarity to decades-old questions on induced patent infringement. James R. Klaiber and Ethan Lee wrote an article on the President’s disapproval authority over ITC decisions, the historical use of such a power, and the likelihood of such an outcome in the ongoing smartphone litigations playing out in the ITC.

# PHARMACEUTICALS AND BIOTECHNOLOGY

A stylized molecular structure graphic is positioned behind the text. It features several blue spheres of varying sizes connected by thin, translucent blue rods. The structure is partially obscured by the text, with some rods and spheres visible on the left and right sides of the central text block.





# Focusing Only on Active Ingredient Patents Ignores Case Law Success Rates: Formulation & Method-of-Use Patents Provide Significant Protection for Medicines

By  
**Errol B. Taylor**  
**Fredrick M. Zullo**  
*and*  
**Anna Brook**



*Errol B. Taylor and Fredrick M. Zullo are partners, and Anna Brook is an associate, in the Intellectual Property Group of Milbank, Tweed, Hadley & McCloy LLP.*

In pharmaceutical litigation conventional wisdom teaches practitioners to focus on active ingredient patents over other types of patents that cover, for example, formulations and methods of use. A review of Federal Circuit and district court decision success rates<sup>1</sup> reveals formulation and method-of-use patents account for one-third of brand name successes against generic companies in Federal Circuit decisions and nearly one-half of brand name successes in the district courts. In other words, focusing only on active ingredients ignores almost half of a brand name company's chance for success.

While active ingredient patents are the most likely to survive validity and infringement challenges, relying solely on these patents has significant disadvantages for patent owners. Active ingredient claims cannot always reflect the innovative advantages of a pharmaceutical product, such as a new use for a known substance or a formulation that enables delivery of a known drug into the body at desired rates and amounts. Also, formulations and methods of use may be developed after the active ingredient

and therefore be entitled to patents that expire later than the active ingredient patent.

Further improvements to formulations or methods of use may provide additional and extended patent protection for a brand name company. On the other hand, while a generic company may need to exhaust resources to develop a non-infringing formulation, it may have a better chance of invalidating patents that claim subject matter other than an active ingredient. Generic manufacturers may under certain circumstances also avoid method-of-use patents by limiting the indications for which they seek to market their product.

## Brand Name v. Generic Success Rates

Since *KSR* the Federal Circuit and district courts issued final decisions on the merits<sup>2</sup> involving 63 pharmaceutical products. The Federal Circuit issued decisions on 38 of these products. The Federal Circuit decisions are evenly split: the brand name company prevailed on 18 out of 38 products and the generic prevailed on 20 out of 38 products.<sup>3</sup>

<sup>1</sup> All final decisions on the merits after *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398 (2007) through August 31, 2011.

<sup>2</sup> A final decision regarding infringement, validity or enforceability of a patent.

<sup>3</sup> For two products, at least one generic manufacturer prevailed with a ruling of non-infringement and were counted as decisions in favor of the generic even though other generic challengers were unsuccessful.



District court decisions were also closely divided, with brand name companies having a marginally better success rate than in the Federal Circuit. Post-KSR, district courts issued final decisions on the merits for 54 pharmaceutical products.<sup>4</sup> Brand name companies prevailed on 29 products and generic challengers prevailed on 25 products.<sup>5</sup> Table 1 summarizes the results.

Table 1: Decisions on the merits by drug product			
Court	Total drug products	Decision on the merits in favor of Brand	Decision on the merits in favor of Generic
Federal Circuit	38	18	20
District Court	54	29	25

Pharmaceutical patents may be categorized as claiming (1) drug substances or active ingredients; (2) pharmaceutical formulations or compositions; and (3) methods of use;<sup>6</sup> or a combination thereof. As expected, active ingredient patents provide the most effective protection for brand name companies, but “other” patents, namely formulation and method-of-use patents, provide significant protection.

## Federal Circuit Results

The Federal Circuit issued decisions on the merits for 16 pharmaceutical products that were protected by active ingredient patent claims.<sup>7</sup> The Court ruled in favor of the brand name company on 12 products and in favor of the generic challenger on 4 products – a 75% success rate for the patentee. Of the 4 generic successes, 2 were based on non-infringement and 2 on invalidity or unenforceability.

The active ingredient patents can be further divided into sub-groups: claims for new active ingredients or molecules, and claims for specific forms of an active ingredient such as polymorphs, isomers, or salts. New molecules provided the best results for brand name companies while generic manufacturers were more successful designing a non-infringing product or invalidating the narrower active ingredient claims (polymorphs, isomers, salts). In the active ingredient category, 4 generic successes involved polymorphs, isomers, or salts.

The other 22 products considered by the Federal Circuit after KSR were protected by formulation or method-of-use claims, or both, but were not protected by active ingredient claims. Out of 14 products that were protected by formulation patents, the brand name prevailed on only 3 – a 21% success rate.<sup>8</sup> The 11 generic victories were split between non-infringement (6 products) and invalidity/unenforceability (5 products). Formulation patents can also be divided into subcategories, including formulations for oral administration, injectable or other liquid formulations, combinations that contain more than one active ingredient, and formulations that allow delivery of an active ingredient at a particular rate or to a certain area of the body. Interestingly, formulation patents relating to liquid pharmaceutical products (e.g., injectables, sprays, drops) were more difficult for generic challengers to overcome.

Finally, when considering only method-of-use claims, the Federal Circuit ruled favorably for the brand name on 2 out of 7 products – a 29% success rate. All generic successes on method-of-use claims were based on invalidity/unenforceability. And the brand name prevailed on 1 product that was covered by both formulation and method-of-use claims. Table 2 summarizes the results.

Table 2: Federal Circuit decisions on the merits by type of patent claims asserted			
Type of patent claims	Total drug products considered by Fed. Cir.	Decision on the merits in favor of Brand	Decision on the merits in favor of Generic
Active ingredient <sup>9</sup>	16	12	4
Formulation	14	3	11
Method of use	7	2	5
Formulation & method of use	1	1	0
Total	38	18	20

Overall brand name companies had a 75% success rate in cases that involved active ingredient claims versus a 29% success rate on products that had only formulation and/or method-of-use claims. Although cases involving non-active ingredient claims were more challenging, they accounted for 6 out of 18 brand name companies’

<sup>4</sup> Total case counts do not include pre-KSR district court decisions that were appealed and addressed by the Federal Circuit in post-KSR opinions.

<sup>5</sup> See note 3.

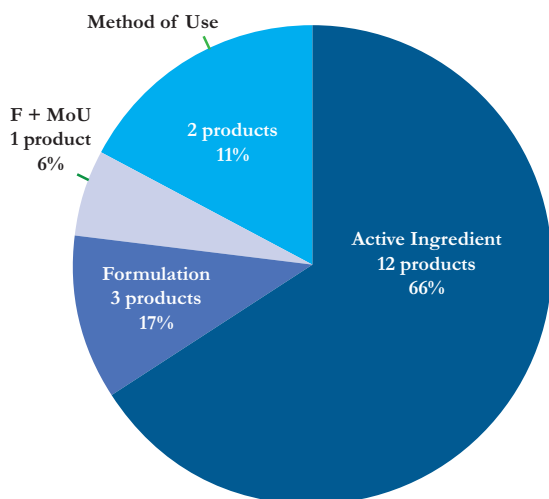
<sup>6</sup> 21 C.F.R. 314.53(b) requires NDA holders to list these categories of patents in the FDA’s Orange Book. Although patents may also be directed to other aspects of pharmaceutical products such as manufacturing processes or delivery devices, this article focuses on active ingredient, formulation and method-of-use patents, which account for the majority of pharmaceutical patent litigation.

<sup>7</sup> In addition to a patent claiming the active ingredient, 10 of the 16 products were also covered by formulation and method-of-use claims. Of those, the brand name was successful in 8 instances. However, in the authors’ view, the outcomes for the non-active ingredient claims were driven in large part by the outcome for the related active ingredient claims and therefore are being counted in the active ingredient category.

<sup>8</sup> See note 3. Not counting the 2 cases that were split between brand name and generic wins, the brand name prevailed on 3 products and the generic prevailed on 9 products – a 25% success rate for brand name companies.

<sup>9</sup> See note 7.

**Chart 1A: Federal Circuit Decisions on the Merits in Favor of Brand Company**



Source: Milbank, Tweed, Hadley & McCloy LLP

successes in the Federal Circuit. Chart 1A illustrates the 18 products where the Federal Circuit ruled in favor of the brand name company, grouped by the type of patent claims considered by the Court. Chart 1B illustrates the 20 generic company wins at the Federal Circuit.

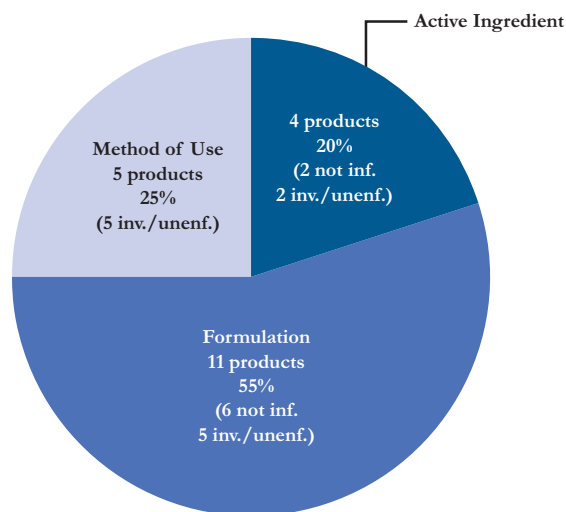
Chart 1A shows that active ingredient patents account for two-thirds of successful patent cases for brand name companies, while the other categories (formulation and method-of-use patents that do not have active ingredient claims) account for one-third of all successful patent cases. Viewing the Federal Circuit decisions in this manner shows that patents other than active ingredient patents have value to brand name companies. On the other hand, Chart 1B demonstrates that the chances of success for a generic company increase significantly when active ingredient patents are not at issue.

### **District Court Results**

The district courts issued decisions on the merits in favor of the brand name company for 15 out of 20 products that were primarily protected by active ingredient patents<sup>10</sup> – a 75% success rate for brand name companies. The 5 generic successes were split: 3 noninfringement decisions and 2 invalidity/unenforceability decisions. Similar to the Federal Circuit results, brand name companies fared better with new molecule active ingredient claims than with narrower claims relating to polymorphs, isomers, or salts.

<sup>10</sup> In addition to a patent claiming the active ingredient, 12 of the 20 products were also covered by formulation and method-of-use claims. Of those, the brand name was successful in 9 instances. However, in the authors' view, the outcomes for the non-active ingredient claims were driven in large part by the outcome for the related active ingredient claims and therefore are being counted in the active ingredient category.

**Chart 1B: Federal Circuit Decisions on the Merits in Favor of Generic Company**



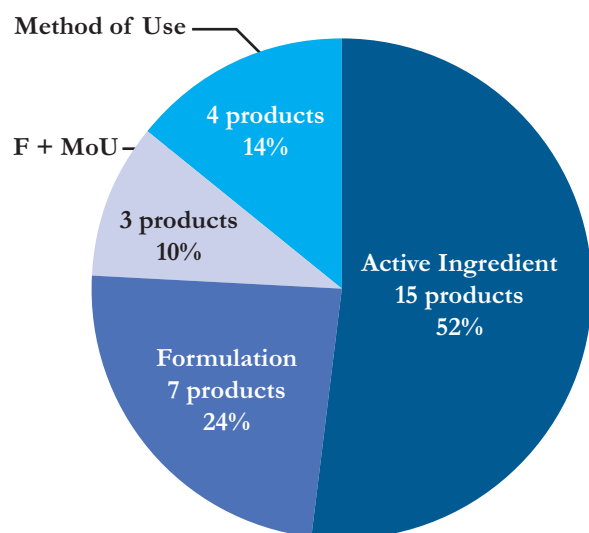
Cases that related to polymorph, isomer, or salt patents accounted for 3 of the generic companies' 5 successes. In the remaining 2 cases, the Federal Circuit reversed.

Brand name companies achieved higher success rates for formulation patents and method-of-use patents at the district court level than at the Federal Circuit. The brand name prevailed in 7 out of 16 formulation patent cases – a 44% success rate. Out of the 9 generic successes, 5 were based on non-infringement and 4 on invalidity/unenforceability. The district court results, like the Federal Circuit, showed that formulation patents relating to liquid pharmaceuticals fared better than other formulation types.

When only method-of-use claims were asserted, the brand name succeeded in 4 out of 10 cases – a 40% success rate. Again, in all 6 method-of-use cases where the generic manufacturer prevailed, the patent in suit was invalid or unenforceable. Finally, the brand name succeeded in 3 out of 8 cases where district courts considered both formulation and method-of-use patents – a 38% success rate.

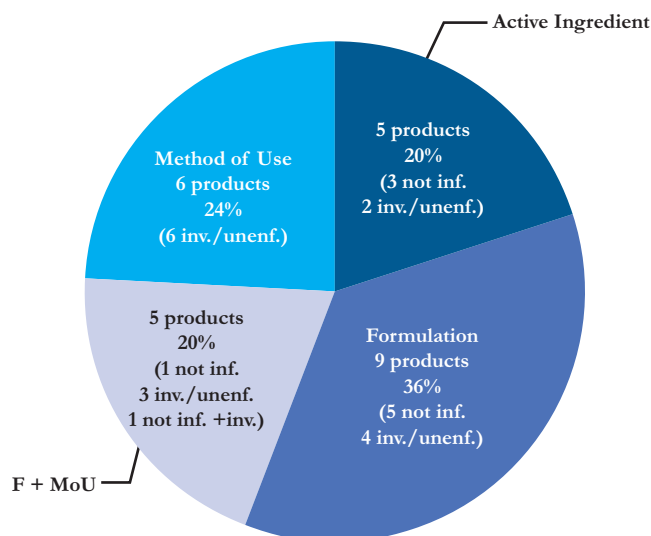
Overall, brand name companies had a 75% success rate in the district courts when asserting active ingredient patent claims – the same success rate exhibited in the Federal Circuit. Products that fell into the “other” patent categories had a 41% district court success rate, which is better than the 29% success rate in the Federal Circuit. Table 3 summarizes the results.

**Chart 2A: District Court Decisions on the Merits in Favor of Brand Name Company**



Source: Milbank, Tweed, Hadley & McCloy LLP

**Chart 2B: District Court Decisions on the Merits in Favor of Generic Company**



**Table 3: District court decisions on the merits by type of patent claims asserted**

Type of patent claims	Total drug products considered by District Courts	Decision on the merits in favor of Brand	Decision on the merits in favor of Generic
Active ingredient <sup>11</sup>	20	15	5
Formulation	16	7	9
Method of use	10	4	6
Formulation & method of use	8	3	5
<b>Total</b>	<b>54</b>	<b>29</b>	<b>25</b>

Table 3 shows that formulation and method-of-use patents provided significant victories for brand name companies at the district court level. Nearly one-half (14 out of 29) of the district court decisions in favor of brand name companies did not involve active ingredient claims. Chart 2A illustrates the 29 products where a district court ruled in favor of the brand name company, grouped by the type of patent claims that were asserted. Chart 2B illustrates the 25 generic company wins in the district courts.

On the district court level the active ingredient successes account for 52% of successful patent cases for brand name companies while the “other” categories account for 48% of successful cases, once again highlighting the value of non-active ingredient patents.

District court case results are a good indicator of how a case will be resolved on appeal. The Federal Circuit reviewed appeals relating to 30 post-KSR district court decisions on the merits. The appeals court reversed on the merits in 5 cases (17% rate of reversal). In 3 of the reversals a district court ruling in favor of the generic challenger was reversed by the Federal Circuit. In the remaining 2 reversals the Federal Circuit’s decision favored the generic manufacturer.

### Are Some Patents “More Valid” Than Others?

The likelihood of success in patent litigation depends on the strength of the patent in terms of the scope and breadth of the patent claims when compared with the prior art (validity) and with a competitor’s product (infringement). While infringement is a highly product specific inquiry, previous validity decisions can shed light on trends that litigants can consider when preparing their case and assessing their chances of success for each of the three categories of patent claims.<sup>12</sup> Again, a common supposition is that active ingredient patents are more likely to withstand a validity challenge than formulation

<sup>11</sup> See note 10.

<sup>12</sup> For a review of post-KSR obviousness decisions in pharmaceutical cases, see “Was the Concern That KSR Was a Game-Changer Justified? Not for Chemical Cases Before the Federal Circuit,” BNA’s Pharmaceutical Law & Industry Report (Sept. 17, 2010)(8 PLIR 1197, 9/17/10).

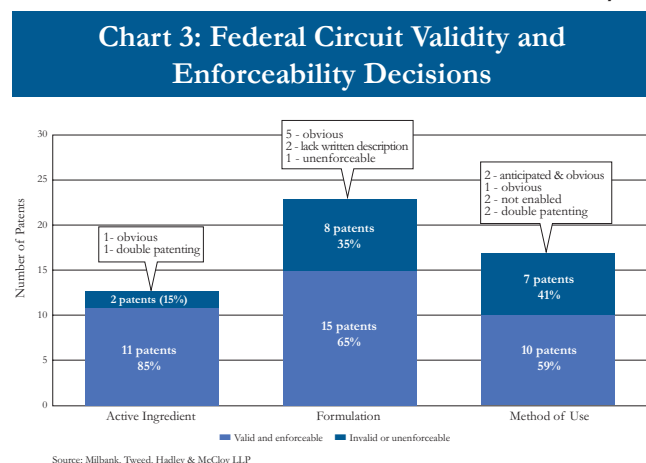
or method-of-use patents. Indeed, in a December 2010 petition for a writ of certiorari to the U.S. Supreme Court, a generic drug manufacturer argued that the Federal Circuit set an “impossibly high standard for obviousness in chemical compound cases,” under which active ingredient patents are virtually impossible to invalidate.<sup>13</sup>

Not surprisingly, at the Federal Circuit level, active ingredient patents are more likely than other pharmaceutical patents to survive an invalidity or unenforceability challenge. As shown in Chart 3, since *KSR* the Federal Circuit addressed validity of 13 active ingredient patents and decided that 2 (15%) were invalid or unenforceable. For comparison, the Federal Circuit decided that 8 out of 23 (35%) patents with formulation claims were invalid or unenforceable and 7 out of 17 (41%) patents with method-of-use claims were invalid or unenforceable.

Active ingredient patents also fared better in the district courts. Out of 19 active ingredient patents considered by the district courts after *KSR*, only 2 (11%) were found invalid or unenforceable. For comparison, 15 out of 41 (37%) patents with formulation claims and 17 out of 40 (42%) patents with method-of-use claims were held invalid or unenforceable by the district courts.

## What Makes A Successful Formulation Patent?

As shown in Chart 3, the Federal Circuit favored validity

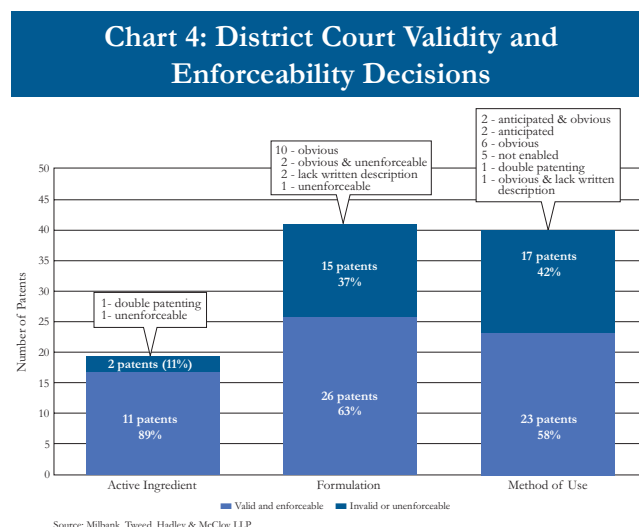


for 15 of 23 (65%) patents that claimed pharmaceutical formulations. Of the 8 that were invalid or unenforceable, the Federal Circuit determined that 5 patents were invalid for obviousness, 2 patents were invalid for lack of a sufficient written description and 1 patent was unenforceable. As shown in Chart 4, the district courts ruled in favor of validity for 26 out of 41 (63%) formulation

patents. Out of the remaining 15 that were invalid or unenforceable, 10 were determined to be obvious, 2 were obvious and unenforceable, 2 lacked a sufficient written description, and 1 was unenforceable.

A review of the Federal Circuit’s obviousness inquiries for formulation patents shows that the Court appears to focus on proofs regarding whether the prior art guides a skilled person toward a limited number of solutions that can be systematically tried. As addressed in more detail below, the Federal Circuit held that the patents in *Bayer v. Barr*<sup>14</sup> and *Purdue v. Par*<sup>15</sup> were obvious because the prior art led persons of ordinary skill in the art to a limited set of options for developing the claimed formulation. On the other hand, in cases like *In re Omeprazole Patent Litigation*<sup>16</sup> and *Unigene v. Apotex*,<sup>17</sup> the Federal Circuit upheld the validity of formulation patents because the evidence suggested a large number of options, a lack of guidance for narrowing alternatives, and in some instances teaching away in the prior art. These cases highlight that a product’s development history and what was available to a person of skill in the art at the time of the invention are critical when developing validity challenges and defenses relating to formulation patents.

In *Bayer* the Federal Circuit determined that the patent at issue was obvious because a person of ordinary skill in the art had only a narrow list of possibilities to choose from for



developing the claimed formulation. Drospirenone, the active ingredient in the oral contraceptive Yasmin®, was known in the prior art. Bayer’s patent related to a formulation containing micronized drospirenone in a “normal” (non-enteric coated) pill. Micronizing drospirenone improved its rate of absorption, but also led to undesired isomerization

<sup>13</sup> Petition for a Writ of Certiorari, *Mylan, Inc. v. Daiichi Sankyo Co. Ltd.*, No. 10-770 (Dec. 8, 2010). Cert. denied (9 PLIR 364, 3/25/11).

<sup>14</sup> *Bayer Schering Pharma AG v. Barr Labs., Inc.*, 575 F.3d 1341 (Fed. Cir. 2009) (7 PLIR 937, 8/14/09).

<sup>15</sup> *Purdue Pharma Prods. L.P. v. Par Pharm., Inc.*, 377 Fed.Appx. 978 (Fed. Cir. 2010) (8 PLIR 743, 6/11/10).

<sup>16</sup> *In re Omeprazole Patent Litig.*, 536 F.3d 1361 (Fed. Cir. 2008) (6 PLIR 987, 9/5/08). The authors were counsel for plaintiffs.

<sup>17</sup> *Unigene Labs., Inc. v. Apotex, Inc.*, No. 2010-1006, 2011 WL 3715557 (Fed. Cir. Aug. 25, 2011) (9 PLIR 1106, 9/9/11).





in the stomach, which Bayer claimed taught away from using a normal pill formulation. Isomerization could be prevented by using an enteric coated formulation, but it would likely reduce bioavailability and increase patient-to-patient variation. Bayer argued that the prior art taught away from using a normal pill and the successful results obtained with a normal formulation were unexpected. Even so, the Federal Circuit found that the prior art directed a skilled person to two options for formulating the product: an enteric coated pill and a normal pill. In light of the two options, the Federal Circuit agreed with the district court that using a normal pill was obvious to try and therefore the patent was invalid. In this case, the generic challenger successfully framed the options available to a skilled person as a simple choice between only two possible paths.

In *Purdue* there were more than two options for making the claimed formulation, but the Federal Circuit still held that patents relating to a controlled-release tramadol formulation (Ultram® ER) suitable for once-daily dosing were obvious. The Court focused on a prior art patent that listed tramadol as one of 14 compounds that could be used in a once-daily controlled-release formulation. The district court and Federal Circuit rejected Purdue's characterization that there were "scores" of possible active ingredients (or combinations thereof) disclosed in this prior art patent. Once again, the generic challenger successfully limited the options to a simple list available in the prior art.

On the other hand, in cases where obviousness challenges were overcome, the Court considered the lack of guidance regarding what options to choose in combination with then-available information that taught away from the claimed formulation. For example, in *In re Omeprazole* the Federal Circuit found that the prior art did not narrow

the field of possible options and upheld the validity of two patents directed to formulations that included an enteric coating, a water-soluble/water-disintegrable subcoating, and a "core" containing the active ingredient and an alkaline reacting compound. The active ingredient in Prilosec® (omeprazole) was invented in 1979, but developing an oral dosage form of the drug presented significant challenges. The prior art disclosed that while an enteric coating could protect the omeprazole from degradation in the stomach, it also contained materials that would cause compounds like omeprazole to decompose during storage. The prior art also showed that while the problem with formulating omeprazole might be solved by adding an inert water-soluble subcoating to protect the active ingredient from degradation caused by the enteric coating, it raised additional problems relating to degradation during manufacture and untimely delivery when ingested. Unlike in *Bayer* and *Purdue*, the courts rejected arguments that the claimed formulations were obvious. The Federal Circuit agreed with the district court that a skilled person working to solve the stability problems had multiple options to pursue regarding each element of the formulation to address the various problems faced by the inventors and would not arrive at the claimed formulation without hindsight and/or undue experimentation. One reason the Court decided *In re Omeprazole* differently than *Bayer* and *Purdue* may be the extensive treatment of the prior art references in *In re Omeprazole* showing a large number of options that in some cases taught away from using the claimed combination, as well as the existence of alternatives and teaching away in prior art relied on by the generic challengers.<sup>18</sup>

New formulations can be the subject of New Drug Applications under 21 U.S.C. § 355(b)(2) (a "505(b)(2) NDA") and provide patent protection for the

<sup>18</sup> *Bayer, Purdue, In re Omeprazole*, and *Unigene* also demonstrate the importance of winning at the district court level, given the 83% Federal Circuit affirmance rate addressed above.



subsequent 505(b)(2) NDA filer against later ANDA filers. For example, in *Unigene*, the Federal Circuit addressed an ANDA formulation patent relating to the nasal spray Fortical®. Fortical® was a 505(b)(2) NDA which in turn referenced the more common 505(b)(1) NDA for the product Miacalcin®. The active ingredient in all three products (Fortical®, Miacalcin®, and the ANDA product) is salmon calcitonin, which is easily degraded by body fluids, relatively unstable in pharmaceutical compositions and is poorly absorbed through tissues. The patent in suit was directed to the Fortical® formulation and used a different preservative, absorption enhancer and surfactant from the earlier Miacalcin® formulation.

The Federal Circuit treated Miacalcin® as a “reference composition” – analogous to a “lead compound” – to determine whether the changes made to obtain Fortical® were obvious.<sup>19</sup> The Federal Circuit focused on the patent’s use of a specific amount of citric acid in the formulation. The Court noted that although prior art references mentioned using citric acid, none of the references focused on it for the same purpose as in the Fortical® formulation, did not suggest the claimed concentration, and did not provide a narrow list of materials that could be systematically tried. Like in *In re Omeprazole*, the Federal Circuit determined that the prior art did not lead a skilled person to use citric acid in the Fortical® formulation in the normal course of research and development and rejected the invalidity challenge.

Comparing *Bayer* and *Purdue* with *In re Omeprazole* and *Unigene* emphasizes the importance of addressing the state of the art at the time of the invention and the possible avenues of product development available to a person of ordinary skill. A limited number of options to try to solve a particular problem favors the patent challenger. On the other hand, a patentee can improve their chances of success by developing the facts relating to issues faced by the inventors during development through both internal documents and prior art.

## What Makes A Successful Method-Of-Use Patent?

As noted in Chart 3 above, 17 Federal Circuit decisions addressed validity of patents that claim a method of use and 7 of those decisions resulted in invalidity or unenforceability. The Federal Circuit’s grounds for striking down these patents were more varied than in its



formulation patent decisions: 2 patents were anticipated and obvious, 1 patent was obvious, 2 were not enabled, and 2 were invalid for obviousness-type double patenting.

The district court decisions were likewise varied. As shown in Chart 4, the district courts issued opinions on 40 patents that claim a method of use and struck down 17: 2 were anticipated and obvious, 2 were anticipated, 6 were obvious, 5 were not enabled, 1 was invalid for obviousness-type double patenting, and 1 was obvious and lacked a sufficient written description.

One area of increased litigation over the past few years is method-of-use patents where the active ingredient was known in the prior art, but was later discovered to be useful for treating a particular condition. In these cases the court reviews whether a person of ordinary skill in the art would expect that the particular active ingredient would be effective for the claimed indication, and whether there were known problems or side effects associated with the drug or class of drugs that taught away from using it for a particular indication or even as a pharmaceutical product.

<sup>19</sup> For discussion of “lead compound” analysis, see “Was the Concern That KSR Was a Game-Changer Justified? Not for Chemical Cases Before the Federal Circuit,” 8 PLIR 1197 (Sept. 17, 2010).



For example, in *Eli Lilly v. Actavis*<sup>20</sup> and *Eli Lilly v. Teva*,<sup>21</sup> discussed in more detail below, the Federal Circuit upheld method-of-use patents directed to using known active ingredients to treat new indications. In contrast, in *King v. Eon*<sup>22</sup> the Federal Circuit held that the patents were invalid because they claimed a known use of a pharmaceutical ingredient.

In *Eli Lilly v. Actavis* the Federal Circuit addressed a patent that claims a method for treating attention deficit/hyperactivity disorder (ADHD) by administering an effective amount of atomoxetine to a patient in need of treatment. The patent in suit issued 15 years after a patent claiming atomoxetine itself. At that time, however, atomoxetine was studied for the treatment of urinary incontinence and depression (without success). The Federal Circuit noted that the initial suggestion that atomoxetine might be effective to treat ADHD “was met with skepticism,” that similar compounds exhibited negative effects, and that “experts for both sides were in agreement that they would not have expected that atomoxetine would be a successful treatment of ADHD.” Based on this evidence, the Federal Circuit affirmed the district court’s decision that use of atomoxetine to treat ADHD was not obvious to a person of skill in the art. Here, like in *In re Omeprazole* and *Unigene*, the Court

looked to the expectations of a skilled person at the time of the invention.

In *Eli Lilly v. Teva* the Federal Circuit affirmed the district court’s decision that patents relating to the osteoporosis drug Evista® were valid. The patents were directed to a method of inhibiting bone loss in post-menopausal women or treating post-menopausal osteoporosis comprising administering a single daily oral dose of an effective amount of raloxifene hydrochloride. Raloxifene, the active ingredient in Evista®, was previously known and tested for treating breast cancer and autoimmune disorders. The district court and Federal Circuit noted that osteoporosis and autoimmune disorders are very different conditions and a person of skill in the art would not expect that the same compound could be successfully used for both. In addition, existing information taught away from using raloxifene because it was believed to have significant bioavailability problems. Later studies, however, showed that raloxifene prevented bone loss. Based on the state of the art at the time of the invention, the Federal Circuit agreed with the district court that it was not obvious to a skilled person to use raloxifene to treat osteoporosis and that the method-of-use patents were valid.<sup>23</sup>

On the other hand, in *King* the Federal Circuit addressed two method-of-use patents relating to the muscle relaxant Skelaxin®. The patents related to a method of increasing the bioavailability of the active ingredient (metaxalone) by administering an oral dosage form with food, or by informing the patient that taking the drug with food increases its bioavailability. Like in *Eli Lilly v. Actavis* and *Eli Lilly v. Teva*, the active ingredient in the pharmaceutical product was known in the prior art. Unlike in the two *Eli Lilly* cases, the product at issue was previously sold for the same indication as in the patents in suit. In addition, prior art disclosed that administering metaxalone with food decreases gastric upset. The district court granted Eon’s motion for summary judgment of invalidity because it determined that increased bioavailability was an inherent result of taking metaxalone with food (as disclosed in the prior art). The Federal Circuit agreed with the district court’s anticipation analysis, stating that metaxalone had been used for decades to treat muscle pain and that it was known to administer the drug with food.

Method-of-use patents have also been invalidated for obviousness-type double patenting. In these cases the

<sup>20</sup> *Eli Lilly and Co. v. Actavis Elizabeth LLC*, No. 2010-1500, 2011 WL 3235718 (Fed. Cir. July 29, 2011) (9 PLIR 989, 8/5/11).

<sup>21</sup> *Eli Lilly and Co. v. Teva Pharms. USA, Inc.*, 619 F.3d 1329 (Fed. Cir. 2010) (8 PLIR 1133, 9/10/10).

<sup>22</sup> *King Pharms., Inc. v. Eon Labs, Inc.*, 616 F.3d 1267 (Fed. Cir. 2010) (8 PLIR 1014, 8/6/10).

<sup>23</sup> *Eli Lilly* also asserted patents directed to formulations using an active ingredient of a particular particle size, set to expire three to five years later than the method-of-use patents. To address infringement, *Eli Lilly* sought a claim construction that an active ingredient particle size limitation applied broadly to the active ingredient before formulating as well as the active ingredient in the final formulation. The Court adopted *Eli Lilly*’s claim construction, but then invalidated the formulation patents for lack of a written description because they did not disclose the idea or procedure for measuring particle size in the final formulation.

courts held that the method-of-use claims were invalid because they were not patentably distinct from the disclosures of earlier active ingredient patents and there was no terminal disclaimer. The Court's analysis highlights that method-of-use patents need to disclose a use for the product that is sufficiently different from previously disclosed uses.

For example, in *Sun v. Eli Lilly*<sup>24</sup> the Federal Circuit affirmed the district court's decision that a patent claiming the use of gemcitabine (the active ingredient in Gemzar®) to treat cancer was invalid for obviousness-type double patenting. The Court referred to an earlier patent that claimed gemcitabine and a method of using it to treat viral infections. That patent's specification also mentioned that gemcitabine could be used to treat cancer. The Court invalidated the patent in suit based on this disclosure and explained that an inventor cannot receive a patent on a composition of matter that discloses its uses in the specification, and later extend the patent term by obtaining patents that claim these same uses.

Similarly, in *Pfizer v. Teva*<sup>25</sup> the Federal Circuit affirmed that a method-of-use patent relating to the drug Celebrex® was invalid for obviousness-type double patenting because the patent "merely claims a particular use described in [an earlier patent] of the claimed compositions of the [earlier patent]." Although Pfizer prevailed on infringement and validity of patents claiming the active ingredient and formulation, it was unable to benefit from the later expiration date of the method-of-use patent.

Litigants developing strategies relating to method-of-use patents should also consider possible enablement challenges and whether the patent disclosures will permit use of the claimed methods without undue experimentation. The inquiry generally relates to the indications disclosed in the patent, the amount of testing that is in the specification or was available at the time of the invention, and dosage information provided in the patent.

In *Eli Lilly v. Actavis*, discussed above, the Federal Circuit determined that a patent specification that contained

statements that atomoxetine was useful for treatment of ADHD, and supporting human testing that was completed shortly after the application was filed but not included in the specification met the enablement requirement. The Federal Circuit noted that in cases where the priority date is not in dispute, post-filing evidence can be used to substantiate utility statements that are already in the specification. In contrast, in *In re '318 Patent Infringement Litigation*<sup>26</sup> a patent that claimed a method of treating Alzheimer's disease by administering a therapeutically effective amount of galantamine or certain salts was held invalid for lack of enablement. The district court held that the specification did not demonstrate utility because relevant animal testing was not complete at the time the patent issued and that the patent did not provide sufficient dosage information to teach a skilled person how to use the claimed method. Affirming the district court's decision, the Federal Circuit explained that patents cannot claim "a mere research proposal" and that typical patent applications need to be supported by test results, even if they are in vitro or animal tests. The key difference between *Eli Lilly v. Actavis* and this case appears to be the inventor's testimony that she was not sure galantamine would work when she submitted the patent. Given this

admission and the lack of testing noted by the district court, the Federal Circuit held that the patent did not satisfy the enablement requirement.

\* \* \*

Although active ingredient patents remain the strongest protection from a brand name company's perspective, Federal Circuit and district court statistics show that brand name companies have significant success asserting formulation and method-of-use patents, even though validity decisions on these patents are split between brand name companies and generic challengers. A review of the case law assists in analyzing the strengths and weaknesses of potential invalidity arguments for formulation and method-of-use patents and in assessing the chances of maintaining or invalidating these types of patents.

Errol Taylor was recognized as one of the country's leading attorneys in the pharmaceutical arena, and was touted as having "a calm approach and strong analytic mind."

— *IAM Licensing 250: The World's Leading Patent & Technology Licensing Lawyers*, 2011

<sup>24</sup> *Sun Pharma. Indus., Ltd. v. Eli Lilly and Co.*, 611 F.3d 1381 (Fed. Cir. 2010) (8 PLIR 1013, 8/6/10).

<sup>25</sup> *Pfizer, Inc. v. Teva Pharms. USA, Inc.*, 518 F.3d 1353 (Fed. Cir. 2008) (6 PLIR 285, 3/14/08).

<sup>26</sup> *In re '318 Patent Infringement Litigation*, 583 F.3d 1317 (Fed. Cir. 2009) (7 PLIR 1128, 10/2/09).



# Reaffirming the Inventor's Role In Patent Ownership

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The Supreme Court delivered its opinion in June in *Board of Trustees of the Leland Stanford Junior University v. Roche Molecular Systems Inc.*, 131 S. Ct. 2188 (June 6, 2011), the first affirmation of a Federal Circuit patent law analysis in years.<sup>1</sup>

This was also the first time the court had ever tackled interpretation of the University and Small Business Procedures Act of 1980 (better known as the Bayh-Dole Act, 35 U.S.C. §§ 200-212). At issue was whether the provisions of the Bayh-Dole Act automatically grant ownership of federally funded inventions to research institutions rather than to the inventor.

The Bayh-Dole Act allows research institutions to retain title to inventions funded by federal research money. Since its enactment, the number of patents American universities seek annually has increased tenfold.<sup>2</sup>

Before the Bayh-Dole Act was enacted in 1980, the federal government had no uniform policy for the ownership of the fruits of the research it funded. Some agencies retained ownership of inventions derived from research they funded. Other agencies allowed institutions

to retain ownership of inventions they developed through federally funded research, in exchange for a license granting the federal government permission to use the patented invention.

Each of these approaches had problems. When the government retained ownership, patents were rarely put to use commercially.<sup>3</sup> Under the licensing approach, industry had to contend with more than 26 agency policies, which proved a confusing administrative burden.

In response, Congress enacted Bayh-Dole. The act formalized the ownership rights between research institutions (called “contractors” under Bayh-Dole) and the federal government.

Under Bayh-Dole, a contractor can gain ownership of a government-funded invention as long as the contractor meets certain requirements, such as disclosing the invention to the agency and making a written election to retain title to the patent. Otherwise, the government may receive title. In any case, the government retains “march-in rights,” permitting it, under certain circumstances, to require the contractor to grant a license to a third party.

<sup>1</sup> The court's last decision affirming both the reasoning and judgment of the Federal Circuit appears to have been *J.E.M. Ag Supply v. Pioneer Hi-Bred International*, 534 U.S. 124 (2001), which related to the patentability of newly developed plant breeds.

<sup>2</sup> *Innovation's Golden Goose*, *The Economist*, Dec. 12, 2002.

<sup>3</sup> For example, before Bayh-Dole, the government licensed less than 5 percent of its patents to industry. In contrast, by 1998, 63 percent of all university inventions were federally funded, and nearly half of these were licensed to industry. See NIH Response to the Conference Report Request for a Plan to Ensure Taxpayers' Interests are Protected (July 2001), available at [http://www.ott.nih.gov/policy/policy\\_protect\\_text.aspx#](http://www.ott.nih.gov/policy/policy_protect_text.aspx#).

The wording of the Bayh-Dole Act posed a potential conflict with established federal patent law, however. In *Stanford v. Roche*, the question arose as to how Section 101 of the Patent Act, 35 U.S.C. § 101, fits into the Bayh-Dole framework.

Normally, under the Patent Act, ownership of a patent rests with the inventor. Section 101 says “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent.”

What happens, then, if an inventor, exercising rights apparently granted under the Patent Act, assigns his rights to a third party, rather than to the contractor for a government-funded invention? If Bayh-Dole automatically vests ownership in the contractor, an assignment by the inventor is subject to the contractor’s superior rights. If the ownership rests with the inventor, however, it appears that an inventor could subvert the framework of Bayh-Dole.

## FACTS OF STANFORD V. ROCHE

The three patents-in-suit at issue in the case are directed to methods for quantifying HIV in human blood samples and correlating those measurements to the effectiveness of drugs that fight the retrovirus. The claimed methods use the polymerase chain reaction technique for measuring the level of ribonucleic acid from HIV in the blood of infected humans.

PCR is a common laboratory technique that provides copies of DNA segments for, among other applications, identifying genes or testing for diseases.

In 1988 Stanford University hired Dr. Mark Holodniy as a research fellow to develop a PCR-based screen for HIV. When he was hired, Holodniy signed a “copyright and patent agreement” obligating him to assign his inventions to the university.

The agreement stated the following: “I agree to assign or confirm in writing to Stanford and/or sponsors that right, title and interest in ... such inventions as required by contracts or grants.”

Shortly thereafter, and while still employed by Stanford, Holodniy began regular visits to Cetus, a company that developed PCR techniques in the early 1980s. Holodniy also signed Cetus’ “visitor’s confidentiality agreement,” which said “[Holodniy] will assign and do[es] hereby assign to Cetus, [his] right[,] title, and interest in each of the

Before the Bayh-Dole Act was enacted in 1980, the federal government had no uniform policy for the ownership of the fruits of the research it funded.

ideas, inventions and improvements” that he may devise from his work at Cetus.

Stanford and Cetus were also parties to “materials transfer agreements” permitting Stanford to use PCR-related materials and information.

In 1991 Roche purchased Cetus’ PCR business (including its agreements with Holodniy and Stanford) and began manufacturing HIV detection kits that screened for retroviral RNA.

Stanford filed the parent application to the patents-in-suit May 14, 1992.

Holodniy, however, did not execute a written assignment of his rights in that application to Stanford until 1995.

In 2005 Stanford sued Roche in the Northern District of California, alleging that Roche’s HIV detection kits infringed its patents. Roche counterclaimed, arguing that Stanford lacked standing to sue for infringement and that Roche possessed an ownership interest in the patents-in-suit.

The District Court construed the patent claims and ultimately held them invalid as obvious on Roche’s motion for summary judgment.

## THE FEDERAL CIRCUIT DECISION

The Federal Circuit vacated the District Court’s order granting Roche’s motion for summary judgment on the grounds that Stanford did not have an ownership interest in the patents-in-suit, and therefore, the District Court lacked jurisdiction to address their validity. *Bd. of Trustees of the Leland Stanford Junior Univ. v. Roche Molecular Sys.*, 583 F.3d 832 (Fed. Cir. 2009).

The Federal Circuit first confirmed that the question of ownership of patent rights is “typically a question exclusively for state courts.” Pointing to an exception to that rule, however, the court noted that “the question of whether contractual language effects a present assignment of patent rights, or an agreement to assign rights in the future, is resolved by Federal Circuit law.”

In order to determine ownership of the patents, the Federal Circuit turned to the language Stanford used in the copyright and patent agreement. Stanford’s agreement said “agree to assign.” The court held that this meant Holodniy “agreed only to assign his invention rights to Stanford at an undetermined time.”

The court noted that in *IpVenture Inc. v. Prostar Computer*, 503 F.3d 1324, 1327 (Fed. Cir. 2007), “[w]e have ruled that



the contract language ‘agree to assign’ reflects a mere promise to assign rights in the future, not an immediate transfer of expectant interests.” At best, therefore, Stanford gained only “certain equitable rights” against Holodniy upon execution of the agreement.

On the other hand, Cetus’ visitor’s confidentiality agreement used the words “I will assign and do hereby assign to CETUS, my right, title and interest in each of the ideas, inventions and improvements.” The court held that this meant Cetus immediately gained equitable title to Holodniy’s inventions upon execution of the confidentiality agreement. Thus, the court recognized a critical distinction between the somewhat passive language of the Stanford agreement and the more immediate language of Cetus’ agreement.

The court went on to analyze title to the patents-in-suit, finding that Cetus’ equitable title converted to legal title, at the latest, on May 14, 1992, the filing date of the parent application. To support this holding, the court quoted *FilmTec Corp. v. Allied-Signal Inc.*, 939 F.2d 1568, 1572 (Fed. Cir. 1991): “Once the invention is made and an application for patent is filed ... legal title to the rights accruing thereunder would be in the assignee..., and the assignor-inventor would have nothing remaining to assign.” Because Holodniy had already assigned his patent rights to Cetus, his written assignment to Stanford in 1995 had no legal effect.

Stanford contended that because Holodniy’s research was funded under National Institutes of Health contracts, Stanford’s election to retain title under the Bayh-Dole Act meant that Holodniy had rights to the patent only if both the government and Stanford declined to exercise their rights.

The court held that Stanford’s interpretation of the Bayh-Dole Act was unsupported by any “reasons or authorities.” Accordingly, the act could not void Holodniy’s prior assignment to Cetus.



## SUPREME COURT CERTIORARI AND BRIEFING

On Nov. 1, 2010, the Supreme Court granted review of the Federal Circuit’s decision on whether the Bayh-Dole Act vested ownership rights in the contractor (Stanford), rather than the inventor. The briefs explored both the text of the act and the policy implications of each of the scenarios.

### Arguments based on the text of Bayh-Dole

Both Stanford and Roche argued that the text of the act supported their positions. Stanford noted that the act applied to “subject inventions,” defined as “any invention of the contractor conceived or first actually reduced to practice in the performance of work under a funding agreement.”

Stanford said “[s]ince an institution can only create an invention through the actions of its employees, this language is naturally read to include all inventions made by the contractor’s employees with the aid of federal funding.”

Roche countered that the phrase “of the contractor” does not grant ownership; it merely refers to inventions already owned by the contractor.

Stanford next observed that the act allows the contractor

## Reaping the benefits of the Bayh-Dole Act: What you should do

### Research Institutions/Contractors

Clearly establish contractor ownership of all inventions made with federal funding.

### Companies Working with Contractors

Educate employees on the risks of signing conflicting patent ownership agreements.

### Investors/Acquirers/Licensors

Investigate all possible conflicted assignments of patent rights.

to “retain title to any subject invention” as long as the contractor complies with certain provisions of the act. If these conditions are not met, the government receives title. If the contractor elects not to retain title, the government “may consider and after consultation with the contractor grant requests for retention of rights by the inventor.”

Within this framework, Stanford argued, Congress did not intend that an inventor could circumvent the statutory arrangement by assigning away his rights to a patent.

In an amicus brief in support of Stanford’s petition for certiorari, the United States supported Stanford’s argument, describing the Bayh-Dole Act as a hierarchy of ownership. At the top is the government, followed by the contractor and, at the bottom, the inventor.

In response to these arguments, Roche answered that the description of the hierarchy is correct, but only for inventions “of the contractor.” Unless an employee assigns ownership rights to the contractor, an invention is not “of the contractor.”

Roche countered with its own textual arguments. It pointed out that in several statutes, Congress explicitly vested ownership in an entity other than the inventor. For example, in statutes superseded by the Bayh-Dole Act, rights to inventions developed under contracts with NASA and the Department of Energy were the property of the United States. Roche’s point was that Congress knew how to draft a statute in which the normal rule of ownership vested in the inventor does not apply. The fact that Congress failed to include explicit language in the Bayh-Dole Act, Roche maintained, meant that a court should not imply it.

### **Policy arguments**

Stanford made several policy arguments in support of its position. The university argued that, under Roche’s interpretation of Bayh-Dole, ownership of patents funded by the government would be permanently clouded. Stanford said if the Federal Circuit’s decision were allowed to stand, a contractor would never know if it had clear title to patents stemming from government-funded research because of the ever-present threat that the inventor had assigned his rights away.

Stanford also argued that the Federal Circuit decision undermined the purpose of

Under Bayh-Dole, a contractor can gain ownership of a government-funded invention as long as the contractor meets certain requirements.

the Bayh-Dole Act: to fund research for the public good. To recognize Cetus’ ownership of the patents, Stanford argued, would acknowledge a “loophole” in the Bayh-Dole framework. This loophole, Stanford said, “calls into question the government’s ability to manage federally funded inventions for the benefit of the public.”

Stanford added that the Federal Circuit ruling would be a return to the “bad old days” before the Bayh-Dole Act, when a multitude of agencies and statutes regulated government-funded

research. Without the clarity that a contractor university had title to government-funded inventions, Stanford claimed, collaboration between the government, research institutions and business would be chilled.

Roche argued that, before the Federal Circuit ruling, contractors already acted as if patent ownership vested in the inventor. If contractors believed they automatically had rights to inventions, they would have had no reason to make their employees assign inventorship rights. Roche noted several examples of assignment agreements in which the employee assigned his present right, rather than agreed to assign in the future, as Stanford’s assignment contract provided.

### **Amicus briefs**

The case drew widespread attention in the research community. Seven briefs supported Stanford, four supported Roche and one was for neither party. Additionally, at the certiorari stage, four amicus briefs in support of Stanford were submitted.

Predictably, several groups representing the recipients of federal research dollars, such as Massachusetts Institute of Technology, the Wisconsin Alumni Research Foundation and the Association of American Universities, urged the court to adopt Stanford’s position. Aware that the Federal Circuit holding could result in the loss of government-funded inventions due to insufficiently drafted assignment contracts, supporters of Stanford argued that Roche’s position represented a “loophole” circumventing the proper functioning of the Bayh-Dole Act.

Groups representing inventors supported Roche because any rule automatically divesting inventors of their patent rights is contrary to their interests. Industry groups supported Roche because industry sometimes collaborates with research institutions that receive federal funding. They argued that a rule automatically granting patent rights to

the contractor would nullify industry's rights to a jointly developed invention.

The American Intellectual Property Law Association made an interesting argument. The AIPLA said Stanford's position would result in a taking of private property without due process or fair compensation, which is contrary to the Constitution. The group also argued that the funding of the patent cannot justify the taking because the government is not paying the inventor but rather the inventor's employer.

Another notable amicus brief was submitted by former U.S. Sen. Birch Bayh, one of the drafters of the act. In support of Stanford, he said Congress chose to give research institutions the "lead role" and that Congress never intended for federally funded patent rights to be predicated on assignments from the inventor. The brief also claimed that Roche's position would compromise Bayh-Dole by allowing inventors to trump the interests of the public and the government.

## ORAL ARGUMENT

The Supreme Court heard oral arguments Feb. 28. During Stanford's argument, Justice Samuel Alito asked whether universities had been proceeding on the assumption that the Bayh-Dole Act vested ownership in the contractor rather than the inventor. If ownership automatically vested in the contractor, Alito implied, the assignment of rights to inventions, which Stanford had Holodniy sign, would have

The Supreme Court's decision makes clear that if government contractors intend to reap the benefits of the Bayh-Dole Act, their employees must execute agreements that clearly assign to the contractor any inventions made with federal funding.

been unnecessary. To this, Stanford's counsel did not provide a reasoned response.

Justices Alito and Antonin Scalia pointed out another weakness in Stanford's case. The normal rule is that inventors have rights to their inventions, even if those inventions were made during employment. If Congress wanted to vest ownership rights in the contractor instead of the inventor it should have made that point explicit.

During oral argument, Deputy Solicitor General Malcolm L. Stewart emphasized that if the Federal Circuit decision were allowed to stand, contractor universities and inventors could contract around the act to cut out the government. For example, he said the contractor and inventor might agree to

split the royalties from a patent, excluding the government entirely despite its funding. But several of the justices asked why the government could not simply require an assignment to the contractor as a condition of federal funding to guard against this possibility.

During Roche's oral argument, Justice Alito said the statute appeared to assume that the contractor would always have rights to inventions derived from federally funded research. Justice Sonia Sotomayor added there appeared to be no reason Congress would have wanted contractors and inventors to be able to circumvent the government's rights by contracting around Bayh-Dole. Roche's counsel responded that the act governed only the

relationship between the contractor and the government.

He said there was no need to regulate the relationship between the contractor and inventor because, before passage of the act, contractor universities had shown they were capable of securing rights in the inventions of their employees.

He also raised the point previously noted by several of the justices: the government could control the inventor-contractor relationship by refusing to fund research unless inventors assigned their rights to their contractor employers.







## SUPREME COURT DECISION

The Supreme Court handed down its decision June 6. In an opinion by Chief Justice John Roberts, the court affirmed the Federal Circuit by a margin of 7-2. Justices Stephen Breyer and Ruth Bader Ginsburg dissented.

The court's decision began with the baseline rule that patent rights in an invention vest in the inventor. Citing Congress' authority in the Constitution "[t]o promote the Progress of Science and useful Arts, by securing ... to Authors and Inventors the exclusive Right to their respective Writings and Discoveries," the court observed that in more than 220 years since the Patent Act, this basic rule has remained unchanged.

The court next noted that, in the past, Congress has vested rights in an invention to an entity other than the inventor, such as the government. When it did so, though, Congress was explicit. According to the court, however, language divesting the inventors of their rights is "noticeably absent" from the Bayh-Dole Act.

The court then addressed Stanford's arguments that the language of the act implied that rights to an invention vested in contractors, rather than the inventors.

The court said it would be odd for Congress to rely on implication to overturn the general rule of inventors' rights to their inventions. Accordingly, the court rejected Stanford's reading of the statute.

The court also discussed the implications were Stanford's argument to prevail. The act applies to subject inventions "conceived or first actually reduced to practice in the performance of work ... funded in whole or in part by the federal government."

The court declared that, under Stanford's argument, an employee's invention would belong to the contractor even if the invention was conceived prior to the employment, as long as it was reduced to practice during employment. Furthermore, the contractor would gain title to inventions even if only "one dollar of federal funding was applied toward the invention's conception or reduction to practice."

Such a "sea change" in the basic rules of ownership of inventions, the court determined, cannot rise by implication.

Even the dissent did not argue for Stanford's position. Instead, Justices Breyer and Ginsburg would have remanded the case to the Federal Circuit to consider two arguments not presented by either party.

First, the Federal Circuit's decision hinged on the difference between Stanford's and Cetus' assignment contracts: the "agree to assign" versus "hereby assign" language. The dissent argued that, under the law at the time of Stanford's assignment, there was no distinction between these clauses. According to the dissent, the Federal Circuit modified this law in *FilmTec* but provided no reasoned explanation. The dissent would have had the Federal Circuit revisit the *FilmTec* decision.

Second, the dissent argued that the Bayh-Dole Act could be interpreted to require an assignment of patent rights in federally funded inventions. The dissent noted that Executive Order 10096 requires federal employees to assign their inventions to the government. Because the act and the executive order's objectives were "roughly analogous," the dissent said, they would have remanded the case to the Federal Circuit to consider whether the act required an assignment of inventions to the contractor.

## IMPLICATIONS OF STANFORD V. ROCHE

The Supreme Court's decision makes clear that if government contractors intend to reap the benefits of the Bayh-Dole Act, they must have their employees execute agreements that clearly assign to the contractor any inventions made with federal funding.

In addition, any company engaged in cooperative research with other entities should educate their employees of the dangers of signing any agreements that would conflict with their invention assignment obligations to the company. In the context of corporate transactions, any potential investor, acquirer or licensee of "bet-the-company" patent rights would do well to conduct a detailed "due diligence" investigation<sup>4</sup> into possible conflicted assignments of the target inventions.

At this writing, both houses of Congress have passed

similar bills that would change the U.S. patent system from a "first to invent" system to a "first to file" system, which would also overturn 220 years of patent law.<sup>5</sup> The court's focus on the undesirability of massive change to the "norm" of inventors' rights under U.S. patent law and its focus on Congress' limited authority to vest patent rights in "inventors," will likely be the basis of arguments that the proposed first-to-file system could be found unconstitutional.

<sup>4</sup> See *Ernst & Ernst v. Hochfelder*, 425 U.S. 185, 208 (1976) (citing 15 U.S.C. § 77k(b)(3)(B)(i)).

<sup>5</sup> See Patent Act of 1790, Ch. 7, 1 Stat. 109-112 (Apr. 10, 1790), at §5 (only "first and true inventor or discoverer" entitled to patent).





## ‘Therasense’: Vaccine for the plague

By  
**Lawrence T. Kass**  
and  
**Nathaniel T. Browand**

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The Federal Circuit issued a much needed ruling, tightening requisite proofs to render a patent unenforceable for inequitable conduct.

Finally, a vaccine for the plague. In *Therasense Inc. v. Becton, Dickinson & Co.*, the U.S. Court of Appeals for the Federal Circuit rendered a much needed decision tightening the analytical framework and requisite proofs to render a patent unenforceable for inequitable conduct in patent litigation. No. 2008-1511 (Fed. Cir. May 25, 2011). Inequitable conduct is a judicial doctrine that was created to address fraud or unclean hands by patent applicants in dealing with the U.S. Patent and Trademark Office (PTO). It theoretically required proof of two elements: First, there must be an intent to deceive the PTO by some act or omission; and second, the act or omission must be material to patentability, such as withholding a material prior-art reference from the PTO or making a material false statement. In the past, however,

courts would “balance” the evidence for these elements on a sliding scale in a manner that too often led to holdings of inequitable conduct with little or no independent support for a finding of intent.

Inequitable conduct became a common defense in part because this threshold of proof was low relative to the severe consequences of an adverse determination. It has been called the “atomic bomb” of patent litigation because such determination not only renders the patent unenforceable but may also render related patents unenforceable while also spawning antitrust and unfair competition claims. The combination of low burden with such drastic consequences caused inequitable conduct allegations against even reputable lawyers to become so commonplace as to be famously characterized as an “absolute plague.”

This plague affected not only the courts but the entire patent system. In the patent-application process (also called patent prosecution), lawyers came to labor under a constant specter that charges might someday be leveled against them for any misstep in prosecution. They would understandably act out of an abundance of caution by tending to overdisclose. An unfortunate byproduct was that PTO examiners would become buried in numerous prior-art references of marginal



value and piles of other tangential information, obscuring the most relevant prior art and information, thereby undermining the quality of the examination process.

These developments set the stage for the Federal Circuit's announcement that it would be revisiting the framework and proofs required for inequitable conduct in the *Therasense* rehearing. In its decision, the court cited a number of cases and amicus submissions in acknowledging the detrimental effect of the prior balancing test and the low threshold required to prove inequitable conduct. Abandoning that framework, the Federal Circuit held that a court must evaluate the evidence of specific intent to deceive independent of its analysis of materiality. And although such intent may be inferred from indirect and circumstantial evidence, it must be "the single most reasonable inference able to be drawn from the evidence."

For the materiality prong, the court generally adopted a standard that requires proof that, "but for" the improper conduct, at least one claim would have been found unpatentable. The court also incorporated an egregious-conduct exception that allows extraordinary affirmative acts, such as false affidavits, to be considered material without but-for proof.

*Therasense* should be heralded by patent holders and prosecutors as a good decision. The increased burden to prove inequitable conduct is appropriate given the powerful remedy, and should provide some inoculation against the plague of inequitable conduct allegations. It also provides substantial guidance in identifying circumstances

in which an inequitable conduct allegation lacks merit, which should help to avoid unsubstantiated accusations.

*Therasense* is also likely to streamline patent litigation. Because the standard for materiality is now primarily but-for unpatentability, the scope of references used to allege inequitable conduct may be narrowed in many cases to those capable of proving invalidity. Along similar lines, more inequitable conduct allegations may be resolved on summary judgment because courts may now more efficiently address prior art relating to invalidity together with materiality.

In addition, *Therasense* provides important guidance for inventors and patent prosecutors, who may treat the but-for rule as a safe harbor from future inequitable conduct allegations. Past concerns about disclosing every possible reference and every event during prosecution of related U.S. and foreign patent applications should be much diminished. As the routine practice of overdisclosure subsides, patent examiners may also come to appreciate the *Therasense* decision.

*Therasense* also represents one of the most significant pro-patent pronouncements in recent memory. Although the sharply divided Federal Circuit suggests that U.S. Supreme Court review is a real possibility, if the decision stands, *Therasense* is at least one departure from recent decisions that have worn away at certain aspects of patent rights.

*Therasense* should therefore help treat, if not eradicate, the inequitable conduct plague, streamline litigation and prosecution, and provide clear and helpful guidance to patent litigators and prosecutors.

# The Biosimilar Ballet: Patent Litigation Under the 2010 Health Care Reform Act

By

**Arie M. Michelsohn**

Corporate Counsel, January 6, 2011

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## Prologue: Patent Litigation as an Incentive to Develop Biosimilar Drugs

The 2010 Health Care Reform Act brought not only insurance reform, but also added new subsections (k) and (l) to the biologics licensing statute, creating an abbreviated regulatory pathway to enable a generic, or “biosimilar,” biologics industry for the first time. (Title VII of the 2010 Health Care Reform Act creates a new biosimilars regulatory pathway by amending the biologics licensing statute, § 351 of the Public Health Services Act (“PHSA”), to add a new “subsection (k),” codified at 42 U.S.C. § 262(a)(1)(A)(k) et seq.)

Central to this pathway is a patent litigation scheme as an incentive for biosimilar development. (Codified as subsection (l) of the biologics licensing statute, 42 U.S.C. § 262(a)(1)(A)(k) et seq.) The scheme, outlined in subsection (l), comprises a multi-stage, highly choreographed, and improvisational series of interactions between a biosimilar applicant under subsection (k) (called the “subsection (k) applicant” (“SSKA”), and the innovator drug company that owns the approved application for the corresponding “reference product” (the “reference product sponsor,” or (“RPS”).

The complexity of the scheme (which is loosely based on, but

much more complicated than, the Hatch-Waxman Act that incentivized development of generic, small-molecule drugs beginning over 25 years ago) appears, at least at first glance, to rival three-dimensional chess. This article provides a guide through the complexity of the new biosimilars litigation scheme, using the metaphor of a ballet.

## SiSKA & RiPS: A Strategic Ballet, in Three Acts By: The United States Congress, March 23, 2010 Cast of Characters

SiSKA, the follow-on filer (the so-called “subsection (k) applicant”), who has asked FDA to approve her application to market a biosimilar drug pursuant to the new subsection (k) of the biologics licensing act; and

RiPS, her counterpart in this drama, the innovator who is the owner, or sponsor, of the reference product SiSKA wants to copy and sell (the “reference product sponsor”). (Those who exclusively license RiPS and retain litigation rights may also join in the ballet, but as they typically are aligned with RiPS, they are omitted here for simplicity.)

The ballet of SiSKA and RiPS takes place in three stages, or Acts, called The Four-Step, The Tango, and The Jig. The overall scheme is illustrated in Figure 1, and described further, below.



## ACT I: The Four-Step [Subsections (I)(1-3)] The choreography of Act I is illustrated in Figure 2A, and may be described as follows:

Act I begins when the FDA accepts an application filed by SiSKA. The statute does not define a time period during which the FDA must accept a filed application, which could lead to some delay in the start of the show. However, within 20 days of such acceptance by the FDA, SiSKA and RiPS must begin their four-step dance, as required under subsections (I)(2) and (3) of the statute:

### Virtually, in Their Respective Offices

SiSKA: Dear RiPS, pursuant to subsection (I)(2) of the new biosimilars legislation, here is the biosimilar application I filed with the FDA, including all its confidential information. I am also giving you any confidential information I consider additionally necessary to inform you of how my biosimilar product is made. You may ask me for more information, and I may give it to you if I want to. Of course, you understand that all of the confidential information is provided under the strict confidentiality provisions of subsection (I)(1), which requires that it only be used by a limited number of your outside and in-house counsel and only for the purpose of determining whether I infringe any of your patents, and that your failure to respect this confidentiality will cause me irreparable harm.

### Within 60 days, RiPS must respond:

RiPS: Thank you, SiSKA. Here is my list of patents pursuant to subsection (I)(3)(A) that I believe you would infringe if you made, used, sold, offered for sale, or imported your proposed biosimilar product. Also, I give you my list of which of those patents I would be willing to license to you.

### Within 60 days, SiSKA must respond:

SiSKA: Dear RiPS, pursuant to subsection (I)(3)(B), here are my detailed factual and legal reasons on a claim-by-claim basis why I believe, with respect to each of the patents on your list, the patent is not infringed, invalid, and/or unenforceable. I also respond to your kind licensing offer. And finally, I list those patents that I want to, which you did not list, and which I believe would be infringed by making, using, selling, offering for sale, or importing my biosimilar

## Subsection (I) Patent litigation arising from biosimilar applications

Statutory Provision 42 U.S.C. § 262(a)(1) (A)(i)-(9)	General Content
(I) (1)	Statutory protective order governing SSKA provision of confidential information to RPS.
(I) (2)	Requirements for submissions of confidential information by SSKA to RPS 20 days after FDA acceptance of SSKA application.
(I) (3)	Requirements for sequential exchange of detailed factual and legal information between RPS and SSKA regarding product and process patents covering the biosimilar drug, over the course of 180 days.
(I) (4)	Requirement for good-faith negotiations between SSKA and RPS for up to 15 days to agree on which, if any, patents will be litigated in the "immediate" (subsection (I)(6)) phase ("(I)(4) patent list").
(I) (5)	Procedure to establish which, if any, patents will be litigated in the "immediate" (subsection (I)(6)) phase, if the parties cannot agree ("(I)(5) patent list").
(I) (6)	"IMMEDIATE" PATENT LITIGATION: Requires RPS to file lawsuit on any (I)(4) or (I)(5) list of patents within 30 days; requires SSKA to notify FDA of complaint; and requires FDA to publish such notice in the Federal Register.
(I) (7)	Procedure for patents issued or licensed after RPS has provided its initial patent list (under (I)(3)) to SSKA; requires vetting of such patents pursuant to (I)(3).
(I) (8)	"PRELIMINARY INJUNCTION" PATENT LITIGATION: Requires SSKA to notice RPS 6 months (180 days) prior to commercial marketing; RPS permitted to bring PI action with respect to any (I)(3) patents not on (I)(4) or (I)(5) patent lists.
(I) (9)	Prohibits either party from bringing a DJ action until (I)(8) applies; SSKA gives RPS the information required under (I)(2); permits RPS to bring DJ action if SSKA does not take certain other required actions under the litigation scheme.

FIGURE 1.

Overview of subsection (I) of the new biosimilars legislation (codified at 42 U.S.C. § 262(a)(1)(A)(i) et seq.), which sets forth a dual-phase patent litigation scheme for resolving patent disputes arising from the filing of a subsection (k) (biosimilar) application. The references on the left of the Figure correlate to the ballet metaphor in the text.

product, and describe the factual and legal reasons why I believe, on a claim-by-claim basis, that those patents are invalid and/or unenforceable.

### Within 60 days, RiPS must respond:

RiPS: Thank you, SiSKA. Pursuant to subsection (I)(3) (C), here are my detailed factual and legal reasons why I believe, on a claim-by-claim basis, that each new patent you identified would be infringed by making, using, selling, offering for sale, or importing your proposed biosimilar product. I also provide my response to your statements on invalidity and/or unenforceability.

The curtain then closes on Act I, each of the principals with the other's lists and contentions in hand.

## Act II: The Tango [Subsections (I)(4) & (5)] The choreography of Act II is illustrated in Figure 2B, and may be described as follows:

Act II unfolds as an improvisational, strategic duet between SiSKA and RiPS, once they have shared their detailed contentions on patents. For 15 days after SiSKA receives RiPS' response under (I)



(3)(C), the statutory ballet requires that the two principals “shall engage in good faith negotiations to agree” on which, if any, patents exchanged in the Act I Four-Step will be litigated immediately, pursuant to subsection (l)(6) of the statute. If they cannot agree, they must engage in a card-game power-dance to determine the final outcome. The suspense of the interactions suggests the tango metaphor.

## In a Conference Room

If SiSKA and RiPS agree within 15 days on which patents to litigate immediately, they prepare what may be called an “(l)(4) list” of patents. Those patents on the (l)(4) list will be litigated “immediately,” pursuant to subsection (l)(6) of the statute.

If SiSKA and RiPS do not agree within the prescribed 15-day period, however, they must engage in the card-game power-dance of subsection (l)(5). Under subsection (l)(5) (A), SiSKA “shall notify” RiPS of the number of cards she will play: the number of patents she will list during the required, subsequent, list-exchange with RiPS that must occur within five days of her notification. If SiSKA fails to notify RiPS, however, then RiPS may bring a declaratory judgment action against SiSKA, pursuant to subsection (l)(9)(B), on any patents listed by RiPS during the Four-Step. (Subsection (l)(5) does not provide a time limit for SiSKA’s notification; and subsection (l)(4)(B) simply states that if the parties fail to reach agreement within 15 days, the provisions of (l)(5) shall apply. Presumably, then, given the tight schedule otherwise provided, declaratory judgment jurisdiction under (l)(9) would commence unless SiSKA notifies RiPS promptly, although there may be some ambiguity as to the timing involved.)

Upon receipt of SiSKA’s notification, SiSKA and RiPS must each give the other a list of patents that each, respectively, wants to litigate immediately (these may be called “the (l)(5) lists”). RiPS, however, may not list any more patents than the number identified by SiSKA in her notification. If, however, SiSKA identified zero patents, SiSKA may list one patent. Upon the exchange of their (l)(5) lists, RiPS then must sue SiSKA within 30 days, if at all, on any patents on either of those lists. Thus, the outcome of the Tango can result in “immediate” litigation of at least one patent, at RiPS’ discretion; but at most, one patent, unless SiSKA desires otherwise.

Act I: The Four-Step		Time	Section 42 U.S.C. § 262(a)(1) (A)...	Actions
Step 1 SSKA (l)(2) information	Step 1 SSKA (l)(2) information	20 Days	(l)(1) & (2)	SSKA must provide RPS <ul style="list-style-type: none"> <li>the biosimilar application and</li> <li>any other information SSKA believes necessary to determine how the proposed biosimilar product is made.</li> </ul> SSKA may provide additional information. <p>(Confidential information is provided subject to the provisions of the statutory protective order under subsection (l)(1).)</p> <p>Failure to provide with the above permits RPS to bring DJ on any patents covering SSKA product (subsection (l)(9)(C)).</p>
		60 Days	(l)(3)(A)	RPS must provide SSKA <ul style="list-style-type: none"> <li>a list of patent RPS believes would be infringed by SSKA product and</li> <li>a list of patents PRS offers to licence</li> </ul>
		60 Days	(l)(3)(B)	SSKA must provide RPS <ul style="list-style-type: none"> <li>detailed reasons why each claim in each patent on RPS (l)(3)(A) Lists is not infringed, and why those and any other patents that SSKA may identify are invalid and/or unenforceable; and</li> <li>a response to RPS offer to licence</li> </ul>
		60 Days	(l)(3)(C)	RPS must provide SSKA <ul style="list-style-type: none"> <li>detailed reasons why each claim in any new patent identified in SSKA(l)(3)(B) Reasons is infringed; and</li> <li>a response to SSKA statements concerning invalidity/unenforceability</li> </ul>

**FIGURE 2A.**

Overview of the four-stage process of detailed factual and legal information exchange between the subsection (k) applicant (SSKA) and the reference product sponsor (RPS) beginning 20 days after the FDA accepts the SSKA application, pursuant to subsections (l)(1)-(3) of the new biosimilars legislation.

## INTERMISSION

Any other patents identified by the principals during a Four-Step and not included on either the (l)(4) or (l)(5) lists generated during the Tango cannot be litigated until six months before commercial marketing of SiSKA’s drug. At that point, at RiPS’ discretion, SiSKA and RiPS may perform their final litigation dance, the Jig of Act III. The length of the intermission may depend on a variety of factors, including the length of FDA approval procedures, whether a biosimilar product is eligible for market exclusivity (which could cause a long intermission when the biosimilar application is filed relatively early in a reference product’s data exclusivity period), and whether a reference product is ineligible for data exclusivity (which could cause a short intermission when FDA approval of the biosimilar’s data package occurs relatively quickly).

## Act III: The Jig [Subsection (l)(8)] The choreography of Act III is illustrated in Figure 2C, and may be described as follows:

Act III begins when SiSKA notifies RiPS six months (180 days) prior to commercial marketing of her biosimilar drug, which she must do pursuant to subsection (l)(8)(A) of the new biosimilars statute.

## Act II: The Tango

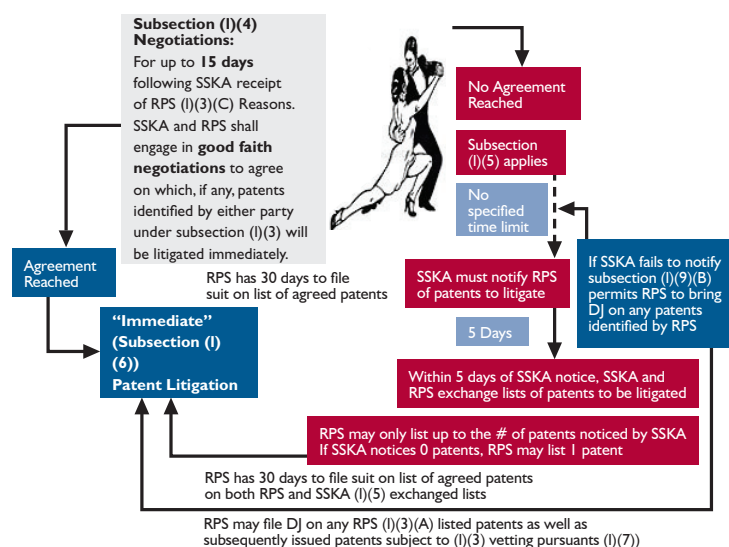


FIGURE 2B.

Overview of the negotiation process between SSKA and RPS according to subsections (l)(4) & (5) of the new biosimilars legislation, culminating in "immediate" patent litigation pursuant to subsection (l)(6).

## In Court

Upon receiving notification from SiSKA of her intent to market, RiPS may initiate the Jig by bringing a preliminary injunction action against SiSKA at any time during the six months before commercial marketing begins. RiPS may assert in this action any patents previously identified by either RiPS or SiSKA in a Four-Step, but not included on any list subject to "immediate" litigation following the Tango. (In technical terms, RiPS may sue SiSKA on any patent vetted under (l)(3) or (l)(7) and not included on any lists generated under (l)(4) or (l)(5).)

Subsection (l)(8) further provides that once RiPS initiates such a preliminary injunction action, the principals "shall reasonably cooperate to expedite such further discovery as is needed" in conjunction with the action. The relatively brief, six month interval, during which RiPS may bring his action, and the explicit, statutory requirement for expedited discovery in such an action, suggests that when brought, it will cause a frenzy of litigation activity to vet issues of infringement, validity, and enforceability, even for the well-prepared (hence, the Jig metaphor).

The frenzy likely would be particularly fierce when the parties previously do not agree to vet substantially the patent issues addressed during the "immediate" (after filing) phase of the litigation scheme.

## Act III: The Jig

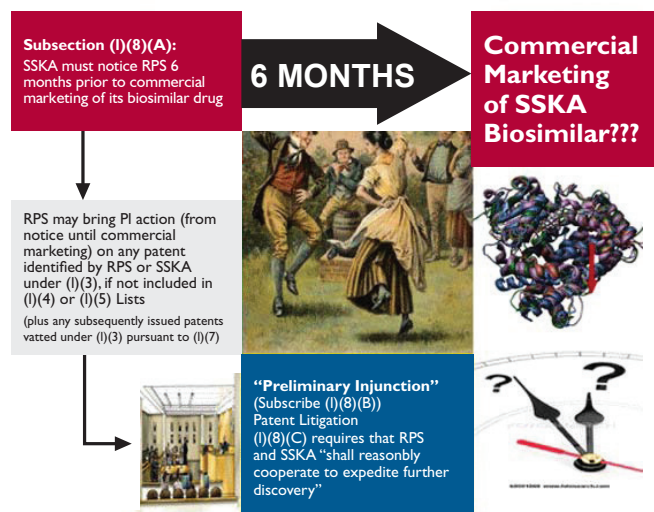


FIGURE 2C.

Overview of the final stage in the patent litigation scheme according to subsections (l)(7) & (8) of the new biosimilars legislation, requiring SSKA to notice RPS 180 days prior to commercial marketing, and permitting RPS to bring a DJ action during that time on patents on (l)(3) lists that were not previously listed under (l)(4) or (l)(5).

In any event, whether SiSKA and RiPS choose to vet their patent differences following the Tango, or in the later Jig (or both), when the Jig stage of the biosimilar patent litigation scheme is over, then the time for biosimilar patent litigation over SiSKA's drug, as it were, is up.

## Epilogue: Preparing for a Plethora of Possibilities

Taken together, the byzantine features of the new biosimilars litigation scheme create a strategic, improvisational dance between the biosimilar applicant (SSKA) and the innovator-patentee (RPS). New subsection (l) of the biologics licensing statute defines the parameters of information exchange, negotiation, and gamesmanship that choreograph this dance. The outcomes of the dance are further influenced by the data and market exclusivity provisions of new subsection (k). The dance will require numerous, detailed, and rapid strategic maneuvers once a biosimilar application is filed, which, in turn, will require adequate and substantial advance preparation. The dance can result in numerous permutations of scope and timing, and the ensuing litigation will be outcome-determinative on substantially all patent issues related to biosimilar drugs in the U.S.

If they haven't already, SiSKA and RiPS should start limbering up now.

The background of the slide is a solid orange color. A horizontal band across the middle features a blurred, glowing effect with binary code (0s and 1s) in shades of red and orange, and wavy, flame-like patterns in lighter orange and yellow. The text is centered within this band.

# SOFTWARE AND BUSINESS METHODS







# Does FINRA Regulate Cloud Computing?

By  
**Richard Sharp**  
and  
**Michael Kurzer**

This article was originally published in the Securities Technology Monitor, October 31, 2011.



*Richard Sharp is a partner and Michael Kurzer an associate at Milbank, Tweed, Hadley & McCloy LLP in New York.*

Broker-dealers are taking a liking to cloud computing. Everything from order entry to execution and settlement to storing colossal amounts of trading data has found a place in the clouds of computing capacity tied together by global networks.

You would think that the topic of cloud computing would be addressed directly by now by the Securities and Exchange Commission or the Financial Industry Regulatory Authority or both. As of the date of this article, however, neither regulator's website has any reference to the cloud.

Are the regulators simply unaware of the puffy billows floating by? Not a chance.

They treat cloud computing as a specialized form of outsourcing, and cloud computing arrangements must, among other requirements, satisfy regulatory guidance governing outsourcing.

In July 2011, the SEC approved FINRA's proposal to establish a new registration category and examination requirement for operations personnel who play an integral role in the business of a broker-dealer.

FINRA Rule 1230(b)(6), which took effect on October 17, 2011, requires that any person who supervises, or has authority to commit a firm's

capital in furtherance of, a broad range of activities of a broker-dealer's business (such activities referred to as "covered functions") be an "associated person" of the firm and registered as an Operations Professional.

FINRA is particularly concerned about those "covered functions" that involve customer funds, accounts and transactions. Being an "associated person" is a big deal, because the firm must directly supervise and maintain registration of such individuals, subject to examinations and regular filings with FINRA.

This rule is very significant for firms and their cloud service providers. FINRA makes it clear that "associated person" status is not determined based on the location from which functions are performed on behalf of the firm. Persons at a third-party service provider, including those located abroad, may be drawn within the rule, if they supervise, or have authority to commit a firm's capital in furtherance of, "covered functions."

FINRA provides some guidance as to the scope of the new rule. Persons not required to register as an Operations Professional are those whose activities are limited to performing a function ancillary to a "covered function."

Also, those whose function is to serve a role that can be viewed



as supportive of or advisory to the performance of a “covered function,” as well as those who engage solely in clerical or ministerial activities in a “covered function,” are not subject to the new registration requirement.

For smaller broker-dealers, a majority of the “covered functions” are typically performed by a clearing firm. Many clearing firms offer a range of cloud-based services to their correspondent broker-dealers, pursuant to a FINRA-approved clearing arrangement. Under these clearing arrangements, “associated persons” of the clearing firm, rather than the firm itself, supervise the “covered functions,” and would be required to register as Operations Professionals.

The situation becomes trickier when the clearing firm, in turn, looks to outsource its activities to a third-party service provider.

In March, FINRA submitted for industry comment proposed Rule 3190, which includes heightened restrictions and obligations on clearing firms. The proposed rule, subject to a limited exception for clerical or ministerial activities, requires an “associated person” of the clearing firm to perform any movement of customer proprietary cash or securities, preparation of net capital reserve formula computations, or the adoption or execution of compliance or risk management systems.

The clearing firm must adopt additional procedures to oversee third-party service providers to make certain the firm takes prompt corrective action if needed to ensure compliance with applicable requirements, as well as approve any sub-contracting by the service provider.

Proposed Rule 3190 requires clearing firms, within thirty (30) days of entering into an outsourcing arrangement, to provide FINRA with a description of the outsourced function, the identity and location of the service provider, whether it has any affiliation with the clearing firm, and the identity of the service provider’s regulator, if any.

Clearing firms would need to notify FINRA of all existing outsourcing arrangements within three (3) months of the effective date of the new rule. Though not required by the proposed rule, a clearing firm may seek a review by FINRA for approval prior to entering into an arrangement with a third-party provider. In the coming weeks, FINRA is expected to submit for approval by the SEC the final version of its proposed Rule 3190.

On October 25, 2011, FINRA issued proposed Rule 4516, which more clearly recognizes a cloud computing model for storage of a clearing firm’s records. The proposed rule would require a clearing firm to physically store certain records at its principal office, but provides an exception for records stored electronically if tagged and indexed and “accessible from the [clearing firm’s] principal office.” The comment period for the proposed rule is open until December 9, 2011.

To comply with FINRA’s outsourcing rules, many broker-dealers and their cloud providers may find it tempting to characterize services in the cloud as merely “ancillary,” “clerical and ministerial.”

Such a characterization will be increasingly difficult to sustain as cloud providers look to differentiate and “climb the value chain.” Both broker-dealers and their cloud providers should stay closely tuned to developing regulatory rules and guidance.

## Reconsidering Akamai's rehearing

*Akamai Technologies, Inc and The Massachusetts Institute of Technology v Limelight Networks, Inc* United States Court of Appeals for the Federal Circuit December 2010

By  
**Miguel Ruiz**  
and  
**Ashlee Lin**

After the Federal Circuit ordered a rehearing of the Akamai case in April 2011, Miguel Ruiz and Ashlee Lin of Milbank, Tweed, Hadley & McCloy LLP discuss why the court was correct the first time around.



Miguel Ruiz is an associate in the litigation department in the Los Angeles office of Milbank, Tweed, Hadley & McCloy LLP. His practice focuses on patent litigation, particularly related to computer technologies. Ashlee Lin is an associate in the litigation department in the Los Angeles office of Milbank, Tweed, Hadley & McCloy LLP. Her practice focuses on commercial litigation.

**What does it mean for two parties to infringe a method patent? Over the past few years, the US Court of Appeals for the Federal Circuit has provided more clarity in a series of decisions, culminating in last December's *Akamai Technologies, Inc v Limelight Networks, Inc* (Akamai I).<sup>1</sup>**

However, less than four months later, some members of the Federal Circuit expressed concern as to how far *Akamai I* had gone, particularly Circuit Judge Pauline Newman in her dissent in *McKesson Technologies Inc v Epic Systems Corp* (*McKesson I*).<sup>2</sup> As a result, the Federal Circuit has ordered an *en banc* rehearing of both *Akamai I* and *McKesson I* to settle this issue once and for all.

### Background

To appreciate the stakes at these rehearings, it's important to distinguish joint infringement, a type of direct infringement, from indirect infringement.

### Joint infringement

Black letter patent law requires that to be liable for direct infringement of a patent, an accused infringer must perform each and every element of

a claimed method.<sup>3</sup> Given that direct infringement is strict liability, the public policy behind direct infringement does not support holding one person liable where multiple persons separately perform the steps.<sup>4</sup>

Nevertheless, an infringer cannot escape liability simply by contracting out one of the steps to another party.<sup>5</sup> Until recently, courts treated this theory of joint infringement rather amorphously: recognizing that the general rule of a single actor could not be absolute, but understanding the risk of expanding strict liability and discouraging innovation.

"Black letter patent law requires that to be liable for direct infringement of a patent, an accused infringer must perform each and every element of a claimed method."

<sup>1</sup> 629 F3d 1311 (Fed Cir 2010), vacated, Nos 2009-1372, -1380, -1416, -1417 (Fed Cir Apr 20, 2011)

<sup>2</sup> 98 USP Q2d 1281 (Fed Cir 2011), vacated, No 2010-1291 (Fed Cir May 26, 2011)

<sup>3</sup> See *Warner-Jenkinson Co v Hilton Davis Chemical Co*, 520 US 17, 40 (1997)

<sup>4</sup> M Lemley, et al., *Divided Infringement Claims*, 33 *AIPLA QJ* 255, 261 (2005)

<sup>5</sup> See *Shields v Halliburton Co*, 493 F Supp 1376, 1389 (WD La 1980)

## Indirect infringement

Indirect infringement, on the other hand, has a well developed history in patent law. As early as 1871, courts have found liability for indirect infringement<sup>6</sup>. Indirect infringement encompasses two different types of infringement: (1) contributory infringement, which arises from the sale of a component used to infringe a patent; and (2) induced infringement, which arises from a third-party's purposeful actions that cause another to infringe a patent.<sup>7</sup>

Indirect infringement has two additional requirements from direct infringement. First, indirect infringement necessarily requires a finding of direct infringement before analyzing indirect liability.<sup>8</sup> Second, indirect infringement requires the accused indirect infringer to have knowledge of the infringement. Back in 1961, the Supreme Court of the United States asserted this knowledge requirement for contributory infringement in *Aro Manufacturing Co v Convertible Top Replacement Co*,<sup>9</sup> and just this May, in *Global-Tech Appliances, Inc v SEB SA*,<sup>10</sup> the Supreme Court explicitly extended this same knowledge requirement to induced infringement.

With these concepts in mind, we can appreciate the Federal Circuit's recent treatment of joint infringement.

## The evolution of joint infringement

The Federal Circuit first approached this issue in *BMC Resources, Inc v Paymentech, LP*.<sup>11</sup> In *BMC Resources*, BMC alleged that Paymentech, a company that processed financial transactions, directly infringed its method patent for pin-less debit transactions.

While Paymentech did not perform all the steps of the claimed method itself, Paymentech's actions, combined with the actions of two separate third parties, covered all of the steps of the patented method. In ruling that the combined conduct of these three actors did not amount to direct infringement, the Federal Circuit confirmed that "[i]nfraction requires, as it always has, a showing that a

defendant has practiced each and every element of the claimed invention." The court did acknowledge a limited exception where the defendant has a third party perform one or more of the elements *on its behalf*: "A party cannot avoid infringement, however, simply by contracting out steps of a patented process to another entity. In those cases, the party in control would be liable for direct infringement". However, the Federal Circuit found no evidence that Paymentech controlled or directed the activity of the other actors, and therefore it could not be liable for infringement.

One year later in *Muniauction, Inc v Thomson Corp*,<sup>12</sup> the Federal Circuit clarified that the control or direction standard for joint infringement set out in *BMC Resources* could be satisfied only where "the law would traditionally hold the accused direct infringer vicariously liable for the acts committed by another party that are required to complete performance of a claimed method". Thus, in *Muniauction*, where the defendant controlled bidders' access to its online auction system and even instructed the bidders on the system's use, the defendant did not directly infringe because the bidders were not performing steps of the patented method on behalf of the defendant.

*BMC Resources* and *Muniauction* set the stage for *Akamai I*, which involved two companies that host website content for their customers. Akamai owned method patents related to the storage and delivery of a customer's website content. While Limelight's content delivery network performed some of the steps, such as the actual storage and delivery of content, Limelight's customers performed the other steps of the method – with instruction from Limelight – such as deciding what content to outsource to local servers.

Relying on the "control or direction" test from *BMC Resources*, and traditional notions of vicarious liability as articulated in *Muniauction*, the Federal Circuit set forth a refined test for joint infringement: an accused infringer is liable for joint infringement only when an agency relationship

"The Federal Circuit set forth a refined test for joint infringement: an accused infringer is liable for joint infringement only when an agency relationship exists between the parties who perform the steps or when one party is contractually obligated to the other party to perform the steps."

<sup>6</sup> See *Wallace v Holmes*, 29 F Cas 74 (CCD Conn 1871)

<sup>7</sup> 35 USC § 271(b), (c)

<sup>8</sup> *Dynacore Holdings Corp v US Philips Corp*, 363 F3d 1263, 1272 (Fed Cir 2004)

<sup>9</sup> 365 US 336 (1961)

<sup>10</sup> 563 US \_\_\_\_ (2011)

<sup>11</sup> 498 F3d 1373 (Fed Cir 2007)

<sup>12</sup> 532 F3d 1318 (Fed Cir 2008)



exists between the parties who perform the steps or when one party is contractually obligated to the other party to perform the steps.

Under this test, Limelight could not be held liable for direct infringement because of the lack of agency between its customers and itself. Any unfair result, the court explained, could have been addressed with better patent drafting – a patentee should simply draft its patent in such a way that all the steps can be performed by a single actor.

Soon after *Akamai I*, some judges on the Federal Circuit started to limit its approach. In *Centillion Data Systems, LLC v Qwest Communications Int'l, Inc.*,<sup>13</sup> the Federal Circuit declined to extend *Akamai I* to systems claims. *Centillion* involved a system for exchanging information over the internet, which required both a service provider's computer system and a customer's personal computer. Although these elements were owned and operated separately, the Federal Circuit stated the customer could be potentially liable for direct infringement because the customer "used" every element and controlled and benefited from the whole system. On the other hand, the service provider, Qwest, could not be liable for direct infringement because it did not control or benefit from the system, but could be liable for indirect infringement.

In April 2011, less than five months after *Akamai I*, the Federal Circuit again considered the joint infringement issue in *McKesson I*.

In *McKesson I*, the plaintiff owned a patent for a method of electronic communication between health care providers and their patients to provide personalized healthcare information. Epic Systems also developed similar software, which McKesson alleged infringed its patent. Guided by *BMC Resources*, *Muniauction* and *Akamai I*, the Federal Circuit – in a split decision – affirmed the district court's finding of non-infringement because McKesson was unable to attribute the performance of all the steps to a single actor.

In her dissent, Judge Newman vehemently disagreed with what she pejoratively coined "the single-entity rule" of *BMC Resources*, *Muniauction* and *Akamai I*. Judge Newman argued that limiting joint infringement claims to

"Clear rules protect innocent parties, but uncertainty deters investment in new technology, which ultimately impedes innovation."

agency relationships and contractual obligations removes "interactive" methods from patent protection. She based her decision on older precedents that applied common-law concepts of joint liability in the area of patent infringement. In addition, Judge Newman cited to the restatement of torts, a treatise on general tort liability, for the appropriate application of joint liability generally in other torts.

One week after *McKesson I*, the Federal Circuit ordered an *en banc* rehearing of

*Akamai I* and a month after that, also ordered a rehearing of *McKesson I* to finally settle these conflicts. What should the courts do?

### Why the courts got it right the first time

At first blush, Judge Newman's opposition to *Akamai I* seems to be the impetus behind the rehearings, so it appears as if the bench is inclined to backpedal from *Akamai I*. But a closer look at her dissent reveals that her analysis conflates joint infringement with indirect infringement.

While Judge Newman does cite to cases applying common law principles of joint liability, those cases only apply to *indirect* infringement and not joint infringement. In fact, the cases Judge Newman cites as counter to the majority found that the defendants could be liable for *indirect* infringement, and that they could not be liable for *direct* infringement where they did not perform all the steps of a patented method. As an example, Judge Newman cites to *Centillion* to support her argument, a case that, as discussed above, explicitly found that the service provider could only be liable for indirect infringement. Additionally, the provisions of the restatement of torts on joint liability that Judge Newman cites are inapplicable to direct infringement, because, like indirect infringement, the restatement requires knowledge for liability. For example, the comment to Section 877(c) explicitly requires knowledge or constructive knowledge. In addition, the comment to Section 876 explicitly states that it is not intended to apply in strict liability situations.<sup>14</sup>

Importantly, the US Patent Act already accounts for joint liability in its statutory provisions for contributory and induced infringement. The US Patent Act only imposes liability for direct infringement on "whoever without

<sup>13</sup> 631 F3d 1279 (Fed Cir 2011)

<sup>14</sup> Restatement (2nd) Torts Section 876 has a caveat that states that the Institute expresses no opinion where "the conduct of either the actor or the other is free from intent to do harm or negligence but involves strict liability for the resulting harm."

authority makes, uses, offers to sell or sells any patented invention...”, but makes no provision for multiple actors. It makes sense, then, that direct infringement liability exists when a single actor performs all the steps of a claimed method, and the only exception is where the principal and the agent are the functional equivalent of a single actor. Limiting joint infringement to agency principles not only furthers an intuitive understanding of the US Patent Act, but to do otherwise would render the indirect infringement provisions superfluous.

Thus, the court in *Akamai I* was right when it applied agency principles to joint infringement as it has in other areas of the law. For example, the Supreme Court has applied agency rules in a US Fair Housing Act of 1968 context where the statute was silent as to the applicability and scope of vicarious liability; it has also applied agency rules to determine an employer’s vicarious liability under a Title VII claim.<sup>15</sup>

## Analysis

Changes in the contours of patent infringement liability can have unintended consequences on innovation and modifying the joint infringement rule in *Akamai I* will create uncertainty as to the extent of liability. Clear rules protect innocent parties, but uncertainty deters investment in new technology, which ultimately impedes innovation.

To disturb the legal precedent set forth in *BMC Resources* through *McKesson I* would threaten to enlarge the scope of direct infringement to reach innocent parties. Technology companies would risk strict liability for their customers’ actions – actions beyond the companies’ control. The law reserves strict liability for extreme cases – the transportation of ultra hazardous materials; the failure to warn about a dangerous product – not a situation where one party could be held responsible for the actions of others.

## What should practitioners do in response to the *Akamai I* rehearing?

- 1) Draft single entity method claims. Due to the general rule that a single user must perform every step of a method, inventors should take care to draft method claims in a way that requires only one actor. Drafting patents in this manner avoids the uncertainty of what Judge Newman described as “interactive methods”, e.g., method claims that involve a user entering or receiving data over the internet.
- 2) Where practical, include system claims. Given the Federal Circuit’s decision in *Centillion*, including a mixture of system claims with method claims in patent applications can ensure that a patentee receives the broadest scope of protection.
- 3) Examine your client’s current portfolio. Companies should re-examine their portfolio, looking particularly at patents with method claims involving the internet, to determine if a method claim might come under scrutiny under *Akamai I*. If so, practitioners should seek to reissue the patents to rewrite those claims that require performance by multiple actors.
- 4) Use *Akamai I* as a defense. If the Federal Circuit affirms *Akamai I*, practitioners should take advantage of the ruling and use it as a general defence. *Akamai I* can potentially provide a potent defence for companies accused of infringement of a method claim. Under *Akamai I*, plaintiffs have to show an agency relationship between the parties and the Federal Circuit has already held that a customer relationship is insufficient. As *Akamai* provides a bright line rule, defendants could have success using it as dispositive of non-infringement at the summary judgment phase.

<sup>15</sup> *Meyer v Holly*, 537 US 280, 282 (2003); *Burlington Indus, Inc v Ellerth*, 524 US 742, 756 (1998)

# The Evolution of Business Models Using Open Source Software

By  
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## I. INTRODUCTION

**“Free as in speech, not as in beer”**

**“Given enough eyes, all bugs are shallow”**

Two of the most important philosophical principles associated with the licensing model used with open source<sup>1</sup> software are summarized in the above two quotations. The first statement makes an important semantic distinction as to the meaning of “free” in the “free software” element of open source licensing—that “free” does not relate to price (that is, “free software” is not necessarily something given away *gratis*), but rather the freedoms granted to the licensee via the bundle of intellectual property rights set forth in the license itself—that is, the unrestricted freedoms to reproduce, prepare derivative works, and distribute copies of the software and modifications thereto.<sup>2</sup> The second statement describes one of the results believed to be

attendant to the freedoms granted via open source licensing—by disclosing the software’s source code, and giving all interested persons an opportunity to study and improve upon it, open source software theoretically has an unlimited pool of developers to detect and fix problems, resulting in cleaner and more stable code.

In the formative years of the open source licensing model, it was generally believed that the extensive freedoms granted via these licenses, and the vast and unlimited developer base able to exercise those freedoms, meant that the open source model was not particularly susceptible to monetization or creation of a business around that model. Thus, the initial answer to the question

“how can you make money from open source software?” was “you can’t.” Nevertheless, since the initial formulation of the open source licensing model, a number of different business models have emerged whereby companies—sometimes quite large and successful companies—have created robust and

...any improvement made to software under GPL must be relicensed, upon distribution, under the exact same terms and conditions, therefore theoretically making all distributed improvements and modifications available to the original developer, and to the community at large.

<sup>1</sup> Note that “open source” and “free” software are essentially the same. However, Open Source Initiative (OSI) (which defines the former) and the Free Software Foundation (FSF) (which defines the latter) have slight differences in their respective definitions and in the licenses they approve as either “open source” or “free”.

<sup>2</sup> 17 U.S.C. § 106 (2002). It is believed open source licenses grant all copyright rights even though each license may not use the exact words of the statute.

sustainable revenue-generating businesses which make use of the open source software licensing model.

This paper examines the evolution of various business models using open source software, with a particular focus on examples from the information technology industry. It proceeds through (1) the early, community-based open source business models of support, customization and subscription; (2) open source as a vehicle for hardware sales; (3) open source as a shared resource; (4) the growth of single vendor open source with examples from the dual licensing and open core models; (5) a recent development in advertising-driven open source business models; and lastly to (6) what the future may bring with an example of category spanning open source business model. But, to understand how various business models have been developed around open source software, a brief overview of open source licensing is in order.

## II. BACKGROUND: OPEN SOURCE LICENSE MODELS AND THEIR IMPACT ON DOING BUSINESS

Since Richard Stallman first released it in 1989<sup>3</sup>, the GNU General Public License (“GPL”), it and its later variations (e.g. GPLv2, LGPL, GPLv3 etc.) have been the most widely adopted open source licenses<sup>4</sup>. Numerous other open source licenses are commonly used today, including the BSD License, MIT License, Apache License (formerly Apache Software License), and Mozilla Public License, to name a few. If mapped on a spectrum based on the ability to create and/or interoperate with closed source, royalty-bearing software licenses, GPL-style (and other “copyleft”) licenses would occupy one end of the spectrum while BSD-style (and other “permissive”) licenses would occupy the other. Each license type has its pros and cons when attempting to develop a business around software licensed under that license type.

### A. Copyleft: Preclusion of Downstream Royalties and Requirement to Perpetuate Identical License Provisions

Stallman steadfastly believed that the knowledge, and specifically the source code, underlying software programs should be free (“free” as in freedom, although he also

believed that the ability to charge fees or collect royalties on software should also be discouraged). He reasoned that if software was not free, then very few, very powerful people would dominate the industry and create market monopolies and innovation inefficiencies.<sup>5</sup> In contrast, source code availability, in his mind, frees the licensees and end-users from “vendor lock-in,” thereby permitting selection of a wider range of hardware and software products. In turn, the costs associated with acquisition and ownership of software should be reduced. Stallman started the GNU Project and the Free Software Foundation in the mid-1980s to uphold his ideals. The GNU Project became the testing ground for GPL, the license which Stallman applied first to his free GNU tools.

Stallman understood that merely providing source code without restrictions in the license and without fee would not prohibit businesses from co-opting the code for their own profitability. Thus, he specifically designed the GPL to prevent software licensed under it from being able to be converted into proprietary, royalty- or fee- bearing, software. The GPL does this through a strong “copyleft” coupling clause that requires derivative works (in the parlance of the GPL, “works based on the Program”) to be governed by the same GPL license.<sup>6</sup> Said another way, any improvement made to software under GPL must be relicensed, upon distribution, under the exact same terms and conditions, therefore theoretically making all distributed improvements and modifications available to the original developer, and to the community at large. To further support this, GPL does not provide a clear demarcation between what code must be relicensed under GPL and what code interacting with GPL can use a different license; it instead appears to rely simply on the copyright concept of derivative works,<sup>7</sup> which under current case law can be somewhat difficult to determine.

Moreover, § 2 of the GPL, version 2, reads “[y]ou must cause any work that you distribute or publish, that in whole or in part contains ... the Program or any part thereof, to be licensed ... under the terms of this License.”<sup>8</sup> (emphasis added). Thus, incorporating some GPL code into proprietary software may render the entire proprietary software program open source under GPL.<sup>9</sup> Because GPL-style licenses require licensees to pass along

<sup>3</sup> Sam Williams, *Free as in Freedom: Richard Stallman's Crusade for Free Software* (2002).

<sup>4</sup> *Top 20 Most Commonly Used Licenses in Open Source Projects*, Black Duck Software, March 2011, <http://www.blackducksoftware.com/oss/licenses> (last visited March 27, 2011).

<sup>5</sup> Chris DiBona, et al., *Introduction to Open Sources: Voices from the Open Source Revolution*, in *Open Sources: Voices from the Open Source Revolution* (Chris DiBona, Sam Ockman and Mark Stone eds. 1999).

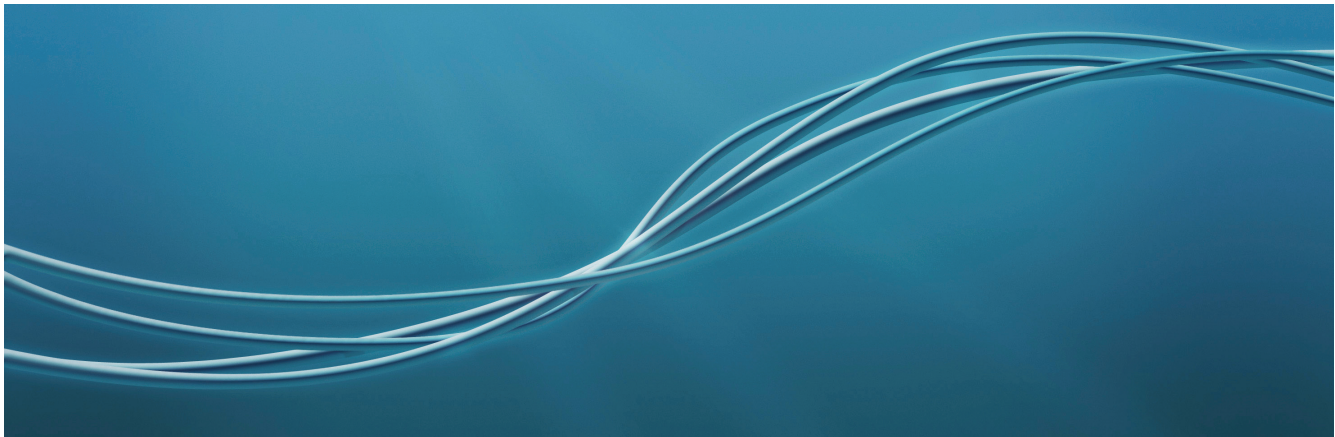
<sup>6</sup> Specifically, the provision is contained in § 2(b) of GPL, version 2, “2. You may modify your copy or copies of the Program or any portion of it, thus forming a work based on the Program, and copy and distribute such modifications or work under the terms of Section 1 above, provided that you also meet all of these conditions: ... (b) You must cause any work that you distribute or publish, that in whole or in part contains or is derived from the Program or any part thereof, to be licensed as a whole at no charge to all third parties under the terms of this License.” GNU General Public License, version 2, available at <http://www.gnu.org/licenses/gpl-2.0.html> (last visited February 7, 2011).

<sup>7</sup> *Id.*

<sup>8</sup> *Id.*

<sup>9</sup> Christian H. Nandan, *Open Source Licensing: Virus or Virtue?*, 10 Tex. Intell. Prop. L.J. 359, 375 (2001-2002).





the same rights and obligations to their own licensees and the rights they themselves were licensed, GPL-style licenses are also known as “reciprocal licenses.”

Because of the copyleft provisions and the inability to incorporate proprietary code into GPL licensed code, most uses of GPL software will preclude the ability to generate downstream royalties for modifications of, or for software significantly interacting with, GPL software.<sup>10</sup> However, if the profit motive is directed towards strategic independence of ancillary revenues from potentially monopolistic software supplier—by building community support and collaboration and preventing vendor lock-in—rather than licensing fees, a license with a strong copyleft, such as GPL, may be a desirable mechanism towards achieving those goals.<sup>11</sup>

GPL, version 2, requires sharing at the program level as it does not recognize any license unit smaller than a program.<sup>12</sup> Yet, the definition of “Program” and its derivatives create a number of ambiguities. Specifically, a “work based on the Program” is defined as “*either the Program or any derivative work under copyright law: that is to say, a work containing the Program or a portion of it, either verbatim or with modifications and/or translated into another language.*”<sup>13</sup> (emphasis added). Thus, “any derivative work under copyright law” is equivalent to “a work containing the Program or a portion of it, either verbatim or with modifications,”<sup>14</sup> and since the determination of what constitutes a derivative work under copyright law for

software can be a highly fact-intensive and somewhat ambiguous exercise under current precedent, there is a certain degree of ambiguity regarding the extent to which GPL spreads to other associated programs. Such ambiguities blur the line between what must be open and what can be proprietary under GPL. The uncertainties created by the ambiguities have discouraged some from using GPL code, especially in the early history of that license. Version 3 of GPL has attempted to remedy this by using clearer and consistent language relating to modified works and works based on the Program, and by not relying on the U.S. copyright law concept of “derivative work.”<sup>15</sup>

### B. Academic/Permissive Licenses

The BSD License<sup>16</sup> allows for proprietary versions of works originally licensed under the BSD License to be created and distributed. In contrast to the GPL, the BSD License arose from proprietary software owned by a commercial organization, Bell Labs. BSD, or Berkeley Software Distribution, is a UNIX based operating system developed and distributed by the Computer Systems Research Group (CSRG) at University of California, Berkeley, in and around the time of Stallman’s GNU Project.<sup>17</sup> The initial codebase and design of BSD was based on the original AT&T UNIX operating system, which was distributed in source code form in the 1970s. From there, CSRG began porting versions of UNIX onto different computing architectures and developed tools actively used to this day. For several early releases of BSD,

<sup>10</sup> It is possible to make use of GPL licensed software in non-GPL software, but doing so requires the use of non-copyrightable elements of the GPL software or activities not considered to create a derivative work under copyright law, both of which significantly constrain the manner in which GPL software may be used in or with non-GPL software.

<sup>11</sup> Carlo Daffara, *Economic Free Software Perspectives*, carlodaffara.conecta.it, May 4, 2009, <http://carlodaffara.conecta.it/economic-free-software-perspectives/> (last visited February 29, 2011).

<sup>12</sup> Van Lindberg, *Intellectual Property and Open Source: A Practical Guide to Protecting Code*, 212 (2008).

<sup>13</sup> GPL, version 2, *supra* note 8, § 0.

<sup>14</sup> Lindberg, *supra* note 14, at 213.

<sup>15</sup> GNU General Public License, version 3, § 0 reads, *inter alia*, “To “modify” a work means to copy from or adapt all or part of the work in a fashion requiring copyright permission, other than the making of an exact copy. The resulting work is called a “modified version” of the earlier work or a work “based on” the earlier work.” 19 GNU General Public License, version 3, June 29, 2007, available at <http://www.gnu.org/licenses/gpl.html> (last visited March 28, 2011).

<sup>16</sup> BSD License, available at <http://www.opensource.org/licenses/bsd-license> (last visited March 27, 2011).

<sup>17</sup> Marshall K. McKusick, *Twenty Years of Berkeley Unix: From AT&T to Freely Redistributable*, in *Open Sources: Voices from the Open Source Revolution*, *supra* note 7.

all recipients had to first get an AT&T source license.<sup>18</sup> However, vendors wanting to implement networking products based just on TCP/IP, which CSRG developed on its own and included in BSD, found the AT&T source fees prohibitively costly.<sup>19</sup> Thus, CSRG broke out the TCP/IP networking code and freely redistributed it under the license agreement now known as the BSD License.

The legal provisions in the BSD License reflect the academic traditions of giving proper credit and safeguarding the basic legal interests of the originating authors.<sup>20</sup> Namely, the BSD License requires the preservation of a copyright notice and a disclaimer of warranty. The BSD License imposes little else in terms of restrictions on the use of software. The BSD License and BSD-style licenses are thus generally known as “permissive licenses.”

For a commercial software company seeking to make use of, or build on top of, open source software to add value for its customers, a permissive license like the BSD License seems ideal. However, a prevalent concern with permissive licenses is the ability of others to create a fork in the codebase—a *la* fork in the road—including closed source forks. Such forks can even be incompatible with the originating open source codebase, or fail to incorporate community-created improvements or bug fixes that might otherwise improve the fork. For example, BSD itself has forked into various forms of the operating system, including NetBSD, OpenBSD, FreeBSD, and many others. In some ways, this forking has led to a fracturing of the BSD community, re-creating the very inefficiencies that open source attempts to solve.<sup>21</sup> In contrast, however, Apache open source web servers have thrived under a permissive license, and has not exhibited the same fragmentation as BSD.<sup>22</sup>

Also, because the BSD License essentially permits unlimited commercial use of open source software and unrestricted creation of proprietary derivative works,<sup>23</sup> developers expose themselves to competitors who need not contribute their innovations back to the community. Thus, the business models that arise from use of the

permissive licenses are strongly tied to customization, embedded software and hardware, and services/support.

### III. EARLY YEARS: RISE OF COMMUNITY OPEN SOURCE

#### A. Subscription Support, Service & Legal Protection Model

##### I. Cygnus: Support and Customization

Michael Tiemann, co-founder of Cygnus Solutions (“Cygnus”), recalls that Cygnus was the first open source business and thus the first to have an open source business model.<sup>24</sup> Cygnus itself predated the coining of the term “open source” by Chris Peterson.<sup>25</sup> Having read Stallman’s GNU Manifesto, Tiemann saw not a socialist polemic, but rather a business plan in disguise. Tiemann wrote that “[t]he basic idea was simple: Open Source would unify the efforts of programmers around the world, and companies that provided commercial services (customizations, enhancements, bug fixes, support) based on that software could capitalize on the economies of scale and broad appeal of this new kind of software.”<sup>26</sup>

Cygnus’ business model was to provide support services for GNU tools, and in particular GNU compilers and debuggers. For example, a company would hire Cygnus to customize GNU tools to work on the company’s platforms, and to optimize and improve the GNU tools for the company’s needs.<sup>27</sup> Cygnus understood that it could not support products that were neither stable nor mature enough for widespread adoption in critical applications. Thus, it focused on improving the compilers and debuggers, and it was soon responsible for the vast majority of the GNU toolchain development.<sup>28</sup> This provided Cygnus with superior knowledge and expertise and first-mover advantage. Even though every Cygnus-developed improvement was fed back into the community, Cygnus’ dominance in GNU development meant that competitors were primarily limited to adding incremental features. Most importantly, Cygnus showed early on that money can be made from free software, and that business models based on free software were sustainable and profitable.

<sup>18</sup> *Id.*

<sup>19</sup> *Id.*

<sup>20</sup> Frank Hecker, *Setting Up Shop: The Business of Open-Source Software*, IEEE Software, Jan/Feb 1999.

<sup>21</sup> *Id.*

<sup>22</sup> Bruce Kogut and Anca Metiu, *Open Source software Development And Distributed Innovation*, Oxford Rev. Econom. Policy, Vol. 17, No. 2, 248, 257 (2001).

<sup>23</sup> BSD License, *supra* note 18; see also Hecker, *supra* note 22.

<sup>24</sup> Michael Tiemann, *Future of Cygnus Solutions, An Entrepreneur’s Account*, in *Open Sources: Voices from the Open Source Revolution*, *supra* note 7. Cygnus was founded in 1989.

<sup>25</sup> John Gilmore, *Marketing Cygnus Support – Free Software history*, Sept 27, 2006, <http://www.toad.com/gnu/cygnus/index.html> (last visited February 18, 2011).

<sup>26</sup> *Id.*

<sup>27</sup> *Id.*; see also Dale Dougherty and David Sims, *Will Money Spoil Open Source?*, Linux Dev Center, January 31, 2000, <http://linuxdevcenter.com/pub/a/linux/2000/01/31/interview/index.html> (last visited March 27, 2011).

<sup>28</sup> Tiemann, *supra* note 26.

## 2. The Linux Development Model

Linus Torvalds began development of the Linux kernel as open source in the early 1990s. He chose GPL as the license for Linux because he sought to use the GCC compiler in Linux, and GCC was licensed under GPL.<sup>29</sup> The interesting business models that eventually emerged from Linux, including those by Red Hat and Novell, will be described later; the focus of this section is Linux's paradigmatic open source development model.

Eric S. Raymond's seminal work *The Cathedral and the Bazaar*<sup>30</sup> describes Linux's development in detail, and deserves to be studied by anyone in the industry. The thrust of the Linux development strategy, as with all open source, is the community. Raymond discusses how to optimize community development, which can be generalized into the following important tenets of successfully executing any open source business model:

**Organization and Coordination.** Distributed development leads to many competitive advantages including the ability to produce more products faster and at higher quality. One research study found that shared development and maintenance costs in open source development led to an estimated reduction of 36% in R&D costs.<sup>31</sup> This approach allows a lean open source company to compete with larger competitors. Moreover, while commercial software companies employ sophisticated testing tools, an active open source community provides an unparalleled level of peer review, which is critical in finding bugs and code defects.<sup>32</sup> The key is to have the proper foundation for collaboration, including having project leaders with the management skills necessary to motivate contributors, "leading without coercion" as mentioned by Raymond, and allocating the projects and tasks to those with the proper skill set.

**Release Early. Release Often.** Open source development can advance rapidly if developers see solutions in a project that interests them.<sup>33</sup> On the other hand, releasing an unstable and problem prone initial codebase can alienate a community and stall development. Thus, a major task for a development leader is to provide an initial codebase able to ignite a following, balance quality

with early community and market entry, and continuously update the software with additional functionality and fixes.

**Implement Feedback.** It is important to incorporate bug fixes from the community back into the codebase. Not only does the code improve, but by doing so, a development leader treats the community programmers as the most valuable resource. Soon, the community programmers will respond by becoming the most valuable resource.

**Exercise Control Over the Core Elements.** Linux's success is partially due to the limited amount of forking it has experienced, which is attributable to Torvalds' management of the development of the core of Linux, i.e., the kernel. He and his team are the gatekeepers for modifying and accessing the kernel. The remaining operating system is developed using modularization.<sup>34</sup> As a result, Linux has a tight kernel without extraneous elements slowing operation or reducing portability.<sup>35</sup>

## 3. Red Hat and Novell: Subscription Support Services and Legal Protection

Red Hat, arguably the most successful open source company, employs the oldest open source business model: support services on a subscription basis. Red Hat's Fedora Linux and Red Hat Enterprise Linux each include significant layers on top of the Linux kernel that add value to Linux for its users. But these additional layers do not depend on a purchase of a subscription from Red Hat; rather, they are free, just as Linux is. Instead of selling licenses to the software itself, Red Hat sells subscription-based support and warranty services in connection with the software packages it distributes. Red Hat also generates revenue by selling physical copies of its Linux operating systems accompanied by documentation and by providing certification programs for Red Hat products. Since GPL precludes downstream royalties, as described above, Red Hat's business model is especially suited for GPL.

Whereas Red Hat began its subscription business in the 1990s, Novell did not start its subscription service until 2004 when it acquired SUSE Linux (though Novell had been developing Linux-based applications for many years before 2004).<sup>36</sup> While the Linux products of Novell and

<sup>29</sup> Linus Torvalds, *The Linux Edge*, in *Open Sources: Voices from the Open Source Revolution*, *supra* note 7.

<sup>30</sup> Raymond, *supra* note 2.

<sup>31</sup> Rishab Aiyer Ghosh, *Economic impact of open source software on innovation and the competitiveness of the Information and Communication Technologies (ICT) sector in the EU* (2006), prepared by MERIT for the European Commission under the contract of ENTR/04/112.

<sup>32</sup> Alberto Onetti and Fabrizio Capobiano, *Open Source and Business Model Innovation: The Funambol case*, in *Proceedings of the First International Conference on Open Source Systems* (Marco Scotto and Giancarlo Succi eds. 2005), pp. 224-227, 225 (citing Reasoning, *MySQL Open Source white paper entitled How Open Source and Commercial Software Compare: MySQL 4.0.16*, Technical Whitepaper, Reasoning, 2003).

<sup>33</sup> Hecker, *supra* note 22.

<sup>34</sup> DiBona, *supra* note 7.

<sup>35</sup> Torvalds, *supra* note 31.

<sup>36</sup> Novell History, <http://www.novell.com/news/press/pressroom/history.html> (last visited March 2, 2011).





Red Hat are different—i.e., each adds a different layer to the Linux kernel—the subscription support services of each company are similar. Novell's subscription service also includes indemnification of any patent, copyright, trademark or trade secret infringement claims made by third parties against Novell customers for use of its Linux products.<sup>37</sup> This indemnity is comparable to the protections generally provided through a commercial license.

Novell's IP indemnity arose from a patent suit brought by The SCO Group against, *inter alia*, IBM and Novell in 2003 alleging that their respective Linux products infringed The SCO Group's patents.<sup>38</sup> Early in the suit, The SCO Group sent letters to numerous customers of IBM alerting them of the potential liability of using Linux, thereby stirring fears that protections under open source were inferior to commercial products. In response, Novell decided to provide indemnity for the patents-in-suit, and later extended this indemnity to all allegations of IP infringement.

While both Red Hat and Novell have found success in the subscription support services business model, this model is not without criticism. First, it is in no way a guarantee. For example, Red Hat attempted to support PostgreSQL, a GPL licensed database, with its own PostgreSQL product in 2001. However, the product did not find nearly the same success as Red Hat's Linux products, and Red Hat no longer commercially supports it. Second, a support

services-based business model does not scale as well as commercial licensing. In particular, the incremental cost of providing services for a new customer is much higher than the incremental cost of selling a new commercial license to a software product. However, with Linux, this scaling problem is somewhat mitigated by the combination of an active community and Red Hat's contributions which has resulted in a very stable product that requires little support. Third, because the underlying software product is free under GPL, there is a lower barrier to entry for competitors, and companies like Red Hat and Novell have had to focus on brand differentiation and awareness to set themselves apart.<sup>39</sup> Lastly, Matthew Aslett, industry analyst with expertise on the business of open source, notes that Red Hat's strategy is the exception and not the rule, as very few open source businesses have been able to replicate Red Hat's model.<sup>40</sup> He explained that Red Hat's success is based on a combination of factors, including its engagement of both an existing developer community and its own (Linux and Fedora, respectively) product appeal to both tech-loving individuals and huge corporations, pioneering entrepreneurs and good leadership.<sup>41</sup>

## B. Open Source as a Vehicle for Ancillary Hardware Sales

As Linux matured into a viable alternative for enterprise scale server systems, technology giants like IBM, Sun Microsystems, and HP began to port their applications onto Linux and later ship their hardware products with Linux. The open source business model of hardware sales as the primary revenue driver was not new at the time. However, it would take Linux and its wide adoption for industry leaders to begin employing open source as part of mission-critical applications and products.

## I. IBM

When IBM first began investigating open source, many at IBM thought that open source efforts lacked the structure and discipline to create software products of the same quality as IBM's proprietary solutions, an attitude which was not uncommon at the time.<sup>42</sup> But IBM was impressed with the quality of software, the skill level of open source developers and the rapid development cycles of open source projects.<sup>43</sup> Early on, IBM ported Apache on their most popular mainframe, AS400, to capitalize on the robust and integrated

<sup>37</sup> Novell Technology Assurance Program, <http://www.novell.com/licensing/ntap/#indemnification> (last visited March 2, 2011).

<sup>38</sup> *Caldera Sys., Inc. v. Int'l Bus. Machs. Corp.*, No. 03-CV-0294 (D. Utah 2003); see also Kerry D. Goettsch, *SCO Group v. IBM: The Future of Open-Source Software*, 2003 U. Ill. J.L. Tech. & Pol'y 581, 587 (2003).

<sup>39</sup> Nadan, *supra* note 11, at 373.

<sup>40</sup> Matthew Aslett, *On open source business strategies (again)*, the 451 group, February 23, 2009, <http://blogs.the451group.com/opensource/2009/02/23/on-open-source-business-strategies-again/> (last visited March 22, 2011).

<sup>41</sup> *Id.*

<sup>42</sup> Peter G. Capek, et al., *A history of IBM's open-source involvement and strategy*, IBM Systems Journal, Vol. 44, No 2, 2005, pp. 249-257.

<sup>43</sup> *Id.*





nature of Apache to sell more IBM hardware.<sup>44</sup> IBM then ported Linux onto its servers, which legitimized open source to many outside the industry as open source became backed by the largest technology company in the world. Today, IBM extends this business model of generating open-source-based revenue through hardware sales by supporting Linux on all IBM servers.<sup>45</sup>

## 2. Sun Microsystems

At one time, Sun Microsystems' UNIX-based operating system, Solaris, enjoyed a market share greater than IBM AIX and HP-UX combined. During the rise of Linux, Sun's revenue came mainly from supporting and servicing Solaris and its hardware products.<sup>46</sup> Sun's port of Linux onto its hardware began with its lower end Ultra series servers in an effort to prevent sales erosion from competing low-cost Linux servers. Sun would later support Linux on many of its server products.<sup>47</sup>

Sun has since been acquired by Oracle for approximately \$7 billion after years of erratic profitability and revenue problems.<sup>48</sup> Still, Sun's fate stands in stark contrast to Santa Cruz Operation (SCO), who went from being the leading UNIX vendor to an afterthought due to Linux's introduction. Most of SCO's revenue came from selling its closed source UNIX operating system, and SCO could not compete with a free, stable and mature Linux.<sup>49</sup> Unlike Sun, SCO did not have hardware ties from which to generate revenue, and it

shortly fell into obscurity. SCO ultimately sold its UNIX rights to Caldera Systems, who later changed its name to The SCO Group, and who later filed the Linux suit against Novell and IBM, as mentioned above.

## 3. HP

HP is largely a hardware company. Thus, for its products to have the broadest appeal, HP supports many software platforms. Accordingly, HP has employed a strategy of embracing open source software to trigger hardware sales. In its server products, HP supports Red Hat and SUSE and unpaid Linux variants such as Debian and CentOS. HP was the first workstation vendor to support Linux on desktops,<sup>50</sup> and was among the first to provide Linux utilities drivers for imaging and printing products. Today, HP promotes integration of its server solutions with various open source platforms, including JBoss, MySQL, and OpenLDAP.

Recently, HP went deeper in the Linux space but not in an open source fashion. It acquired webOS, Palm's proprietary mobile operating system which runs on the Linux kernel, and HyperSpace, an instant-on Linux-based operating system.<sup>51</sup> Without question, HP remains committed to open source Linux, which is critical to sales of its workstation and server products. But, with webOS and HyperSpace, HP is supplementing that open source business model and leveraging its Linux expertise with proprietary Linux-based software to break into the tablet and small form factor computing market.

<sup>44</sup> DiBona, *supra* note 7.

<sup>45</sup> IBM & the Linux Community, <http://www.ibm.com/linux/community.html> (last visited March 19, 2011).

<sup>46</sup> DiBona, *supra* note 7.

<sup>47</sup> *Id.*

<sup>48</sup> Don Clark and Ben Worthen, *Oracle Snatches Sun, Foiling IBM*, *The Wall Street Journal*, April 21, 2009, <http://online.wsj.com/article/SB124022726514434703.html> (last visited March 20, 2011).

<sup>49</sup> DiBona, *supra* note 7.

<sup>50</sup> Linux operating systems for HP Workstations, <http://h71028.www7.hp.com/hpsub/cache/537200-0-0-225-121.html> (last visited March 19, 2011).

<sup>51</sup> Dana Blankenhorn, *HP and Linux's OEM problem*, *ZDNet*, June 22, 2010, <http://www.zdnet.com/blog/open-source/hp-and-linux-oem-problem/6719> (last visited March 19, 2011).

By embracing open source and Linux in particular, IBM, Sun Microsystems (now Oracle), and HP among many others focus on adding value to customers in areas with the greatest impact: reliable hardware solutions, and mission-critical server systems, i.e., not in the area of the operating system. In such a model, competitive advantage over other hardware vendors is incumbent on working with the open source community. None of IBM, Sun Microsystems, and HP have been freeloaders of the Linux community. Each have provided valuable contributions by way of improvements to the networking, system performance, and security of Linux, or (especially) by donating hardware for test bedding early in Linux's development.<sup>52</sup>

### C. Open Source as Shared Resource: Open Source Foundations

#### 1. Mozilla Foundation: non-profit. Mozilla Corporation: for-profit.

The Netscape internet browser was pivotal in its role in ushering in the internet age. But, ultimately the company itself was not as successful as the internet browser (currently named "Firefox") that the company spawned. From the demise of Netscape arose the Mozilla Foundation, a non-profit organization founded in 2003 committed to free and open source software and the development of the Internet as a public resource.<sup>53</sup> The Mozilla Foundation's open source business models, however, have repeatedly changed in light of varying circumstances which make it unique.

In 1998, when it was clear that Microsoft's Internet Explorer had won the internet browser war, AOL acquired Netscape and later distributed the browser as open source. Raymond wrote at the time that "if Netscape's execution doesn't work, the open-source concept may be so discredited that the commercial world won't touch it again for another decade."<sup>54</sup> And for a time, poor management, missed opportunities, and little community involvement torpedoed the Mozilla Foundation's open source endeavors<sup>55</sup> and whittled its market share from 60% in 1998 to a mere 2% in 2004<sup>56</sup>. However, after several

stable releases of the Mozilla browser and later Firefox, the open source community supporting the Mozilla Foundation grew to Raymond's proverbial bazaar—a vibrant community of active users and programmers with free and open exchange of ideas and code—resulting in stable and secure software, tuned to user needs.<sup>57</sup>

In less than one year after the initial release of Firefox in 2004, the Mozilla Foundation decided that Firefox's unanticipated popularity and revenue required the incorporation of a wholly owned subsidiary, Mozilla Corporation, to oversee Firefox.<sup>58</sup> The Mozilla Corp.'s revenues and net income for 2009 were \$91 million and \$43 million, respectively, and approximately 90% of the revenue came from royalties paid by Google for each user generated search originating from Firefox's search field.<sup>59</sup>

At its core, this model is very much an advertising business model: a commercial third party supports the free use of the customers/users of the product. Here, the commercial third party, Google, pays for visibility and for users to be directed to their services. While lucrative, Mozilla Corp.'s advertising business model is overwhelmingly dependent on its agreement with Google, thus making it vulnerable to the risks associated with having a single revenue stream from just one customer.

The Mozilla Foundation initially distributed Firefox under the Mozilla Public License ("MPL"). The MPL exists in the middle of the spectrum between copyleft and permissive. MPL is similar to GPL because it requires the sharing of modifications to the "Original Code," as defined by the original licensor. Unlike GPL, however, MPL allows the Original Code or modifications thereof to be combined with separate proprietary code to create a proprietary program ("Larger Work") which is not governed by MPL, provided that the requirements of the MPL's terms continue to apply to the Original Code and modifications.<sup>60</sup> Since 2007, in order to address compatibility concerns with GPL and LGPL, Firefox distributes under a triple licensing scheme of MPL/GPL/LGPL where the user can choose which license to use.<sup>61</sup>

<sup>52</sup> Capak, *supra* note 44, at 254; DiBona, *supra* note 7; Jay Lyman, *HP leverages Linux, less known for contribution*, the 451 group, June 9, 2010, <http://blogs.the451group.com/opensource/2010/06/09/hp-leverages-linux-less-known-for-contribution/> (last visited March 19, 2011).

<sup>53</sup> The Mozilla Manifesto, <http://www.mozilla.org/about/manifesto.en.html> (last visited March 11, 2011).

<sup>54</sup> Raymond, *supra* note 2.

<sup>55</sup> *Id.*

<sup>56</sup> John Koenig, *Seven open source business strategies for competitive advantage*, IT Manager's Journal, March 17, 2004, <http://management.itmanagersjournal.com/management/04/05/10/2052216.shtml?tid=85> (last visited February 1, 2011).

<sup>57</sup> Bobbie Johnson, *Looking beyond the open source battle*, The Guardian, October 21, 2009, <http://www.guardian.co.uk/technology/2009/oct/21/mitch-kapor-open-source> (last visited March 2, 2011); see also Lenny T. Mendonca and Robert Sutton, *Succeeding At Open-Source Innovation: An Interview With Mozilla's Mitchell Baker*, CIO Zone, January 2008, <http://www.ciozone.com/index.php/Management/Mozilla-s-Baker-On-Mastering-Open-Source-Innovation.html> (last visited March 24, 2011).

<sup>58</sup> Lisa DiCarlo, *Firefox Goes For-Profit*, Forbes.com, August 3, 2005, [http://www.forbes.com/2005/08/03/mozilla-firefox-forprofit-cx\\_id\\_0803mozilla.html](http://www.forbes.com/2005/08/03/mozilla-firefox-forprofit-cx_id_0803mozilla.html) (last visited February 12, 2011). Mozilla Corporation now also oversees Thunderbird, Mozilla Foundation's email client software.

<sup>59</sup> Mozilla Foundation and Subsidiary: 2009 Independent Auditors' Report and Consolidated Financial Statements, December 31, 2009, available at <http://www.mozilla.org/foundation/documents/mf-2009-audited-financial-statement.pdf> (last visited February 19, 2011).

<sup>60</sup> Hecker, *supra* note 22.

<sup>61</sup> Mozilla Relicensing FAQ, v. 1.1, <http://www-archive.mozilla.org/MPL/relicensing-faq.html> (last visited March 2, 2011).

The Mozilla Foundation's browser Firefox is widely regarded as a huge success, but its road to success is unique and unlikely to be replicated. Mitch Kapor, Chairman of the Mozilla Foundation when it was founded, said in an interview in 2009 that "I tell people that the history of Mozilla and Firefox is so one of a kind that it should not be used – ever – as an example of what's possible[...]. The accomplishment of open source is that it is the back end of the web, the invisible part, the part that you don't see as a user."

## 2. IBM's Creation of the Eclipse Foundation

Eclipse is an integrated development environment—i.e., an application framework, tools and runtime library for software development and management. Development of Eclipse began at IBM Canada in 1998, and the Eclipse Project was created in 2001 to further develop Eclipse as open source software supported by a consortium of other technology companies.<sup>62</sup> In 2004, IBM open-sourced all of Eclipse's code shortly after the founding of the Eclipse Foundation, a non-profit organization whose members include various software organizations. Since then, the Eclipse ecosystem has grown to include open source projects, commercial projects, training and services, and community conferences.

This section focuses on IBM's business model in leveraging open source to create the Eclipse Foundation. Whereas Firefox and the Mozilla Foundation became open source successes without the clear intention of large profits, IBM's Eclipse strategy tells a different tale. What each have in common, however, is the strategy of opening source code to dissipate the virtual monopoly power of a competitor's proprietary software. Mozilla directed its browser product at Internet Explorer in a bid to reverse its dwindling market share.<sup>63</sup> IBM directed Eclipse at Microsoft's Visual Studio in a bid to prevent Visual Studio from becoming the *de facto* software development platform.

As Lee Nackman, then Chief Technology Officer and Vice President of Design, Construction, and Test Tools at IBM's Rational Software division explained in 2005, "[o]ur target was Microsoft, [who] was on a path to become the dominant tools platform. ... We felt, key to the competition around application servers and middleware, we needed to bring developers to Java-based middleware."<sup>64</sup> However, IBM's Eclipse tools strategy was fragmented in the early 2000s, and IBM's solution was to release the framework as

open source to build community support, wider adoption and awareness.<sup>65</sup>

IBM's business model with Eclipse is based on adding value for its customers higher up the development tool chain through IBM's proprietary Rational tools. This is facilitated by the Eclipse Public License (EPL) which, like MPL, allows proprietary tools to be built on top of the Eclipse framework: namely, additions to the original Eclipse program may be separately licensed, even under a commercial license, provided that such additions are "separate modules" and not derivative of the original work.<sup>66</sup> Clearly, GPL would not fit into IBM's business model for Eclipse as GPL's strong copyleft provisions would prevent proprietary add-ons.

Currently, thousands of individuals and over fifty companies participate in the Eclipse ecosystem and community.<sup>67</sup> At any given time, IBM accounts for 20% of the community, and the remaining are prospective customers for IBM to promote its robust Rational tools, Eclipse-driven integration, and solutions for emerging technologies.

## IV. GROWTH OF SINGLE-VENDOR COMMERCIAL OPEN SOURCE

Open source began as an ideal, as a counterculture movement against proprietary software systems and companies that dominated software development at the time. Early business models reflected the ideal. But as the fears and uncertainty surrounding the early notions of open source quelled, developers and business leaders alike saw the advantages of open source software—e.g., reduced cost of development, reduced time to market, quick update and bug fix release cycle, reduced direct sales staff and marketing, etc.—and saw opportunities to leverage these advantages and apply them to commercial software.

The support services business model continues to be the most referenced business model by industry outsiders—because of the overwhelming success of Red Hat and Cygnus before it—but, numerous other business models have emerged that are no less important. Namely, business models fostered by a particular type of open source: the single vendor open source, where a single commercial firm performs the bulk of developing a core product, and the open source community supplements that product with lesser contributions. We describe two such business models that rely on single-vendor open source development.

<sup>62</sup> Andrea Casarella, *Proximity Alert: An Eclipse Plug-in for Software Analysis*, University della Svizzera italiana, 9 (June 2008).

<sup>63</sup> *Id.*

<sup>64</sup> Darryl K. Taft, *Eclipse: Behind the Name*, eWeek.com, March 20, 2005, <http://www.eweek.com/c/a/Application-Development/Eclipse-Behind-the-Name/> (last visited March 14, 2011).

<sup>65</sup> Koenig, *supra* note 58.

<sup>66</sup> Eclipse Public License, v 1.0, available at <http://www.eclipse.org/legal/epl-v10.html> (last visited March 4, 2011).

<sup>67</sup> *Company / Project Commit Details*, The Eclipse Foundation, March 13, 2011, <http://dash.eclipse.org/dash/commits/web-app/commit-count-loc.php> (last visited March 13, 2011).

## A. The Dual Licensing Model

MySQL is a relational database management system, which began in the mid-1990s as closed source software developed by the Swedish company MySQL AB. MySQL was first publicly released in 1996, but not long after that, in 2000, it was released as open source through a dual licensing model.<sup>68</sup> MySQL has since become the database of choice in web applications, and often deployed in conjunction with Linux, Apache and PHP, aka the “LAMP” web application stack. Notably, the LAMP stack is used by leading internet companies including Facebook, Google, Yahoo!, and YouTube. MySQL AB was acquired by Sun Microsystems (now Oracle) in early 2008 for \$1 billion.<sup>69</sup>

A company that uses dual licensing offers its open source software in two ways: (i) available for free under an open source license (most commonly, GPL-style), and (ii) available to paying customers under a commercial license. Companies choosing a commercial license may do so in order to modify the software and redistribute it without disclosing its modifications to the public.<sup>70</sup> Oracle distributes its open source version of MySQL under GPLv2, sells to paying customers commercial licenses to MySQL, and also sells maintenance and support contracts covering MySQL.

With such a strategy, MySQL reaps the benefits of both open source and proprietary software. In its open source distribution, MySQL receives much wider distribution than a paid product, community feedback and industry familiarity. At the same time, with its commercial distribution, MySQL can cater to large corporations and enterprises who prefer to keep their intellectual property proprietary.

But, a dual licensing strategy does have certain drawbacks. To be able to provide both a commercial version and an open source version, a dual licensing company must have ownership of all the code it distributes. This presents logistical problems if the community is contributing code, because such contributors would need to assign their IP rights to the company to be incorporated into future official releases under the dual license scheme.<sup>71</sup> MySQL AB “solved” this problem by developing the bulk of MySQL by itself and by rarely accepting code from outside developers.<sup>72</sup> However, by doing so, it has not

benefited from the advantages of having a large and active community assisting in software development.

One study in 2007 surveyed the business models of approximately 80 free and open-source-based companies and found that software developed under a dual licensing strategy shows a “reduce[d] volume of external contributions (that becomes mainly limited to bug fixes and small additions).”<sup>73</sup> Nevertheless, former CEO of MySQL Marten Mikos, in 2008, noted that providing source code encouraged volunteers to innovate and contribute important additions for free, thereby still adding substantial value to the product. In one such instance, a community programmer developed a JDBC driver for MySQL, a valuable and sizable piece of code. MySQL eventually bought this code and employed the programmer to properly incorporate the driver into their dual licensing model.<sup>74</sup> Moreover, community contributions, while limited to bug spotting and small additions, are not insignificant. An evaluation comparing the quality of MySQL to similar proprietary code found MySQL’s code to be six times better in terms of defect density.<sup>75</sup>

Other prominent software products distributed under a dual licensing model include Funambol (mobile cloud synchronization and push messaging), Qt (cross-platform application and UI framework), and Berkeley DB (formerly Sleepycat) (embedded database). In Funambol’s case, it quickly realized pre-existing business models for proprietary software companies did not suit open source, and that open source required a very different model to leverage its potential.<sup>76</sup> In particular, it found that adopting a “sales push” strategy of reaching potential customers via a large direct sales team was inefficient. Rather, Funambol discovered that open source software is generally discovered directly by customers, and that as downloads of its software increased more companies would solicit it for pricing—a sales lead.<sup>77</sup> Funambol thus directed its efforts towards downloads and hits, and properly following prospects and sales leads—what it calls a “user pull” sales strategy. Note also that both Qt and Sleepycat, acquired by Nokia and Oracle respectively, show another possible open source business model. Namely, develop a software project so compelling that a commercial vendor buys both the copyrights in the project, and hires the programmers that created it, as a mechanism for either dual licensing the software or gaining control of a strategic software project.

<sup>68</sup> Keith Murphy and Sheeri K. Cabral, *MySQL Administrator’s Bible*, 3 (2009).

<sup>69</sup> Sun Microsystems Announces Agreement to Acquire MySQL, Developer of the World’s Most Popular Open Source Database, <http://www.mysql.com/news-and-events/sun-to-acquire-mysql.html> (last visited March 11, 2011); Oracle Buys Sun, April 20, 2009, <http://www.oracle.com/us/corporate/press/018363> (last visited March 11, 2011).

<sup>70</sup> Commercial License for OEMs, ISVs and VARs, MySQL, <http://www.mysql.com/about/legal/licensing/oem/> (last visited March 11, 2011).

<sup>71</sup> Nadan, *supra* note 11, at 375.

<sup>72</sup> *Open, But Not As Usual*, The Economist Newspaper Limited, March 16, 2006 (last visited March 7, 2011).

<sup>73</sup> Carlo Daffara, *Open Source Business Models: a Taxonomy of Open Source Firms’ business models*, Commercial Open Source Software, April 6, 2007, <http://robertogaloppini.net/2007/04/06/open-source-business-models-a-taxonomy-of-open-source-firms%E2%80%99-business-models/> (last visited March 7, 2011).

<sup>74</sup> *An Interview with Marten Mikos, The Oh-So-Practical Magic of Open-Source Innovation*, MIT Sloan Management Review, Vol. 50, No. 1 (Fall 2008), 16.

<sup>75</sup> Onetti and Capobiano, *supra* note 34.

<sup>76</sup> *Id.*, at 226.

<sup>77</sup> *Id.*



## B. The Open Core Model

Open core, a term coined by Jaspersoft's Andrew Lampitt, refers to the business model where the core software is available under an open source license, while extensions, add-ons or "premium features" are sold as proprietary software under a traditional commercial license. Again, such a model attempts to mix open source with proprietary software to leverage the advantages of both. While dual licensing's popularity has diminished, open core is currently one of the more popular strategies among open source specialists.<sup>78</sup> One study of open source companies found that firms offering exclusively or prevalently open source solutions grew at less than half the rate of firms that mix open and proprietary software.<sup>79</sup>

In Jaspersoft's case, it freely distributes the core of its business intelligence software under GPL. In addition, Jaspersoft offers, under a commercial license, added features such as enterprise security, web reporting and portal server, and an improved UI. SugarCRM also uses an open core business model whereby it distributes its Community Edition of its CRM software under a GPL-style license, AGPL. Revenue is generated through sales of Sugar Professional, which adds proprietary improvements directed at the user interface and functionality for larger data sets. In another example, Alfresco develops content management systems and distributes a community edition for free under LGPL and an enterprise edition with advanced features under a commercial license.

In each of the three examples above, while the core of the software product is open source, development occurs under a rubric similar to dual licensing. Namely, the vendors themselves comprise the majority of the software development.<sup>80</sup> Thus, as in the case of MySQL, community contributions for open core companies are generally limited to bug fixes. In addition, businesses that use the open core model must carefully balance open source and proprietary aspects. For example, an open source version should include enough features to be superior to the competition, but must also not be complete enough to prevent competition with the commercial version.<sup>81</sup> Simultaneously, vendors must not be seen as crippling or dumbing down the open source version in favor of the proprietary version. Such actions can quickly alienate the open source community and create backlash.

As always, selection of the open source license is critically important. In each of the three examples above, it is not surprising that the vendors chose a GPL-style license, and retained ownership in all aspects of the open source code. The copyleft provisions of the GPL prevent third-party distribution of closed source to the core product as such improvements must be governed by GPL and thus disclosed to the public. In addition, the premium features are sold as closed source extensions, which are considered as independent and separate works under the GPL license, and therefore not governed by the copyleft provisions of GPL.

## V. RECENT SHIFTS IN OPEN SOURCE BUSINESS MODEL: MOBILE COMPUTING, GOOGLE'S ADVERTISING AND APPS

If there were any doubts about Google's ability to be an undeniable force in any market it chooses to enter, the meteoric rise of its open source Android mobile operating system put those doubts to rest. Google released Android in October 2008 under an Apache License, and while it captured only 3% of the smart phone market share in its first year, by its second year it had 24%, securing the number three spot behind Apple's iOS and RIM's BlackBerry OS.<sup>82</sup> As of the date of this paper, less than two and a half years since it first launched, Android is now the world's most popular smart phone platform, with over 67 million shipments at the end of 2010, and continues to grow.<sup>83</sup> To understand Android's open source business model, an explanation of Google's overall business is necessary, which to many is perplexing because the vast majority of users have not paid anything for Google's services.

The two largest sources of revenue for Google come from "Sponsored Links" and advertising that appear on Google-owned sites (e.g. Google.com, Google Maps etc.) and from Google's partner sites through AdSense. In each instance, when a user clicks on those links or ads, Google charges an amount to the website. In sum, Google makes money by sending traffic to other websites, and more users yield more traffic. Google's strategy for increasing user clicks is to provide free services, such as Gmail, which enable Google to serve their ads and to provide

<sup>78</sup> Matthew Aslett, *Winning and losing with open core*, the 451 group, March 25, 2010, <http://blogs.the451group.com/opensource/2010/03/25/winning-and-losing-with-open-core/> (last visited March 20, 2011).

<sup>79</sup> Andrea Bonaccorsi, et al., *Adaptive Entry Strategies under dominant standards. Hybrid business models in the Open Source software industry*, 52 Management Science 1085 (2006).

<sup>80</sup> Aslett, *supra* note 42.

<sup>81</sup> Daffara, *supra* note 75.

<sup>82</sup> Price Mclean, *Canalys: iPhone outsold all Windows Mobile phones in Q2 2009*, Apple Insider, August 21, 2009, [http://www.appleinsider.com/articles/09/08/21/canalys\\_iphone\\_outsold\\_all\\_windows\\_mobile\\_phones\\_in\\_q2\\_2009.html](http://www.appleinsider.com/articles/09/08/21/canalys_iphone_outsold_all_windows_mobile_phones_in_q2_2009.html) (last visited March 21, 2011); Stan Schroeder, *Android Overtakes BlackBerry As the Top U.S. Smartphone Platform*, Mashable, March 8, 2011, <http://mashable.com/2011/03/08/android-smartphone-platform-report/> (last visited March 21, 2011).

<sup>83</sup> *Gartner Says Worldwide Mobile Device Sales to End Users Reached 1.6 Billion Units in 2010; Smartphone Sales Grew 72 Percent in 2010*, Gartner, February 9, 2011, <http://www.gartner.com/it/page.jsp?id=1543014> (last visit March 28, 2011).



better search results by factoring in not only relevance, but also trends, popularity, user location, demographics, etc. While grossly simplified, this explanation is sufficient for our purposes.

As mobile traffic became cheaper and mobile devices became more powerful, Google positioned Android as the next platform to attract users to consume their services. While Blackberry and iPhone benefited from being first to market, Android's open source strategy allowed Google to make up for the lost ground with widespread adoption by device manufacturers (OEMs) and cultivating an ecosystem of app developers not constrained by a closed system. Google's Android business model incorporates the search-based strategy mentioned above, from which it derives the majority of its Android-related revenues, but also includes other sources facilitated by the tight integration of default Google apps and the Android marketplace. These other sources of revenue include collecting a 30% share from Android marketplace app purchases (shared with mobile carriers), a 10% share of subscription-based content (e.g. magazines, news etc.) through Google's One Pass service, and in-app advertising via AdMob.<sup>84</sup> In addition, Google's stake in Clearwire's efforts to build a high-speed wireless network have led many to speculate that Google may enter the telecommunications market and cater directly

to customers via Android, Google Voice and Google Talk, and thereby circumvent the carriers altogether.<sup>85</sup>

Google's use of the permissive Apache License allows OEMs to create proprietary user interfaces, which are essential to an OEM's brand differentiation. Such brand differentiation was critical in Google's ability to obtain partnerships early in Android's development. The Apache License also allows Google to implement important software stacks as closed source proprietary applications to limit fragmentation among OEM offerings and protect important revenue streams—for instance, Gmail, Gtalk and Marketplace apps are closed source. Lastly, in a recent study on open source mobile projects, the market has exploded: going from approximately 500 new open source projects in 2007 to nearly 4,000 in 2010.<sup>86</sup> Of these projects in 2010, Android was the platform of choice with 55% of the total number of new mobile open source projects, followed by Apple's iOS with 39%, and Windows, Blackberry, WebOS and Symbian each having 2% or less.<sup>87</sup> With Google only beginning to enter the market for tablet computing with its tablet focused Honeycomb version of Android, one can expect that Android will distance itself from the other platforms and account for an even greater share of mobile open source projects.

## VI. THE FUTURE

<sup>84</sup> Seth Weintraub, *Goldman sees profit in Android*, CNNMoney.com, Fortune, October 1, 2010, <http://tech.fortune.cnn.com/2010/10/01/goldman-lays-out-googles-android-money-making-strategy/> (last visited March 21, 2011).

<sup>85</sup> *Id.*

<sup>86</sup> *Mobile Innovation, Growth Driven by Open Source*, Black Duck Software, March 2, 2011, <http://www.blackducksoftware.com/news/releases/2011-03-02> (last visited March 21, 2011).

<sup>87</sup> *Id.*



### A. Open source as category-spanning common platform—MeeGo

The MeeGo platform is an open source operating system platform hosted by the Linux Foundation (the entity that also hosts the canonical version of the Linux kernel) and sponsored by Intel and Nokia.<sup>88</sup> Primarily licensed under GPL and based upon a Linux kernel,<sup>89</sup> MeeGo is designed for a plethora of hardware platforms such as netbooks, entry-level desktops, tablets, smart phones, smart TVs, IPTV-boxes and other embedded systems.<sup>90</sup> MeeGo was created by merging two existing operating system platforms that originated from its sponsors—Moblin, originated by Intel and hosted by the Linux Foundation, and Maemo, originated by Nokia.<sup>91</sup>

The business model behind MeeGo stems from prior business open source business models discussed previously: the MeeGo operating system platform itself becomes a commodity that all may freely use, while each stakeholder (including Intel and Nokia, but presumably also other vendors) still has plenty of room for their own differentiation with proprietary software, services and device products.<sup>92</sup> In the case of Intel, commercialization can come primarily from its well-established business of providing silicon components for devices that will run the MeeGo platform, while for Nokia, commercialization may come primarily from its well-known business of selling mobile devices. Both companies also have the opportunity to commercialize software and services associated with

devices running the MeeGo platform.

MeeGo has also set itself out as a potential open source alternative to Android for those who criticize the Android platform for not being open enough and for companies that perceive the Android business model as favoring Google. MeeGo represents a true open source variant in the same product space that provides commercial benefits to companies using it in ways otherwise not achieved with other small form factor operating systems—whether they are closed source (e.g., Windows Phone 7), split open/closed source (e.g., HP's webOS, where the product is primarily closed source, but some components are released as open source), or open source (e.g. Android).

If successful, MeeGo may represent a more sophisticated variant of the business model first exploited by IBM and HP around Linux—namely, by developing a robust, successful and widely-used software platforms, revenues can be generated around hardware sales, through licensing of commercial software running on top of the open source platform, as well as through services (in particular web services) accessed using the open source platform. In the case of MeeGo, however, these potential commercial models appear to be designed to benefit not just a single vendor but rather a number of different vendors, each of whom adds value to the devices and/or services that use MeeGo.

<sup>88</sup> Ibrahim Haddad, *Introduction to the MeeGo Project*, The Linux Foundation, at 1, available at [http://wiki.meeego.com/images/MeeGo\\_Introduction.pdf](http://wiki.meeego.com/images/MeeGo_Introduction.pdf) (last visited March 30, 2011).

<sup>89</sup> *Licensing Policy*, MeeGo, <http://meeego.com/about/licensing-policy> (last visited March 30, 2011).

<sup>90</sup> *Announcing Smeegol 1.0*, OpenSUSE, October 6, 2010, <http://news.opensuse.org/2010/10/06/announcing-smeegol-1-0/> (last visited March 28, 2011).

<sup>91</sup> Haddad, *supra* note 90, at 1.

<sup>92</sup> *Marketing/MeeGo vs Android*, [http://wiki.meeego.com/Marketing/MeeGo\\_vs\\_Android#Business\\_model](http://wiki.meeego.com/Marketing/MeeGo_vs_Android#Business_model) (last visited March 28, 2011).



## VII. CONCLUSION

When open source began in the 1980s, it was seen by many as the musings of a handful of ideologues and as lacking the economic incentives necessary to be part of a viable commercial enterprise. At the time, making money from something that was “free” was the antithesis of traditional business models which promoted vendor lock-in and proprietary systems. But as discussed above, many organizations have found ways to capitalize on open and free platforms to become successful and to develop the foundational technology of the Internet and the information age. Numerous innovative companies have created robust, mature and stable open source software, and have done so more efficiently than proprietary software companies, while at the same time creating new business models to monetize their open source assets.

We have described the ever expanding ways to make money from open source software: support and customization (Cygnus), subscription support (Red Hat and Novell), hardware sales (IBM, Sun Microsystems, HP), shared resources (the Mozilla Foundation and the Eclipse Foundation), single vendor open source with dual licensing (MySQL) and open core (Jaspersoft), advertising (Android), and category spanning (MeeGo). Also described are the types of open source license used in each business model, and how each license is tied to the business model and vice versa. Moreover, there are open source business models that we have not touched upon, including Software-as-a-Service model, aggregating support services model, and the consulting model. As open source becomes more and more prevalent, there will be no shortage of ways to commercialize “free” software.



# What Can Decisions by European Courts Teach Us About the Future of Open-Source Litigation in the United States?

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## Introduction

Corporations can no longer ignore the commercial impact and cultural changes resulting from the exponentially increasing adoption of and reliance on open-source software. Unlike traditional proprietary software licenses that afford access only to machine-readable object code and generally for a fee, open-source software is available to the public at no charge. The licensee receives the human-readable source code, which it may modify for use in any field of endeavor, and redistribute both the original code and its derivative works to others.<sup>1</sup> Powerful non-profit, volunteer communities, such as the Free Software Foundation ("FSF"), Apache Software Foundation, and Eclipse Foundation, bring together the talents of thousands of skilled developers who engage in collaborative development and enhancement of open-source software.<sup>2</sup> Companies with sizeable IT departments bring the software in-house and use it to create new proprietary offerings or develop custom features and functionalities to meet their unique internal business requirements. The availability of open-

source software and the extensive collaboration that fosters its enhancement are widely believed to allow the development, modification, and debugging of software through processes that are faster and less expensive than if the creator were required to do all of the work independently.

The United States Court of Appeals for the Federal Circuit recognized this phenomenon in the landmark case *Jacobsen v. Katzer*, observing that "[o]pen source licensing has become a widely used method of creative collaboration that serves to advance the arts and sciences in a manner and at a pace that few could have imagined just a few decades ago."<sup>3</sup> Unsurprisingly, the widespread use of open-source software has created a groundswell in the number of actions filed by licensors who believe that their intellectual property and contractual rights have been infringed. These licensors turn to federal courts when informal enforcement requests fail to bring users of the source code into compliance. Those suits are often brought by, or in close cooperation with, open-source or free software communities and their legal counterparts.

<sup>1</sup> Open Source Initiative, "Open Source Definition," <http://www.opensource.org/docs/osd> (accessed April 2, 2010).

<sup>2</sup> The Free Software Foundation identifies itself as a proponent of "free" rather than "open" software, viewing open source as a "development methodology" and free software as a "social movement." Richard Stallman, "Why Open Source misses the point of Free Software," <http://www.gnu.org/philosophy/open-source-misses-the-point.html> (2007). For purposes of this article, we use the term "open source" to refer to software available under the Open Source Definition and do not distinguish licenses that the FSF may consider to be "non-free."

<sup>3</sup> *Jacobsen v. Katzer*, 535 F.3d 1373, 1378 (Fed. Cir. 2008).



But years earlier, European courts began laying the foundation for the enforcement of open-source licenses taking place today in the United States. And the same volunteer, non-profit organizations that now lead compliance efforts and drive the litigation in this country also filed or offered material assistance in the early European court cases. This paper traces some of the roots of current strategies in the United States for enforcement of open-source licenses back to the ground-breaking decisions in Europe. We also highlight the impact of those decisions abroad on recent and ongoing federal litigation.

## Corporate America Meets Open-Source

The requirements and restrictions of open-source licenses vary dramatically. The many variations of the permissive Berkeley Software Distribution (“BSD”) License allow the licensee to distribute and modify the subject code essentially without limitation, provided that the text of the license (including the disclaimer of warranties) and applicable copyright notices are provided with the distribution.<sup>4</sup> The popular Apache Software License v.2.0 similarly enables the end-user to distribute its derivative works of the code under the licensing terms of its choice.<sup>5</sup> Unless a “patent retaliation” clause is triggered by a

licensee’s suit alleging that the software infringes its patent rights, the licensee enjoys the benefits of broad, explicit patent and copyright licenses that mirror those granted by the original creators of the software under Contributor License Agreements. The BSD and Apache licenses have found great favor with the private sector because they permit the licensees to exploit the software commercially as long as they abide by reasonable documentation requirements.

By contrast, the philosophy of other open-source licenses is “copyleft”<sup>6</sup> – that is, in exchange and consideration for use of the subject work, the copyright holder allows licensees to copy, modify, and distribute the code and their derivative works thereto *provided that* downstream users are afforded the same privileges of accessibility and use of the licensee’s derivative works. A pure copyleft license provides each user or holder of a software program the same “four essential freedoms” as the software’s creator:

1. the freedom to run the program, for any purpose,
2. the freedom to study how the program works (through access to the source code) and change it at will,

<sup>4</sup> See, e.g., Open Source Initiative, “Open Source Initiative OSI - The BSD License: Licensing,” <http://www.opensource.org/licenses/bsd-license.html> (accessed April 2, 2010).

<sup>5</sup> Apache Software Foundation, “Apache License Version 2.0, January 2004,” <http://www.apache.org/licenses>; <http://www.apache.org/licenses/LICENSE-2.0.txt> (2004). See also Opscode, Inc., “Why We Chose the Apache License,” <http://www.opscode.com/blog/2009/08/11/why-we-chose-the-apache-license/> (August 11, 2009), for an interesting layman’s perspective on the benefits of using the Apache Software License v.2.0 as an outbound licensing mechanism.

<sup>6</sup> See generally Free Software Foundation, Inc., “What is Copyleft?,” <http://www.gnu.org/copyleft> (accessed April 2, 2010).

3. the freedom to copy and share the program with others, and
4. the freedom to share modifications with others.<sup>7</sup>

The GNU General Public License (“GPL”) is the most well-known copyleft license. By way of example, copyleft licenses may contain:

- a requirement that the licensee publish or make available the source code for any works based on or derived from the original software;
- a requirement that the licensee send the sponsoring open-source community a copy of all versions of derivative software created using the software; or
- a requirement that software documentation be made available at no charge.

“Weak” copyleft licenses permit the licensee to include or link to the original, unmodified code in a greater work without being required to license the entirety of the new work under the open-source license. Examples of weak copyleft licenses are the Mozilla Public License and the Eclipse Public License. While the GNU Lesser General Public License (“LGPL”) is sometimes referred to as a weak copyleft license, its narrow safe harbor and diverse interpretations of how to link safely to LGPL-licensed code warrant a much more rigorous analysis than the more straightforward Mozilla and Eclipse requirements.

The free software philosophy first captured the attention of corporate America in 1994 when Linus Torvalds released Linux, a free, Unix-type operating system, under the GPL.<sup>8</sup> Corporate counsel and their clients were uncertain how to comply with the terms of this new licensing structure and what the risks were of noncompliance. United States common law on open-source licensing issues was undeveloped, and practitioners struggled in applying the artistically focused Copyright Act to the technicalities of software.<sup>9</sup>

...the widespread use of open-source software has created a groundswell in the number of actions filed by licensors who believe that their intellectual property and contractual rights have been infringed.

Many lawyers relied on online, informal guidance published by open-source communities, which consisted primarily of developers and other non-lawyers. But the relatively low level of enforcement activity actually conducted by these communities added uncertainty as to how real and costly the risks were for failing to comply with the terms of an open-source license. The number of devices and companies that relied upon or included open-source software continued to expand rapidly.

There is no longer a question that the risks and ramifications of noncompliance are real. By the end of 2007, the FSF, with the assistance

of the Software Freedom Law Center, had filed copyright infringement actions in the United States District Court for the Southern District of New York (“SDNY”) against Verizon Communications, Xterasys, and High-Gain Antennas based on the defendants’ distribution of open-source, Unix-based Busy Box software in alleged violation of the GPL. The FSF withdrew the complaint in each of those actions shortly after filing suit, but only after each defendant agreed to comply with the terms of that license. (These suits and others are described in more detail below.)

European case law allowing licensors to strictly enforce the GPL against wayward licensees, coupled with other publicized settlements of open-source disputes in the European Union, was undoubtedly a significant factor in the 2007 SDNY cases. These unwavering, bright-line decisions empowered the free software proponents while serving as a cautionary tale to the corporate defendants. Pioneering judges from across the pond have created a *de facto* precedent for American courts in information technology law and policy – a compelling reminder to remain aware of global trends in intellectual property law. Today, both formal and informal enforcement activity of open-source licenses continues to intensify, and many more related copyright infringement and breach of contract cases have been filed in federal district courts as of the date of this article.

<sup>7</sup> Free Software Foundation, Inc., “Free Software Definition,” <http://www.gnu.org/philosophy/free-sw.html> (accessed April 2, 2010). While the four freedoms are paraphrased above, we have retained Richard Stallman’s unique numbering scheme that begins with a zero rather than a one.

<sup>8</sup> Linux Online Inc., “What is Linux,” <http://www.linux.org/info/> (July 2, 2007).

<sup>9</sup> 17 U.S.C. §§ 101 et seq.



## It All Started With A 25-Year-Old German Developer...

In 2003, Harald Welte, a young programmer from Berlin, was a principal contributor to and copyright owner of netfilter/iptables, a packet filtering framework for the Linux kernel that is licensed under the GNU General Public License.<sup>10</sup> Welte became frustrated over what he perceived as a pervasive, industry-wide failure of wireless networking manufacturers who embedded netfilter code in their products to comply with the terms of the GPL. After being named chairman of the netfilter core team that managed the open-source project, Welte began active enforcement activity targeted at the manufacturers. He founded the gpl-violations.org project in January 2004 to advocate and investigate compliance with the GPL, then

proceeded to obtain several out-of-court settlement agreements in which the licensees agreed to remedy their licensing violations.<sup>11</sup> Welte sent one such cease and desist notice to Sitecom Germany GmbH, the German subsidiary of a Dutch wireless networking company.<sup>12</sup> After Sitecom declined to cooperate, Welte filed an action for copyright infringement in the Munich district court alleging that Sitecom violated the terms of the GPL by (i) failing to make available the source code for its wireless access router and (ii) failing to distribute a copy of the GPL license to its end-users. He sought a preliminary injunction to stop distribution of the product pending compliance by Sitecom with the open-source license.

On April 2, 2004, a three-judge panel issued the injunction and upheld it on May 19, 2004, in response to Sitecom's objection.<sup>13</sup> The German court held that the terms of the GPL were enforceable and that Sitecom had no right to distribute netfilter/iptables-based products without

Today, both formal and informal enforcement activity of open source licenses continues to intensify, and many more related copyright infringement and breach of contract cases have been filed in federal district courts as of the date of this article.

complying with the GPL's conditions. The milestone decision was reported worldwide, both within and beyond the open-source community.

Till Jaeger, counsel for Welte and co-founder of the Institute for Legal Issues of Free and Open-Source Software, noted: "To my knowledge, this is the first case in which a judicial decision has been decreed on the applicability and the validity of the GNU GPL."<sup>14</sup>

Formal enforcement of open source licenses thus began with the targeting of primarily router and network appliance manufacturers, likely due in part to the discrete architecture of the technology and the relative ease of demonstrating noncompliance. Because the software for these devices is necessarily integrated and embedded in the hardware as "firmware," manufacturers encountered difficulty claiming that they were not distributing

or conveying a work "based on" the GPL-licensed code.<sup>15</sup> There may also have been insufficient policing of internal software development and licensing practices by the hardware manufacturers because it was not viewed as a critical business issue at the time.

Emboldened by their success and indeed, an apparent batting record of a thousand, Welte and the gpl-violations.org project broadened the scope of their efforts to include an infringing operating system. Fortinet UK Ltd. ("Fortinet") sold a line of security appliances that were marketing as running on the proprietary "FortiOS" operating system. The GPL watchdogs analyzed the operating system and determined that it contained portions of the Linux kernel that were not being distributed in compliance with the GPL.<sup>16</sup> Moreover, the project concluded that Fortinet had knowingly concealed its use of the Linux code through the use of cryptographic tools.<sup>17</sup>

<sup>10</sup> <http://netfilter.org/about.html#license> (accessed on April 3, 2010).

<sup>11</sup> <http://www.gpl-violations.org/about.html#history> (accessed on April 3, 2010).

<sup>12</sup> Harald Welte, "Preliminary Injunction to enforce netfilter/iptables GPL," <http://lists.netfilter.org/pipermail/netfilter-announce/2004/000057.html> (April 15, 2004).

<sup>13</sup> For a report of this decision, see [http://news.cnet.com/2100-7344\\_3-5198117.html](http://news.cnet.com/2100-7344_3-5198117.html) (April 22, 2004); see also <http://www.gpl-violations.org/news/20040415-iptables.html> (April 15, 2004). The decision itself is located at [http://www.ifross.org/ifross\\_html/eVWelte.pdf](http://www.ifross.org/ifross_html/eVWelte.pdf) (accessed April 3, 2010). An unofficial English-language translation by Thorsten Feldmann, LL.M., Esq., and RRef. Julian Hoeppner, LL.M., Jaschinski Biere Brexl Rechtsanwälte, Berlin is available at [http://www.jbb.de/fileadmin/download/judgment\\_dc\\_munich\\_gpl.pdf](http://www.jbb.de/fileadmin/download/judgment_dc_munich_gpl.pdf).

<sup>14</sup> Harald Welte, "Preliminary Injunction to enforce netfilter/iptables GPL," <http://lists.netfilter.org/pipermail/netfilter-announce/2004/000057.html> (April 15, 2004).

<sup>15</sup> The GNU General Public License Version 2 focuses on whether the licensee is "distributing" a covered work, while the GNU General Public License Version 3 published in June 2007 queries whether a covered work has been "conveyed." See generally Free Software Foundation, Inc., "Licenses," <http://www.gnu.org/licenses/licenses.html> (accessed April 3, 2010). The difference in application of these terms is beyond the scope of this article.

<sup>16</sup> <http://gpl-violations.org/news/20050414-fortinet-injunction.htm> (April 14, 2005).

<sup>17</sup> *Id.*



Fortinet, however, did not yet take the project's efforts to engage it seriously, and it refused to either honor the cease-and-desist notice or otherwise settle the project's claims of infringement. Again, Welte sought enforcement from the Munich district court.

On April 14, 2005, the court granted a preliminary injunction against Fortinet, agreeing with Welte's assertions that Fortinet did not have the right to continue distributing the Linux kernel in its operating system without abiding by the terms of the GPL.<sup>18</sup> In order to return to the marketplace, Fortinet was required to modify its end user license agreement to conform to the GPL, and make available the corresponding source code for the covered code.<sup>19</sup>

Welte's gpl-violations.org project prevailed again in litigation in 2006, this time against D-Link Germany GmbH ("D-Link"), a German subsidiary of the Taiwanese manufacturer and a distributor of its hardware and network devices.<sup>20</sup> D-Link had distributed a Wireless G network attached storage (NAS) device that contained at

least three software components from the Linux kernel, all of which were licensed under the GPL.<sup>21</sup> D-Link, however, did not provide either a copy of the GPL or the requisite disclaimer of warranties to its customers, and it did not disclose the source code for the data storage unit to the public. Although D-Link agreed to address these breaches, it refused to reimburse Welte for the costs of investigation, a remedy potentially available to him under the German Civil Code.<sup>22</sup>

Welte brought suit in the Frankfurt district court, alleging copyright claims based on the GPL and claiming that he was entitled to reimbursement for the expenses of the enforcement activity. In the proceedings, D-Link argued that the GPL was not legally binding, "[r]egardless of the repeatedly-quoted judgment of the district court of Munich..." a reference to the Sitecom decision discussed herein.<sup>23</sup> D-Link contended that the GPL's requirement that source code be made available at no charge was in essence a price-fixing obligation, and hence unenforceable as a violation of antitrust law.<sup>24</sup> D-Link also contended that it could not be held liable for infringement because its

<sup>18</sup> *Id.*; see also Pinsent Masons, LLP, "Software firm settles GPL violation lawsuit," <http://www.out-law.com/page-5620> (April 28, 2005); CBS Interactive, "Fortinet Accused of GPL Violation," <http://www.zdnet.co.uk/news/application-development/2005/04/14/fortinet-accused-of-gpl-violation-39195174/> (April 14, 2005).

<sup>19</sup> [http://news.cnet.com/Fortinet-settles-GPL-violation-suit/2100-7344\\_3-5684880.html](http://news.cnet.com/Fortinet-settles-GPL-violation-suit/2100-7344_3-5684880.html) (accessed April 5, 2010).

<sup>20</sup> [http://www.gpl-violations.org/news/20060922-dlink-judgement\\_frankfurt.html](http://www.gpl-violations.org/news/20060922-dlink-judgement_frankfurt.html) (accessed on April 3, 2010).

<sup>21</sup> The authors of the software had granted Welte exclusive rights in the code, thus enabling Welte to license the software to others under the GPL and granting him standing to enforce the terms of the license in the German court. [http://thinkingopen.files.wordpress.com/2007/07/d-link-verdict-english-translation-061028\\_2\\_.pdf](http://thinkingopen.files.wordpress.com/2007/07/d-link-verdict-english-translation-061028_2_.pdf) (accessed on April 4, 2010).

<sup>22</sup> See Sections 670 and 683 of the German Civil Code. An English translation of the German Civil Code is provided by the German Federal Ministry of Justice at [http://www.gesetze-im-internet.de/englisch\\_bgb/index.html](http://www.gesetze-im-internet.de/englisch_bgb/index.html).

<sup>23</sup> [http://www.gpl-violations.org/news/20060922-dlink-judgement\\_frankfurt.html](http://www.gpl-violations.org/news/20060922-dlink-judgement_frankfurt.html) (accessed on April 3, 2010).

<sup>24</sup> [http://thinkingopen.files.wordpress.com/2007/07/d-link-verdict-english-translation-061028\\_2\\_.pdf](http://thinkingopen.files.wordpress.com/2007/07/d-link-verdict-english-translation-061028_2_.pdf) (accessed on April 4, 2010).



status as a subsidiary meant that it was merely a distributor of the data storage unit and had no knowledge of the code actually embedded in the device.

On September 6, 2006, the district court issued its judgment, confirming Welte's claims of copyright infringement and specifically holding that the GNU GPL was valid and enforceable under German law.<sup>25</sup> The court rejected D-Link's claim that it was not responsible for infringement because it was merely a distributor. In a statement foreshadowing the Federal Circuit's 2008 decision in *Jacobsen* (discussed below), the court noted in response to D-Link's antitrust defense that if a would-be licensee refused to accept the licensing terms imposed by the copyright owner of software, regardless of the rationale for refusal, then it could not somehow claim the right to distribute the software under the terms of its choice.<sup>26</sup> The court also ordered D-Link to reimburse Welte for most of his requested expenses for legal services, testing, and re-engineering.

After the victory, Welte issued a statement condemning D-Link's attitude and hinting at the implementation of more aggressive enforcement tactics:

"It was very sad to see D-Link starting to argue that the GPL would not apply. Given D-Link's repeated license violations, it can be thankful that we've never asked for any kind of damages, but merely to cease and desist from further infringements, plus our expenses. I start to wonder whether they actually deserve such a mild strategy."<sup>27</sup>

Another clear-cut win for the free software proponents; the court's resounding validation of the GPL's legitimacy plainly advanced both their cause and their zeal.

Thus, it was a trio of decisions by German courts that led the way in recognizing and enforcing free and open-source software licenses. Welte crowed on the gpl-

Many contracts between software licensors and their customers contain warranties of noninfringement and other terms that enable the customers to claim monetary damages for the licensor's unauthorized distribution of third-party intellectual property, if not specific performance obligating the licensor to remediate the infringement.

violations.org site: "By June 2006, the project has hit the magic '100 cases finished' mark, at an exciting equal [sic] '100% legal success' mark. Every GPL infringement that we started to enforce was resolved in a legal success, either in-court or out of court."<sup>28</sup> The project announced that numerous "major companies" had agreed to out-of-court settlements of GPL enforcement activity, including Siemens, Fujitsu-Siemens, Asus, Belkin, and TomTom B.V.<sup>29</sup> The Free Software Foundation presented Welte with the 2007 FSF Award for the Advancement of Free Software as recognition for his leadership in licensing enforcement; he subsequently received the 2008 Google-Reilly Open-Source Award for Defender of Rights. He continues to lead gpl-violations.org vigorously as of the date of this article.

### A French Appellate Court Enforces the GPL in Favor of a Software Recipient

While Welte and gpl-violations.org energetically enforced the GPL in German courts, the Free

Software Foundation France ("FSF France") was helping a downstream licensee pursue its rights under an open-source license in a case of first impression under the French Civil Code. The licensee, *Association pour la formation professionnelle des adultes* ("AFPA"), maintained training facilities that included tele-mentoring and other adult educational programs.<sup>30</sup> EDU 4, a manufacturer of multimedia teaching rooms, was the successful bidder to a request for proposals issued by AFPA and provided AFPA with certain equipment and software that included a modified version of Virtual Network Computing ("VNC") software. VNC software enables a desktop user to view and control another desktop connected to the Internet. The version of VNC provided by EDU 4 was subject to the GNU GPL.

EDU 4 did not acknowledge the presence of the VNC software in the media that it provided.<sup>31</sup> In its

<sup>25</sup> *Id.*

<sup>26</sup> *Id.* See also Groklaw, "GPL Upheld in Germany Against D-Link," <http://www.groklaw.net/articlebasic.php?story=20060922134536257> (September 22, 2006).

<sup>27</sup> [http://www.gpl-violations.org/news/20060922-dlink-judgement\\_frankfurt.html](http://www.gpl-violations.org/news/20060922-dlink-judgement_frankfurt.html) (accessed on April 3, 2010).

<sup>28</sup> <http://www.gpl-violations.org/about.html#history> (accessed on April 3, 2010).

<sup>29</sup> <http://www.gpl-violations.org/news/20041004-majorupdate.html>; <http://www.gpl-violations.org/news/20041024-linux-tomtom.html> (accessed on April 3, 2010).

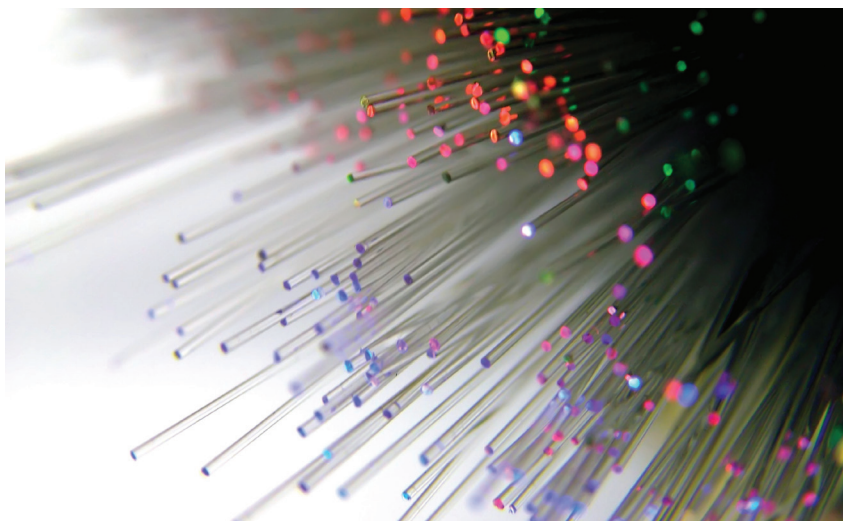
<sup>30</sup> A copy of the decision is available at <http://fsffrance.org/news/arret-ca-paris-16.09.2009.pdf>. The authors of this article relied upon an unofficial English translation of the decision for their discussion of the case.

<sup>31</sup> *Id.*

distribution, it also had deleted the VNC license, copyright notices, and attributions originally contained in the software and inserted its own. FSF France, another open-source community advocate for enforcement of the GPL, assisted AFPA by identifying the specific violations of the GPL and attempting to mediate a resolution with EDU 4, but to no avail.<sup>32</sup> In early 2002, AFPA unilaterally terminated the contract with EDU 4, due in part to the perceived violation of the GPL and its claim that EDU 4 had concealed the true pedigree of this code.<sup>33</sup> EDU 4 sued AFPA for breach of contract and was awarded damages by the Trial Court of Bobigny on September 21, 2004.

On appeal, AFPA alleged that it was entitled to rescission under Article 1184 of the French Civil Code.<sup>34</sup> AFPA also sought restitution of amounts it had paid under the contract. The Court of Appeals of Paris agreed and overturned the lower court's ruling on September 16, 2009.<sup>35</sup> The court determined that EDU 4 breached its contractual obligations by, *inter alia*, delivering software that did not satisfy the notice and attribution requirements of the GPL. Because EDU 4 did not provide AFPA with the source code for its modifications to the VNC software despite repeated requests from both AFPA and FSF France, the court also determined that EDU 4 could not assert that it had made a compliant delivery of software.<sup>36</sup> This was the first time that the French courts treated the GPL as enforceable and binding.<sup>37</sup>

Two additional aspects of this decision bear mention here. First, the decision established that, under French civil law, an end-user of software licensed under the GPL can seek judicial relief regarding compliance with its terms, based on rights granted to that downstream licensee by the copyright owner.<sup>38</sup> While this ruling does not automatically bestow standing on an unlimited class of potential enforcers in United States courts, it serves as a reminder that the FSF is not the only party that can enforce the General Public License.<sup>39</sup> Further, many contracts between software licensors and their customers



contain warranties of noninfringement and other terms that enable the customers to claim monetary damages for the licensor's unauthorized distribution of third-party intellectual property, if not specific performance obligating the licensor to remediate the infringement. The existence of these commercial terms can have the same practical impact in federal court as the AFPA's claim for rescission under French civil law.

Second, the appeals court's ruling concerned software preloaded on a personal computer, unlike the German cases governing firmware on routers, appliances, and other hardware. The investigative focus of free and open-source software advocates has clearly broadened to include non-embedded software that can readily be distributed independently of hardware. This reinforces the need to comprehend how expansively the open-source proponents may scrutinize applications, middleware, and utilities to assess their incorporation of open-source code and the parameters they will apply to determine whether the software is a derivative work of code originally licensed under a free or open source software license.

## Coming to America

The American free software movement continued to gather steam, invigorated by the achievements of their European counterparts. In 2005, Eben Moglen, professor at Columbia University Law School and longtime legal advisor to the Free Software Foundation, founded the

<sup>32</sup> FSF France, "Paris Court of Appeals condemns Edu4 for violating the GNU General Public License," <http://fsffrance.org/news/article2009-09-22.en.html> (September 22, 2009).

<sup>33</sup> <http://fsffrance.org/news/arret-ca-paris-16.09.2009.pdf> (September 16, 2009).

<sup>34</sup> *Id.* A copy of Article 1184 is available at <http://www.legifrance.gouv.fr/affichCodeArticle.do?cidTexte=LEGITEXT000006070721&idArticle=LEGIART1000006436635&dateTexte=20100404> (February 1804).

<sup>35</sup> *Id.*

<sup>36</sup> *Id.*; <http://fsffrance.org/news/article2009-09-22.en.html> (September 22, 2009).

<sup>37</sup> See Mark Radcliffe, "French Court Indirectly Finds the GPL Enforceable for the First Time," <http://lawandlifesiliconvalley.com/blog/?p=285> (September 30, 2009).

<sup>38</sup> FSF France, "Paris Court of Appeals condemns Edu4 for violating the GNU General Public License," <http://fsffrance.org/news/article2009-09-22.en.html> (September 22, 2009).

<sup>39</sup> SCO notoriously argued to the contrary in its Answer to IBM's Amended Counterclaims in *The SCO Group, Inc. v. International Business Machines Corp.*, No. 03-CV-294 (D. Utah) (October 24, 2003), contending that IBM lacked standing to enforce the GPL because it had failed to join the FSF as a necessary party to its claim. SCO subsequently dropped this defense in its Answer to IBM's Second Amended Counterclaims, filed on April 23, 2004.





Software Freedom Law Center (“SFLC”), a nonprofit organization dedicated to providing legal representation for advocates of free and open-source software.<sup>40</sup> On September 19, 2007, the SFLC and two developers of the popular BusyBox UNIX utilities sued Monsoon Multimedia (“Monsoon”) in the SDNY, in the first federal action for copyright infringement based on an alleged violation of the GPL.<sup>41</sup> The plaintiffs sought actual damages, attorney fees, and injunctive relief.<sup>42</sup>

BusyBox, the “Swiss Army Knife of Embedded Linux,” is a single executable program comprised of numerous, bare-bone UNIX utilities for devices such as cell phones and PDAs.<sup>43</sup> BusyBox is distributed under the terms of the GPL Version 2, which requires that re-distributors of a GPL-licensed program give recipients access to the corresponding source code.<sup>44</sup> The plaintiffs alleged that Monsoon improperly failed to make available the source code for the firmware embedded on its media devices,

though Monsoon had acknowledged on its online support forum that its firmware included BusyBox code and it was otherwise providing the firmware for download in object form.<sup>45</sup> They also claimed that the only permission Monsoon had to distribute BusyBox software was pursuant to the GPL, characterizing that permission as “contingent” on Monsoon’s compliance with its terms.<sup>46</sup>

The parties settled the case on October 30, 2007, just six weeks after the complaint was filed.<sup>47</sup>

In addition to the payment of an undisclosed sum, Monsoon agreed to appoint an open-source compliance officer, publish the source code for the BusyBox software it had distributed, and notify previous recipients of the software of their rights under the GPL.<sup>48</sup> The victory inspired the plaintiffs and their counsel to file a rapid stream of separate, near-identical copyright infringement claims in the SDNY against Verizon Communications, High-

<sup>40</sup> <http://www.softwarefreedom.org/> (accessed on April 4, 2010).

<sup>41</sup> *Andersen v. Monsoon Multimedia, Inc.*, No. 07-CV-8205 (S.D.N.Y. 2007); see Software Freedom Law Center, “On Behalf of BusyBox Developers, SFLC Files First Ever U.S. GPL Violation Lawsuit,” <http://www.softwarefreedom.org/news/2007/sep/20/busybox/> (September 20, 2007).

<sup>42</sup> It is not clear from the *Monsoon* filings why the developers did not seek statutory damages under the Copyright Act, but it is possible that they had not yet satisfied the registration requirements for that remedy. 17 U.S.C. §§ 412, 504(c).

<sup>43</sup> *Monsoon* Complaint ¶ 6; <http://www.busybox.net/about.html> (accessed on April 5, 2010).

<sup>44</sup> As noted in the Preamble to the GPL: “[I]f you distribute copies of such a program, whether gratis or for a fee, you must give [pass on to] the recipients all the rights that you have [the same freedoms that you received]. You must make sure that they, too, receive or can get the source code. And you must show them these terms so they know their rights.” <http://www.gnu.org/licenses/gpl-2.0.txt>; <http://www.gnu.org/licenses/gpl-3.0.txt> (variations shown in brackets).

<sup>45</sup> *Monsoon* Complaint ¶¶ 11, 15.

<sup>46</sup> *Id.* at ¶ 12.

<sup>47</sup> Software Freedom Law Center, “BusyBox Developers and Monsoon Multimedia Agree to Dismiss GPL Lawsuit,” <http://www.softwarefreedom.org/news/2007/oct/30/busybox-monsoon-settlement/> (October 30, 2007).

<sup>48</sup> *Id.*; see [http://news.cnet.com/8301-13580\\_3-9808378-39.html](http://news.cnet.com/8301-13580_3-9808378-39.html) (describing the case as “signal[ing] a new assertiveness on the part of open-source programmers”).



Gain Antennas, L.L.C., and Xterasys Corporation.<sup>49</sup> Like Monsoon, each defendant quickly agreed to comply with the GPL by publishing the source code for the firmware, and the cases were settled under terms substantially similar to those in the Monsoon litigation.

On December 11, 2008, the FSF, represented by the SFLC, brought a suit in the SDNY for copyright infringement against Cisco Systems, Inc.<sup>50</sup> The Cisco case was the first U.S.-based enforcement action filed by the FSF and the first case prosecuted by the SFLC involving open-source software other than BusyBox.<sup>51</sup> The FSF alleged that Cisco infringed the FSF's copyrights in various GNU tools licensed under either the GPL or the GNU Lesser General Public License ("LGPL") when the company distributed Linksys routers and other products embedding the GNU software, but failed to give its users access to corresponding source code as required by those licenses.<sup>52</sup> The complaint also set forth a stance considerably more aggressive than that of the earlier BusyBox litigation, explicitly invoking the automatic termination clause of the GPL and LGPL and contending that Cisco had lost all rights to redistribute the GNU software or any modifications thereto "the instant that [it] made noncompliant distribution of the Program in its Infringing Products or Firmware."<sup>53</sup>

The hard-line tactics were due in large part to the evidently unproductive exchanges regarding the alleged violations that had taken place between the FSF and Linksys for several years before the FSF commenced the lawsuit.<sup>54</sup> In a statement announcing the filing of the lawsuit, the FSF explained its disappointment with the earlier compliance efforts:

"We began working with Cisco in 2003 to help them establish a process for complying with our software

While the list of conquests by the FSF and SFLC is impressive and there is no reason to expect that the trend of filings will ebb, the litigation is not without controversy in the open-source community.

licenses, and the initial changes were very promising," explained Brett Smith, licensing compliance engineer at the FSF. "Unfortunately, they never put in the effort that was necessary to finish the process, and now five years later we have still not seen a plan for compliance. As a result, we believe that legal action is the best way to restore the rights we grant to all users of our software."<sup>55</sup>

Queries about Linksys' compliance with the GPL had been rampant on developer blogs and forums when Cisco acquired the privately held company for \$500 million in June 2003; the larger corporation apparently failed to "meaningfully improve" upon those

licensing practices when the FSF continued its discussions with the new parent company.<sup>56</sup>

Shortly thereafter, and before Cisco was required to formally respond to the FSF's complaint, the FSF announced that the parties had settled the dispute.<sup>57</sup> Cisco and the FSF jointly announced the terms of the settlement, which included Cisco's agreement to: (1) appoint a Free Software Director for Linksys to supervise the subsidiary's compliance with the requirements of free software licenses; (2) report periodically to the FSF regarding Linksys' compliance efforts; (3) notify recipients of Linksys products of their rights under the GPL and other applicable licenses; (4) publish licensing notices online and in product documentation; (5) make source code for FSF software used with current Linksys products freely available on its website; and (6) make an unspecified monetary contribution to the FSF.<sup>58</sup>

While the list of conquests by the FSF and SFLC is impressive and there is no reason to expect that the trend of filings will ebb, the litigation is not without controversy in the open-source community. Rob Landley – the second plaintiff in the watershed Monsoon case – disengaged from

<sup>49</sup> Complaints were filed against High-Gain Antennas, L.L.C. and Xterasys Corporation on November 19, 2007, and against Verizon Communications on December 6, 2007; all three cases involved the distribution of routers and gateways with BusyBox embedded in the firmware. See <http://www.linux-watch.com/news/NS8734215139.html> (December 7, 2007).

<sup>50</sup> *Free Software Foundation, Inc. v. Cisco Sys., Inc.*, No. 08-CV-10764 (S.D.N.Y. 2008).

<sup>51</sup> See Ars Technica, "Free Software Foundation lawsuit against Cisco a first," <http://arstechnica.com/open-source/news/2008/12/free-software-foundation-lawsuit-against-cisco-a-first.ars> (December 11, 2008).

<sup>52</sup> *Cisco Complaint* ¶ 26.

<sup>53</sup> *Id.* at ¶ 28.

<sup>54</sup> *Id.* at ¶¶ 29-42.

<sup>55</sup> *Free Software Foundation*, "Free Software Foundation Files Suit Against Cisco For GPL Violations," <http://www.fsf.org/news/2008-12-cisco-suit> (December 11, 2008).

<sup>56</sup> *Cisco Complaint* ¶ 42. See, e.g., Forbes.com, "Linux's Hit Men," [http://www.forbes.com/2003/10/14/cz\\_dl\\_1014linksys.html](http://www.forbes.com/2003/10/14/cz_dl_1014linksys.html) (October 14, 2003); "Embedded Linux and the GPL" [including comments], <http://lwn.net/Articles/35712/> (June 10, 2003); "Linux and Linksys: The Saga Continues" [with comments], [http://www.oreillynet.com/etel/blog/2003/08/linux\\_and\\_linksys\\_the\\_saga\\_con.html](http://www.oreillynet.com/etel/blog/2003/08/linux_and_linksys_the_saga_con.html) (August 12, 2003).

<sup>57</sup> *Free Software Foundation* "FSF Settles Suit Against Cisco," <http://www.fsf.org/news/2009-05-cisco-settlement.html> (May 20, 2009).

<sup>58</sup> *Id.*

the SFLC in December 2008 and refused to participate in any subsequent litigation.<sup>59</sup> Landley disliked what he called “ivory tower idealism with a negative pragmatic result,” and he did not recognize any substantive benefit to BusyBox from the SDNY settlements.<sup>60</sup> Other developers have also begun to raise concerns about the SFLC’s decision to seal the settlement agreements, a concept they perceive as counter to the objectives to an open community rather than a nod to defendants who do not wish to broadcast the amount of damages paid.<sup>61</sup>

Ironically, the most recent expression of misgivings about the SFLC is from Bruce Perens, a co-founder of the Open-Source Initiative and BusyBox developer who has openly warred with Landley for several years over the pedigree of that code.<sup>62</sup> On December 15, 2009, Perens released a statement asserting that he was the creator of the original BusyBox code base and that the SFLC did not represent his interests in the ongoing enforcement actions.<sup>63</sup> Perens contended:

The version 0.60.3 of BusyBox upon which

Mr. Andersen claims copyright registration in the lawsuits is to a great extent my own work and that of other developers. I am not party to the registration. ... Mr. Andersen, his past employers and Mr. Landley appear to have removed some of the copyright statements of other BusyBox developers, and appear to have altered license statements, in apparent violation of various laws. ... Much as other BusyBox developers wish to support the general cause of getting companies to comply with simple Free Software Licenses, some of the other developers and I are becoming annoyed with Mr. Andersen and Mr. Landley’s apparent violation of our own rights, and SFLC’s treatment of our interest. We have held off, to date, to avoid confusing issues, but our patience is limited.<sup>64</sup>

He was joined on another bulletin board by longtime BusyBox maintainer Dave Cinege, who also expressed his unhappiness with the SFLC and expressly stated that he believed Andersen was subject to legal action for his own

<sup>59</sup> Rob Landley, <http://landley.net/notes-2009.html#15-12-2009>; <http://landley.net/notes-2008.html> (accessed on April 2010).

<sup>60</sup> Linux Weekly News, “Bruce Perens: Statement on Busybox Lawsuits” [including comments], <http://lwn.net/Articles/366684/> (December 15, 2009).

<sup>61</sup> *Id.*

<sup>62</sup> Bruce Perens, “Statement on BusyBox Lawsuits,” <http://perens.com/blog/d/2009/12/15/23/> (December 15, 2009); see also Linux Weekly News, “Bruce Perens: Statement on BusyBox Lawsuits” [including comments], <http://lwn.net/Articles/366684/> (December 15, 2009).

<sup>63</sup> *Id.*

<sup>64</sup> *Id.*



violations of the GPL:

Anderson [sic] is claiming complete Copyright [sic] and that is simply an impossibility. As far as I am concerned, this claim is a GPL violation in and of itself. ... [H]e is in violation of Section 1 GPLv2, and has lost his privileges to the software according to Section 4 GPLv2. In this case Anderson lacks standing to bring suit and he himself is open to an action.

...One must wonder why the SFLC is working with Anderson when they have been aware that both Bruce and myself have more senior claims to the original work without the “issues” Anderson has. As Bruce has written we’ve basically been snubbed by them.<sup>65</sup>

Perens and Cinege raise interesting questions as to the validity of the copyright registrations that may have been relied upon in some of the BusyBox cases. Further, the Free Software Foundation itself has issued guidance strongly suggesting that the removal of copyright notices from GPL-licensed source code without the consent of the copyright owner would be an unauthorized modification of that code:

**I want to get credit for my work. I want people to know what I wrote. Can I still get credit if I use the GPL?**

You can certainly get credit for the work. Part of releasing a program under the GPL is writing a copyright notice in your own name (assuming you are the copyright holder). The GPL requires all copies to carry an appropriate copyright notice.<sup>66</sup>

If an entity redistributing the GPL-licensed code for profit intentionally deleted copyright notices, such conduct would almost certainly generate a violation report, as in the AFPA litigation before the Paris appeals court and vigorously pursued by FSF France. Cinege’s proposed application of the automatic termination clause with respect to Andersen is thus not inconsistent with policies implemented to date by the FSF and its allies. And it would be unwise to disregard Perens’ subject matter expertise, which was immediately called upon by the triumphant appellant following the Federal Circuit’s landmark decision verifying the remedies available to open-source licensors.

## Full Steam Ahead at the Federal Circuit

The first federal appellate decision enforcing an open-source license was issued on August 13, 2008, less than a year after the threshold *Monsoon* case was filed.<sup>67</sup> The United States Court of Appeals for the Federal Circuit considered “the ability of a copyright holder to dedicate certain work to free public use and yet enforce an ‘open-source’ copyright license to control the future distribution and modification of that work.” *Jacobsen v. Katzer*, 535 F.3d 1373, 1375 (Fed. Cir. 2008). Reversing the district court, the Federal Circuit held that because the terms of the open-source license were both covenants and conditions, the copyright holder had granted a limited license that entitled it to seek remedies for both breach of contract and copyright infringement. *Id.* at 1381-82. This case is a clear indicator of a somewhat newly crystallized view of the viability of open-source licenses in the United States.

*Palsgraf v. Long Island Railroad Co.*, 162 N.E. 99 (N.Y. 1928), set the standard for determining foreseeability in negligence cases, when a package full of unexpected fireworks fell and exploded at a railroad station. It was the model railroad enthusiasts that set the fireworks ablaze in *Jacobsen*, the new standard for the enforceability of open-source licenses. Robert Jacobsen and similarly minded developers collaborated in an open-source software project called Java Model Railroad Interface (“JMRI”). JMRI created and distributed Java-based applications including the DecoderPro tool, which allows model railroad enthusiasts to program decoder chips that control the trains. At the time of the subject lawsuit, DecoderPro was available for download from the JMRI site under the terms of an Artistic License.<sup>68</sup>

Katzer developed commercial software products for the model train industry, and offered a proprietary software product, Decoder Commander, that was also used to program decoder chips. Katzer, the owner of KAMIND Associates, Inc., contended that JMRI software infringed two patents held by KAMIND and sent Jacobsen numerous letters seeking the payment of royalties.<sup>69</sup> Investigating, Jacobsen determined that Katzer/KAMIND had included definition files from the DecoderPro code in the Decoder Commander software in apparent noncompliance with the Artistic License. In particular, the Decoder Commander

<sup>65</sup> “Your Rights Online: Busybox Developer Responds to Andersen-SFLC Lawsuits” [including comments], <http://yro.slashdot.org/story/09/12/15/1925257/Busybox-Developer-Responds-To-Andersen-SFLC-Lawsuits> (December 15, 2009).

<sup>66</sup> Free Software Foundation, “Frequently Asked Questions about the GNU Licenses,” <http://www.gnu.org/licenses/gpl-faq.html?sess=bf533ea338dd987ba57fe7f7c2b3b30e#IWa ntCredit> (accessed April 5, 2010).

<sup>67</sup> An earlier opinion from the United States Court of Appeals for the Seventh Circuit stated, without holding, that “[c]opyright law, usually the basis of limiting reproduction in order to collect a fee, ensures that open-source software remains free: any attempt to sell a derivative work will violate the copyright laws, even if the improver has not accepted the GPL.” *Wallace v. IBM Corp.*, 467 F.3d 1104, 1105-06 (7th Cir. 2006). In that case, Wallace alleged that IBM, Red Hat, and Novell conspired to eliminate competition in the operating-system market by making Linux available at no charge and that the GPL’s requirement in this regard constituted illegal price-fixing. The Seventh Circuit held that the GNU GPL did not restrain trade or violate the federal antitrust laws. *Id.* at 1107-08.

<sup>68</sup> *Jacobsen*, 535 F.3d at 1376.

<sup>69</sup> See, e.g., <http://jmri.org/k/correspondence/20050308-KAM.pdf> (accessed on April 6, 2010).



software did not include: “(1) the authors’ names; (2) JMRI copyright notices; (3) references to the COPYING file; (4) an identification of SourceForge or JMRI as the original source of the definition files; or (5) a description of how the files or computer code had been changed from the original source code.”<sup>70</sup> Katzer/KAMIND had also modified DecoderPro file names without referencing the original JMRI files or explaining where they could be located.

Jacobsen sued Katzer and KAMIND in the United States District Court for the Northern District of California for copyright infringement on the basis of the defendants’ failure to abide by the terms of the Artistic License and sought a preliminary injunction to halt distribution of the Decoder Commander software.<sup>71</sup> Jacobsen employed a similar litigation strategy to that followed by Harald Welte in the German courts, recognizing that equitable relief could be a powerful motivational tool while acknowledging that monetary damages arising from the unauthorized distribution of free software could be speculative.<sup>72</sup> Like Welte, Jacobsen also found an attorney dedicated to the cause, in the person of Victoria Hall; she had regularly provided *pro bono* advice to the Electronic Frontier Foundation and was willing to assist Jacobsen at no charge.<sup>73</sup>

The district court, however, held that the Artistic License was an “intentionally broad” nonexclusive license that was unlimited in scope. The district court thus concluded that no liability for copyright infringement could attach and denied Jacobsen’s request for a preliminary injunction:

...[T]he JMRI Project license provides that a user may copy the files verbatim or may otherwise modify the material in any way, including as part of a larger, possibly commercial software distribution. The license explicitly gives the users of the material, any

member of the public, “the right to use and distribute the [material] in a more-or-less customary fashion, plus the right to make reasonable accommodations.” The scope of the nonexclusive license is, therefore, intentionally broad.<sup>74</sup>

The court determined that to the extent Jacobsen had a potential remedy for Katzer’s unauthorized distribution of the DecoderPro files, the appropriate cause of action was breach of contract, not copyright infringement.

On appeal, the Federal Circuit vacated and remanded the district court’s decision. The appeals court noted, as a *practical* matter, that “[o]pen source licensing has become a widely used method of creative collaboration that serves to advance the arts and sciences in a manner and at a pace that few could have imagined just a few decades ago.”<sup>75</sup> The court offered an illustration of the popularity and prevalence of software and other content distributed under public licenses:

For example, the Massachusetts Institute of Technology (“MIT”) uses a Creative Commons public license for an OpenCourseWare project that licenses all 1800 MIT courses. Other public licenses support the GNU/Linux operating system, the Perl programming language, the Apache web server programs, the Firefox web browser, and a collaborative web-based encyclopedia called Wikipedia. Creative Commons notes that, by some estimates, there are close to 100,000,000 works licensed under various Creative Commons licenses. The Wikimedia Foundation, another of the *amici curiae*, estimates that the Wikipedia website has more than 75,000 active contributors working on some 9,000,000 articles in more than 250 languages.<sup>76</sup>

The Federal Circuit also highlighted the benefits of open-source licenses “that

If an entity redistributing the GPL licensed code for profit intentionally deleted copyright notices, such conduct would almost certainly generate a violation report, as in the AFPA litigation before the Paris appeals court and vigorously pursued by FSF France.

<sup>70</sup> *Jacobsen*, 535 F.3d at 1376.

<sup>71</sup> *Jacobsen v. Katzer*, No. 06-CV-01905 JSW, 2007 WL 2358628 (N.D. Cal. Aug. 17, 2007).

<sup>72</sup> See *Jacobsen*, 535 F.3d at 1383, n.6 (noting that “[a]t oral argument, the parties admitted that there might be no way to calculate any monetary damages under a contract theory”).

<sup>73</sup> Bruce Perens, “Bruce Perens: Inside Open Source’s Historic Victory,” <http://itmanagement.earthweb.com/features/article.php/3866316/Bruce-Perens-Inside-Open-Sources-Historic-Victory.htm> (February 22, 2010).

<sup>74</sup> *Jacobsen*, 2007 WL 2358628, at \*7. Exhibit A to the Supplemental Declaration of Robert Jacobsen in Support of Motion for Preliminary Injunction states, *inter alia*, that “The intent of this document is to state the conditions under which a Package [i.e., the collection of files distributed by the Copyright Holder, and derivatives thereof] may be copied, such that the Copyright Holder maintains some semblance of artistic control over the development of the package, while giving the users of the package the right to use and distribute the Package in a more-or-less customary fashion, plus the right to make reasonable modifications.” *Jacobsen*, No. 06-CV-01905 JSW (N.D. Cal. filed Nov. 17, 2006) (document no. 131-1).

<sup>75</sup> *Jacobsen*, 535 F.3d at 1378.

<sup>76</sup> *Id.*





range far beyond traditional license royalties,” including the expansion of market share for proprietary licensors who are willing to offer certain components at no charge, gain of reputation, and the ability to exploit additional development resources for more rapid and less costly product enhancements.<sup>77</sup>

The court’s *legal* analysis focused on the issue of whether the terms of the Artistic License were *covenants to or conditions of* the license to use the DecoderPro software. Specifically, the Federal Circuit explained that if the license terms constituted conditions of use, then those conditions could limit the scope of the license and enable the licensor to bring a claim of copyright infringement against a licensee that acted outside its scope.<sup>78</sup> The court found that the Artistic License’s explicit reference to the creation of “conditions,” the use of the phrase “provided that” when

characterizing the license grant, and the critical nature of the license requirements in helping the copyright holder benefit from the subsequent redistribution of the software, all supported the characterization of these terms as conditions.<sup>79</sup>

Accordingly, the Federal Circuit determined that the district court had erred in failing to treat the express limitations in the Artistic License on an end-user’s right to copy, distribute, and modify as conditions.<sup>80</sup> The appellate court thus explicitly confirmed that the potential remedies available to a copyright owner for violation of an open-source license included those for breach of contract and copyright infringement.<sup>81</sup> It directed the district court to reconsider the motion for preliminary injunction and make factual findings on whether Jacobsen had satisfied the criteria for the issuance of equitable relief.<sup>82</sup>

<sup>77</sup> *Id.* at 1379-81 (further noting that “[t]he 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”).

<sup>78</sup> *Id.* at 1380.

<sup>79</sup> *Id.* at 1382; see also *id.* (“The clear language of the Artistic License creates conditions to protect the economic rights at issue in the granting of a public license.”).

<sup>80</sup> *Id.* at 1382.

<sup>81</sup> In addition to his claim for copyright infringement, Jacobsen also alleged that Katzer had violated the Digital Millennium Copyright Act (“DMCA”). *Jacobsen v. Katzer*, No. C 06-01905 JSW, 2009 WL 4823021, at \*1, 93 USPQ2d 1236 (N.D. Cal. Dec. 10, 2009). Jacobsen specifically alleged that notices and attributions in the original JMRL source code constituted “copyright management information” (“CMI”) within the meaning of the DMCA, and that the defendants violated 17 U.S.C. § 1202(b) by removing those notices prior to re-distribution of the software. *Id.* at \*7. The statute, which has as a primary objective protection of the integrity of CMI, includes the information in copyright notices, the name and other identifiers of the author of the work, the name and other identifiers of the copyright owner of the work, and terms and conditions for use of the work.” 17 U.S.C. § 1202(c). Jacobsen contended that for purposes of the DecoderPro files, the “author’s name, a title, a reference to the license and where to find the license, a copyright notice, and the copyright owner” were CMI. *Jacobsen*, 2009 WL 482301, at \*7.

The district court agreed that this information was “CMI” and found that defendants’ removal thereof met certain elements of a DMCA violation, but it did not resolve the ultimate issue prior to the parties’ settlement of the case. *Id.* Nevertheless, the case highlights the potential applicability of the DMCA in instances where copyright or licensing notices have been removed; criminal penalties including fines and imprisonment could result from the willful removal of CMI “for purposes of commercial advantage.” 17 U.S.C. § 1202.

<sup>82</sup> *Id.*

Upon remand, the court again denied the request for a preliminary injunction, and Jacobsen filed an appeal with the Federal Circuit.<sup>83</sup> Jacobsen also continued to pursue the district court litigation vigorously, filing a motion for summary judgment on October 30, 2009. Jacobsen engaged several expert witnesses to provide written testimony on the critical importance of copyright notices and attributions in open-source code and the irreparable harm caused by the ongoing distribution of infringing open-source software; one such witness was Bruce Perens, the BusyBox developer discussed *supra*.<sup>84</sup>

Following a ruling on both parties' motions for summary judgment that heavily favored Jacobsen, the parties settled the litigation on February 17, 2010. Rather than continuing to distribute the DetectorPro files and implementing remedial steps to comply with the Artistic License, Katzer/KAMIND consented to a permanent injunction prohibiting them from reproducing, modifying, or distributing JMRI materials. Katzer/KAMIND also agreed to pay Jacobsen the sum of \$100,000.<sup>85</sup> JMRI independently forswore the Artistic License and adopted the GPL Version 2 for all of its applications.<sup>86</sup>

### Recent Enforcement Actions in U.S. Courts Continue to Follow Patterns Formed in European Courts

In December 2009, again represented by the SFLC, Andersen and the Software Freedom Conservancy<sup>87</sup> sued

Best Buy Co., Samsung Electronics America, and twelve other companies in the SDNY for copyright infringement arising from their redistribution of the BusyBox program.<sup>88</sup> As of the date of this article, the case is proceeding and the district court recently set a schedule for standard pre-trial and discovery activities. Notably, the defendants in *Best Buy* have reserved their right to seek a jury trial on the issues, perhaps believing that the laymen on a jury would look unfavorably on this extension of free software philosophy; this would be the first federal case in which a jury would serve as decision-maker for an open-source enforcement action.

Two additional procedural aspects of this case are noteworthy, even as the case remains in its early stages. First, *Best Buy* emphasizes that open-source licenses are being enforced not only against software providers and hardware manufacturers, but distributors of devices that contain open-source software. Best Buy, for example, is alleged to have distributed a "Blu-ray Disc Player" infringing Andersen's copyright in the BusyBox code. Discovery in the case will likely show that Best Buy had no role in determining which software or firmware was used in the disc player or was even aware of its inclusion.

Second, counter to the reaction to earlier cases filed by the SFLC, only one of fourteen defendants in *Best Buy* settled the suit before the due date for formally responding to the complaint. The remaining thirteen defendants each filed a timely "answer" under Federal Rule of Civil Procedure 12(a). No defendant filed a motion to dismiss

<sup>83</sup> JMRI provides a detailed chronology of the *Jacobsen* litigation at <http://jmri.sourceforge.net/k/History.shtml> (accessed on April 6, 2010).

<sup>84</sup> Perens' testimony is available at <http://perens.com/works/testimony/PerensJMRI.pdf> (accessed on April 6, 2010); see Bruce Perens, "Bruce Perens: Inside Open Source's Historic Victory," <http://itmanagement.earthweb.com/features/article.php/3866316/Bruce-Perens-Inside-Open-Sources-Historic-Victory.htm> (February 22, 2010).

<sup>85</sup> *Jacobsen*, No. 06-CV-01905 JSW (N.D. Cal. filed Feb. 18, 2010) (document no. 402).

<sup>86</sup> <http://www.jmri.org/help/en/html/doc/Technical/index.shtml#use> (accessed April 6, 2010).

<sup>87</sup> Founded in 2006, the Software Freedom Conservancy is an outgrowth of the Software Freedom Law Center and is a self-described "fiscal sponsor" for open source projects that elect to transfer their assets to this 501(c)(3) organization. <http://conservancy.softwarefreedom.org/news/2006/apr/03/conservancy-launch/> (April 3, 2006). The Conservancy performs financial and administrative services for the projects and asserts that its corporate shield will protect the software contributors from personal liability. <http://conservancy.softwarefreedom.org/overview/> (accessed on April 6, 2010). "All of these benefits are currently provided for free." *Id.* Busy Box was one of the first projects to join the Conservancy. <http://conservancy.softwarefreedom.org/news/2006/apr/03/conservancy-launch/> (accessed on April 6, 2010).

<sup>88</sup> *Software Freedom Conservancy, Inc. v. Best Buy Co., Inc.*, No. 1:09cv10155 SAS (S.D.N.Y. Dec. 14, 2009).



under Federal Rule of Civil Procedure 12(b)(6), alleging, for example, that the GPL was unenforceable as a matter of law. The defendants' procedural strategy suggests that they are cognizant of earlier decisions upholding the enforceability of open-source licenses.

But the defendants have denied copyright infringement and raised numerous affirmative defenses yet to be considered by a federal court in a claim seeking the enforcement of a free or open-source license. For example, Best Buy raised seven affirmative defenses that include a challenge to the plaintiffs' standing to bring the suit and a "fair use" defense. Best Buy has also filed a counterclaim seeking a declaratory judgment that it does not infringe any copyright in the BusyBox code. This forceful approach may be the result of Best Buy observing the previously referenced disputes within the open-source community regarding the ownership of such copyright; it will be enlightening to see who Best Buy names to its witness list.

This case is certain to be closely watched by the open-source community and the corporate users of their software.

## Conclusion

Since 2005, authority supporting the enforceability of open-source licenses in the United States has matured, in large part due to groundbreaking and unwavering decisions by European courts. So too have the recognized scope of remedies available to the licensor and, perhaps, even the range of other affected parties who can pursue such enforcement. Although the European decisions have not been cited directly in opinions by federal courts, they certainly have left their mark on our jurisprudence.

Moreover, the zealous and dedicated open-source advocates that aided enforcement litigation in European courts through both technical and *pro bono* legal services have offered the same assistance in analogous federal cases. And efforts to enforce free and open-source licenses in the United States are more spirited than ever, with disciplined organizations of developers and counsel often ready and willing to participate on behalf of the plaintiff.

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The open-source community will exploit the momentum gained from their achievements; they cannot afford to lose credibility, or the impetus for many licensees to comply may be diminished.<sup>89</sup> As courts around the world continue to decide the vast array of complex contractual and intellectual property questions surrounding the interpretation of and compliance with open-source licenses, the marks of early decisions by European courts will remain.

But there are many issues that require deeper exploration. What will become the conventional standard for quantifying actual monetary damages for copyright infringement suffered by a copyright owner of

software distributed solely under an open-source license? May a copyright owner of open-source software seek the destruction or seizure of equipment and hardware on which infringing code is embedded? Under what circumstances will the terms of a free or open-source license be deemed to be covenants but not conditions enabling a related claim for copyright infringement? These and many other questions remain.

And perhaps the most intriguing question of all also remains, for those who must understand and apply the principles to their technology with a degree of certainty as to their validity: On which continent will jurisprudence regarding the enforcement of free and open-source licenses develop most rapidly? Counsel on both sides of the Atlantic Ocean are advised to track carefully the work of their colleagues.

<sup>89</sup> CBS Interactive, "GPL Defenders Say: See You in Court," [http://news.cnet.com/GPL-defenders-say-See-you-in-court/2100-7344\\_3-6210837.html](http://news.cnet.com/GPL-defenders-say-See-you-in-court/2100-7344_3-6210837.html) (October 1, 2007) (Daniel Ravicher, counsel in *Monsoon* and co-founder of SFLC, observed "[i]f you start getting a reputation for being a pansy, then people are going to conclude they don't have to do anything").



# Keeping Broker Records in the Cloud

By  
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Broker-dealers caught unaware have paid millions in fines for failure to comply with the Securities and Exchange Commission's requirements to preserve books and records.

For instance, a large brokerage firm in 2006 agreed to pay a \$15 million settlement for allegedly failing to produce e-mails and electronic records in a timely manner during the course of two separate SEC investigations. In 2009, the brokerage arm of a large commercial bank agreed to pay several million dollars in fines for, among other things, failure to retain electronic records pertaining to its business, following hearings before the New York Stock Exchange and the Financial Industry Regulatory Authority.

Now comes computing in the cloud, which should save firms big bucks by placing their applications and data on servers and systems maintained by other parties. Already, many broker-dealers take advantage of third-party service providers in the "cloud" to archive e-mail, text messages, and other electronic documents, including financial transaction data, trade confirmations, and net capital records.

Fortunately, outsourcing of record-keeping is an area for which the SEC provides reasonably clear guidance, principally through Rule 17a-4(f), under the Securities Exchange Act of 1934.

Prior to relying on a third party for electronic record-keeping, a broker-dealer is required to notify the SEC and a designated examining authority ("DEA") such as FINRA of its intention to do so. Under Rule 15b3-1, the broker-dealer must amend its Form BD to identify to the SEC and self-regulatory organizations of which it is a member, like FINRA, "any arrangements" with third parties who maintain the broker-dealer's books or records. FINRA has adopted both NASD Rule 3110 and NYSE Rule 440, which reiterate the need to preserve books and records in compliance with Rule 17a-4.

Next, the broker-dealer must make a representation, or obtain one from a storage vendor or other third party "with appropriate expertise," that the broker-dealer's selected storage media meets the conditions set forth in Rule 17a-4(f).

The broker-dealer or third-party expert must attest that the electronic storage media will: (1) preserve the records exclusively in a non-rewriteable, non-erasable format (subsequent interpretive guidance from the SEC states that media itself need not be physically non-rewriteable and non-erasable, and that "non-rewriteable, non-erasable" can be achieved using "integrated hardware and software control codes"); (2) verify automatically the quality and accuracy of the storage

media recording process; (3) serialize the original and, if applicable, duplicate units of storage media, and time-date for the required period of retention the information placed on such electronic storage media; and (4) have the capacity to readily download indexes and records preserved on the electronic storage media to “any medium acceptable” under Rule 17a-4(f) as required by the SEC or the self-regulatory organizations of which the broker-dealer is a member.

In addition, every broker-dealer exclusively using electronic storage media for any of its record preservation must make arrangements with at least one third-party who has access, and the ability, to download information from the broker-dealer’s electronic storage media to “any medium acceptable” under Rule 17a-4. The third-party downloading service provider, which may or may not be the same service provider that is storing the electronic records, must file with the SEC and the broker-dealer’s DEA two undertakings with respect to the electronically maintained records.

The service provider must undertake to: (1) “furnish promptly” to the SEC or its designee “upon reasonable request,” such information as “is deemed necessary” by the SEC or its designee by downloading the information from the broker-dealer’s electronic storage media to the “acceptable” medium; and (2) “take reasonable steps” to provide access to information contained on the broker-dealer’s electronic storage media, including arrangements for downloading any record required to be maintained and preserved by the broker-dealer “in a format acceptable” to the SEC or its designee. In the event of a failure on the part of the broker-dealer to download the records “into a readable format,” and, after “reasonable notice” to the broker-dealer, upon request of the SEC the third-party service provider must provide the records to the SEC or its designee.

The SEC also requires the broker-dealer to put in place an audit system that provides “accountability regarding inputting of records required to be maintained and preserved” on electronic storage media and “inputting of any changes made to every original and duplicate record maintained and preserved.” At all times, the broker-dealer must be able to have the results of such audit system

available for examination by the SEC and the self-regulatory organizations of which the broker-dealer is a member. The audit results must be preserved for the same amount of time as the underlying records being audited.

Despite the relative clarity of Rule 17a-4, some ambiguity remains. For example, Rule 17a-4 does not expressly describe the “acceptable” download medium, but presumably the medium must preserve the accuracy, indexing, and serialization of the records otherwise required for storage of the records under Rule 17a-4. The second undertaking requirement states that the downloaded information must be in a “readable format,” but it is not clear whether this adds an additional requirement to change the format of the records beyond the indexing and serialization of the stored data. It is also not clear whether the download medium must also be non-erasable and non-rewriteable.

Recently, some examiners at FINRA have questioned whether the audit requirements under Rule 17a-4 might be interpreted to require the preservation of all intermediary drafts of all records or even all metadata relating to the records. Such an interpretation calls into question when a draft becomes a “record” under the rules. Though the rules do not explicitly require such a burdensome undertaking, what might have been unthinkable ten years ago is now possible in the cloud’s ever increasing storage capacity, and may soon be required.

Rule 17a-4 also includes default preferences for anachronisms like microfilm, microfiche, and “optical disk technology (including CD-ROM)” which have, for the most part, been replaced in practice by optical tape technology. Specifically, Rule 17a-4(f)(2)(i) requires a broker-dealer employing any electronic storage media other than optical disk technology (including CDROM) to notify its DEA at least ninety (90) days prior to employing such storage media.

Future revisions to the rules should address such relics. Going forward, the challenge for regulators will be to strike the balance of providing clear guidance, while leaving enough flexibility in the rules to keep up with advances in technology.

## Tips for Practitioners and Guidance from the Patent Office, Federal Circuit, and ITC on Patent Eligibility Under Section 101

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### INTRODUCTION

Patent applicants, practitioners, and examiners at the U.S. Patent and Trademark Office ("USPTO") continue their best efforts to properly analyze questions of patent eligibility under 35 U.S.C. § 101<sup>1</sup> in view of the United States Supreme Court's *Bilski v. Kappos*<sup>2</sup> ruling from earlier this year. Guidance on § 101 and *Bilski* continues to emerge from various sources, including the USPTO (and its Board of Patent Appeals and Interferences), the United States Court of Appeals for the Federal Circuit, and the United States International Trade Commission. Despite this guidance, some contours of patent-eligible subject matter remain considerably clearer than others.

The USPTO's July 2010 guidelines for examiners (and practitioners) concerning application of *Bilski* answers many questions while highlighting others that remain, at least in the USPTO's view. For example, the July 2010 "Interim Guidance" by the USPTO indicates that the USPTO is somewhat likely to find a process patent-eligible under § 101 if that process is either tied to a specific machine or it transforms

a physical object from one state or thing to another. But even the USPTO candidly acknowledges that it is not entirely clear whether, for example, claims that do not meet the machine-or-transformation test nevertheless remain patent-eligible because they do not recite an abstract idea.

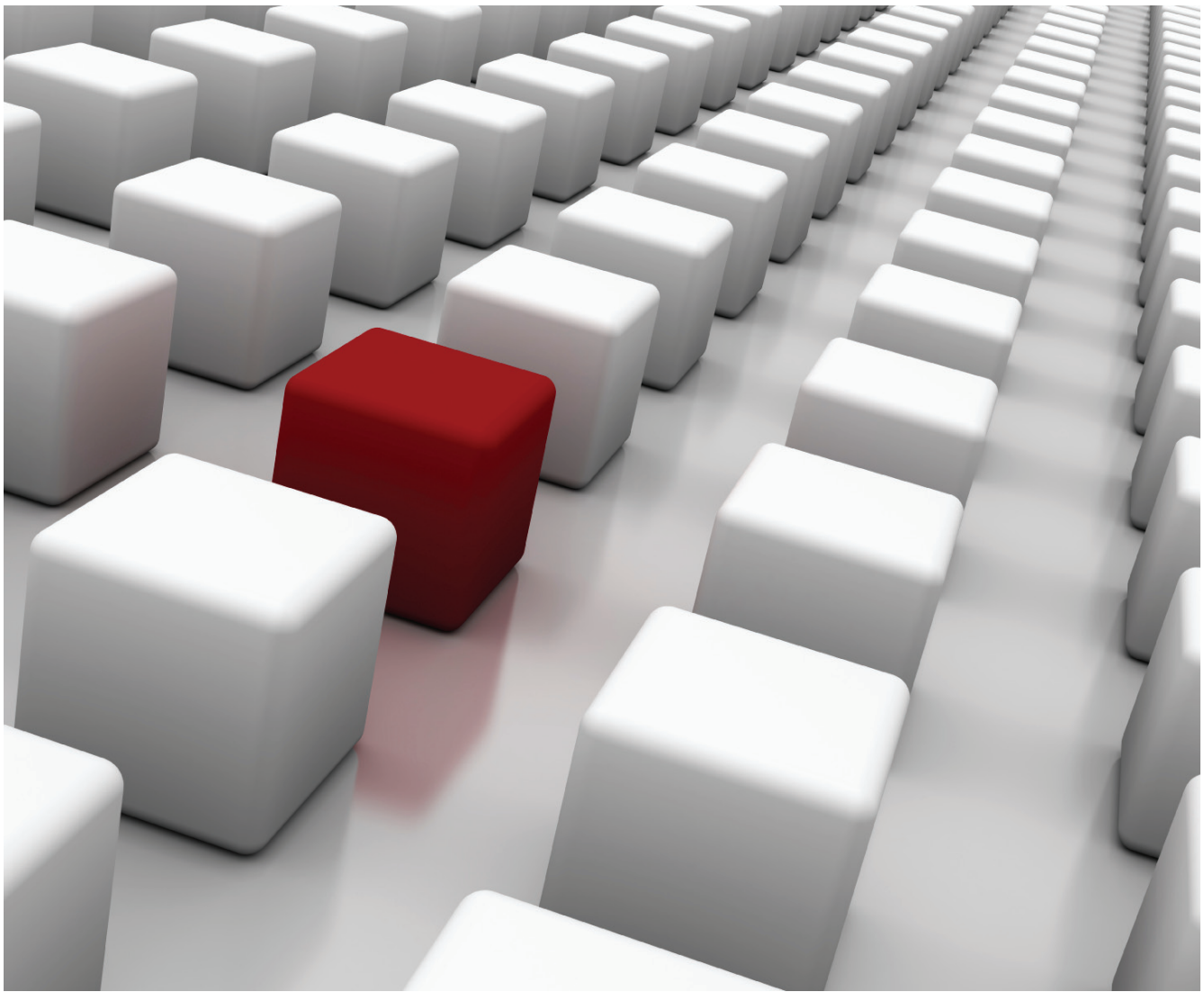
The International Trade Commission also recently ruled that certain claims are not patent-eligible "in view of *Bilski v. Kappos*, 130 S. Ct. 3218 (2010), *Gottschalk v. Benson*, 409 U.S. 63 (1972), and *Parker v. Flook*, 437 U.S. 584 (1978)."<sup>3</sup> In *In the Matter of Certain Machine Vision Software, Machine Vision Systems, and Products Containing Same*, the Commission affirmed the Administrative Law Judge's initial determination that several claims directed to methods for image processing were not patent-eligible subject matter because they merely recited abstract ideas. This Commission Opinion by the International Trade Commission did not expressly cite to the USPTO's Interim Guidance, but the Commission's analysis of the abstractness issue includes many of the factors discussed in the Interim Guidance.

<sup>1</sup> 35 U.S.C. § 101 states: "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title."

<sup>2</sup> 130 S. Ct. 3218 (2010).

<sup>3</sup> *In the Matter of Certain Machine Vision Software, Machine Vision Systems, and Products Containing Same*, Investigation No. 337-TA-680, Commission Opinion (Nov. 16, 2010) at 2 ("Certain Machine Vision Software").





On the other hand, the Federal Circuit recently issued its first post-*Bilski* opinion and provides guidance that, in some ways, differs from the USPTO's July 2010 Interim Guidance. In *Research Corporation Technologies, Inc. v. Microsoft Corporation*,<sup>4</sup> the Federal Circuit held that certain signalprocessing methods-at-issue were patent-eligible under § 101. The “machine or transformation test” that was much the focus of the district court, Federal Circuit, and Supreme Court opinions in *Bilski* did not take center stage in *Research Corporation*. Instead, the Federal Circuit observed, *inter alia*, that the claims-at-issue presented “functional and palpable applications in the field of computer technology.”

While the law (and USPTO examination policy) develops, applicants and the practitioners that represent them may draw upon an ever-growing – if ever-changing – body of guidance from the USPTO, federal courts, and even the International Trade Commission. This Article discusses

aspects of that body of guidance and presents potential strategies for clearing the first hurdle to patentability: patent-eligibility under § 101.

### THE U.S. PATENT AND TRADEMARK OFFICE'S INTERIM GUIDANCE ON PATENT-ELIGIBLE SUBJECT MATTER

On July 27, 2010, the USPTO issued “Interim Guidance for Determining Subject Matter Eligibility for Process Claims in View of *Bilski v. Kappos*”. Notably, the Interim Guidance “applies to *all* application filed before, on or after the effective date of July 27, 2010.” It thus represents the USPTO's current guidance on *Bilski* as it applies to all pending applications.

The Interim Guidance provides a detailed discussion of various factors that weigh in favor of, or against, patent eligibility.<sup>5</sup> It also focuses much attention on the “abstract

<sup>4</sup> No. 2010-1037, 2010 WL 4971008 (Dec. 8, 2010).

<sup>5</sup> 75 Fed. Reg. 43922 at 43925-27 (July 27, 2010).

idea exception to subject matter eligibility.”<sup>6</sup> The USPTO’s “Quick Reference Sheet” to evaluate whether a claim is directed to patent-eligible subject matter is as follows, although the USPTO notes that “not every factor will be relevant to every claim and, as such, need not be considered in every analysis”:<sup>7</sup>

### Factors Weighing Toward Eligibility

- Recitation of a machine or transformation (either express or inherent).
- Machine or transformation is particular.
- Machine or transformation meaningfully limits the execution of the steps.
- Machine implements the claimed steps.
- The article undergoes a change in state or thing (e.g., objectively different function or use).
- The article being transformed is an object or substance.
- The claim is directed toward applying a law of nature.
- Law of nature is practically applied.
- The application of the law of nature meaningfully limits the execution of the steps.
- The claim is more than a mere statement of a concept.
- The claim describes a particular solution to a problem to be solved.
- The claim implements a concept in some tangible way.
- The performance of the steps is observable and verifiable.

### Factors Weighing Against Eligibility

- No recitation of a machine or transformation (either express or inherent).
- Insufficient recitation of a machine or transformation.
- Involvement of a machine, or transformation, with the steps is merely nominally, insignificantly, or tangentially related to the performance of the steps, e.g., data gathering, or merely recites a field in which the method is intended to be applied.
- Machine is generically recited such that it covers any machine capable of performing the claimed step(s).
- Machine is merely an object on which the method operates.
- Transformation involves only a change in position or location of article.

- “Article” is merely a general concept....  
The claim is not directed to an application of a law of nature.
- The claim would monopolize a natural force or patent a scientific fact; e.g., by claiming every mode of producing an effect of that law of nature.  
Law of nature is applied in a merely subjective determination.  
Law of nature is merely nominally, insignificantly, or tangentially related to the performance of the steps.
- The claim is a mere statement of a general concept....
- Uses of the concept, as expressed in the method, would effectively grant a monopoly over the concept.
- Both known and unknown uses of the concept are covered, and can be performed through any existing or future-devised machinery, or even without any apparatus.
- The claim only states a problem to be solved.
- The general concept is disembodied.
- The mechanism(s) by which the steps are implemented is subjective or imperceptible.

The USPTO emphasized that no factor is conclusive by itself, and that the weight accorded each factor will vary based upon the particulars of an application. And, interestingly, “when it is determined that the claim is patent-eligible, the analysis may be concluded”<sup>8</sup> and the examination may proceed to evaluation of other considerations, e.g., §§ 102, 103, and 112. It thus appears that not all factors need be considered if one or more of them sufficiently suggest patent eligibility.

In a gesture quite appropriate under the circumstances, the Interim Guidance sought public comments in response to three questions *before* explaining the USPTO’s factors that examiners and practitioners should consider:<sup>9</sup>

1. What are examples of claims that do not meet the machine-or-transformation test but nevertheless remain patent-eligible because they do not recite an abstract idea?
2. What are examples of claims that meet the machine-or-transformation test but nevertheless are not patent-eligible because they recite an abstract idea?
3. The decision in *Bilski* suggested that it might be possible to “defin[e] a narrower category or class of patent applications that claim to instruct how business should be conducted,” such that the category itself would be

<sup>6</sup> *Id.* at 43924-25.

<sup>7</sup> *Id.* at 43927.

<sup>8</sup> *Id.* at 43927.

<sup>9</sup> *Id.* at 43923.



unpatentable as “an attempt to patent abstract ideas.” *Bilski* slip op. at 12. Do any such “categories” exist? If so, how does the category itself represent an “attempt to patent abstract ideas?”

The Federal Circuit’s *Research Corporation v. Microsoft Corporation* opinion discussed in more detail below may have answered aspects of the USPTO’s first question. There, the entirety of one claim-at-issue was a “method for half-toning of gray scale images by utilizing a pixel-by-pixel comparison of the image against a blue noise mask in which the blue noise mask is comprised of a random non-deterministic, non-white noise single valued function which is designed to produce visually pleasing dot provides when thresholded at any level of said gray scale images.”<sup>10</sup> It remains to be seen how USPTO-examination practice may change in view of *Research Corporation*, and whether the USPTO will revise its examination guidelines to take into account the Federal Circuit’s recent ruling.

## RECENT RULING BY THE U.S. INTERNATIONAL TRADE COMMISSION

In *Certain Machine Vision Software*<sup>11</sup> – which predated the Federal Circuit’s *Research Corporation* opinion – the Commission affirmed the Administrative Law Judge’s ruling that two patents-in-suit failed to claim patent-eligible subject matter. One claim-at-issue is as follows:<sup>12</sup>

A geometric pattern matching method for refining an estimate of a true pose of an object in a run-time image, the method comprising:

*generating* a low-resolution model pattern using a training image, the low-resolution model pattern including a geometric description of the expected shape of the object at a low spatial resolution, each geometric description including a list of pattern boundary points;

*generating* a high-resolution model pattern using the

<sup>10</sup> *Research Corp.*, 2010 WL 4971008, at \*3 (emphasis added).

<sup>11</sup> See *supra* at note 2.

<sup>12</sup> U.S. Patent No. 7,065,262 (emphasis added). It is interesting to compare claim 1 of the ‘262 Patent with claim 1 of the patent that the Federal Circuit held to be patent-eligible in *Research Corporation*.



training image, the high-resolution model pattern including a geometric description of the expected shape of the object at a high spatial resolution, each geometric description including a list of pattern boundary points;

receiving a starting pose, the starting pose representing an initial estimate of the true pose of the object in the run-time image;

receiving a run-time image;

using the low-resolution model pattern, and the starting pose, analyzing the run-time image so as to provide a low-resolution pose that is a more refined estimate of the true pose than the starting pose; and

using the high-resolution model pattern, and the low-resolution pose, analyzing the run-time image so as to provide a high-resolution pose that is a more refined estimate of the true pose than the low-resolution pose.

The Commission explained that “[a]ll of the claimed steps of the patents asserted here, e.g., generating, receiving, analyzing, providing, comparing, and computing, are no more than algorithms or data gathering steps, and neither

they nor the patent specification limit the claims to patentable industrial processes.”<sup>13</sup> Invoking what appear to be factors similar to those found in the USPTO’s Interim Guidance, the Commission also noted:<sup>14</sup>

- “[T]he asserted claims of both patents cover an *idea without a link to any realworld undertaking*.”
- “Although the *specifications* provide a litany of *potential uses* of the claimed algorithms such as “industrial automation, medical diagnosis, satellite imaging [and others],” the two specifications are silent as to any *actual implementation* beyond the abstract concepts (i.e., algorithms) that are claimed.”
- “While the patent specifications teach that many imaging devices *exist*, e.g., x-ray devices, CT scanners, [and others], the claims do not *tie the subject matter to any particular machine* as required by Supreme Court precedent.”
- “[T]he asserted claims have *unbridled scope* and attempt to pre-empt any use of the claimed idea regardless of the machinery used to implement the idea.”

<sup>13</sup> *Certain Machine Vision Software*, No. 337-TA-680, Commission Opinion (Nov. 16, 2010) at 2.

<sup>14</sup> *Id.* at 2-4 (emphasis added).





- “[T]he asserted claims do not *transform* anything, but rather simply collect data.”
- “[N]othing about the image or model claimed in these patents is *transformed or manipulated* in any manner by the asserted claims, and the *result itself is not displayed or otherwise transformed*.”

Ultimately, the Commission concluded that the claims of the two patents-in-suit did not satisfy the machine-or-transformation test and “have not been shown to cover more than abstract ideas.”<sup>15</sup>

While the Commission’s ruling in *Certain Machine Vision Software* follows in some respects the USPTO’s Interim Guidance, the Federal Circuit’s more-recent *Research Corporation* opinion at least suggests that factors other than those concerning machines or transformations may be important when determining whether or not a method is an unpatentable abstract idea.

## THE FEDERAL CIRCUIT’S RECENT OPINION IN *RESEARCH CORPORATION V. MICROSOFT CORPORATION*<sup>16</sup>

On December 8, 2010, the Federal Circuit issued a panel opinion<sup>17</sup> reversing a summary judgment of invalidity under § 101. The ruling itself is instructive for practitioners and examiners, as the claims-at-issue concerned computer processes for rendering a halftone image. But the *opinion* provides substantial additional guidance for analyzing § 101 issues and, perhaps, includes one or more tests that could be applied in the future to help aid that analysis.

The claims-at-issue were directed to methods for halftoning color or gray scale images by comparing, on a pixel-by-pixel basis, the image with a blue noise mask:<sup>18</sup>

I. A method for halftoning of gray scale images by utilizing a pixel-by-pixel comparison of the image against a blue noise mask in which the blue noise mask is comprised of a random non-deterministic, non-white noise single valued function which is designed to produce visually pleasing dot profiles when thresholded at any level of said gray scale images.

II. A method for the half-toning of color images comprising the steps of utilizing, in turn, a pixel-by-pixel comparison of each of a plurality of color planes of said color image against a blue noise mask in which the blue noise mask is comprised of a random non-deterministic, non-white noise single valued function which is designed

to provide visually pleasing dot profiles when thresholded at any level of said color images, wherein a plurality of blue noise masks are separately utilized to perform said pixel-by-pixel comparison and in which at least one of said blue noise masks is independent and uncorrelated with the other blue noise masks.

The Federal Circuit explained several rationale for finding these claims patent-eligible under § 101 and *not* merely abstract ideas. For example, the Court explained that it “will *not* presume to define ‘abstract’ beyond the recognition that this disqualifying characteristic should exhibit itself *so manifestly* as to override the broad statutory categories of eligible subject matter and the statutory context that directs primary attention on the patentability criteria of the rest of the Patent Act.”<sup>19</sup> This at least suggests that the Federal Circuit prefers borderline cases to advance past the “threshold” of § 101 and on to further examination under the other provisions of Title 35.

Another example of a potential new guidepost is the Federal Circuit’s statement that “this court notes that inventions with specific applications or improvements to technologies in the marketplace are not likely to be so abstract that they override the statutory language and framework of the Patent Act.”<sup>20</sup> This statement raises the question: To what extent will future inquiries about the abstractness *vel non* of a claim include not only whether the invention has a “specific application,” but also whether the invention improves technologies already found in the marketplace? If an invention that is shown to have “specific applications or improvements to technologies in the marketplace” is indeed not likely to fall into the “abstract idea” exception to patent eligibility, practitioners and examiners alike may focus more attention on this statement by the Federal Circuit and the additional analysis it may suggest.

As yet another potential new guidepost, the Federal Circuit observed that “[t]he invention presents functional and palpable applications in the field of computer technology.”<sup>21</sup> At least two aspects of this observation are particularly interesting.

First, will the presence or absence of a “functional and palpable application” become a substantial test or guidepost for determining eligibility? If so, must that application be stated in the claim itself, or merely disclosed in the specification (or, perhaps, merely known to a person of ordinary skill)? A focus on the functional and palpable is somewhat different than a strict focus on a machine or

<sup>15</sup> *Id.* at 4.

<sup>16</sup> -- F3d --, No. 2010-1037, 2010 WL 4971008 (Fed. Cir. Dec. 8, 2010).

<sup>17</sup> The unanimous panel included Chief Judge Rader, Judge Newman, and Judge Plager.

<sup>18</sup> *Research Corp.*, 2010 WL 4971008, at \*3-4.

<sup>19</sup> *Id.* at \*7 (emphasis added).

<sup>20</sup> *Id.*

<sup>21</sup> *Id.*

transformation. For example, the Federal Circuit's *Research Corporation* opinion does not comment directly on whether or not each claimed method for halftoning of color images was either tied to a machine, or transformed an object or thing.

Second, the Federal Circuit defined the “field” of the invention-at-issue as “computer technology”; a somewhat broad definition of the field considering that the claims are directed to methods of halftoning (and that at least some of the claims-at-issue do not even mention a “computer”). Notably, the Federal Circuit did not define the field more narrowly even though the claim scope appears to have allowed for a more narrow definition. It remains to be seen whether or not this is a signal from the Federal Circuit that process inventions applied in the field of computer technology will generally be viewed as patent-eligible notwithstanding how such inventions might fair under the USPTO's Interim Guidance.

## IMPLICATIONS FOR PRACTITIONERS

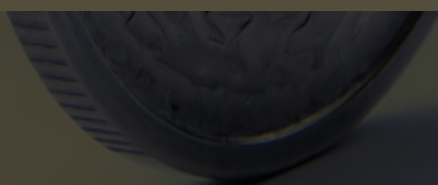
For practitioners seeking broad process claims, the Federal Circuit's *Research Corporation* opinion may provide a roadmap of how to rebut § 101 rejections (if they arise) in certain cases, and may ultimately become part of future USPTO examination guidelines concerning patent eligibility. The Federal Circuit seems poised to soon issue additional opinions to help clarify how practitioners and examiners should evaluate the question of patent eligibility. In the meantime, the extensive list of factors weighing toward and weighing against patent eligibility found in the USPTO's Interim Guidance are likely to remain a central set of guideposts for examiners. Those factors provide strategies for drafting (or amending) claims, as well as traversing rejections based on § 101.

## CONCLUSION

According to the Supreme Court, the machine-or-transformation test is not the only test for determining patent eligibility.

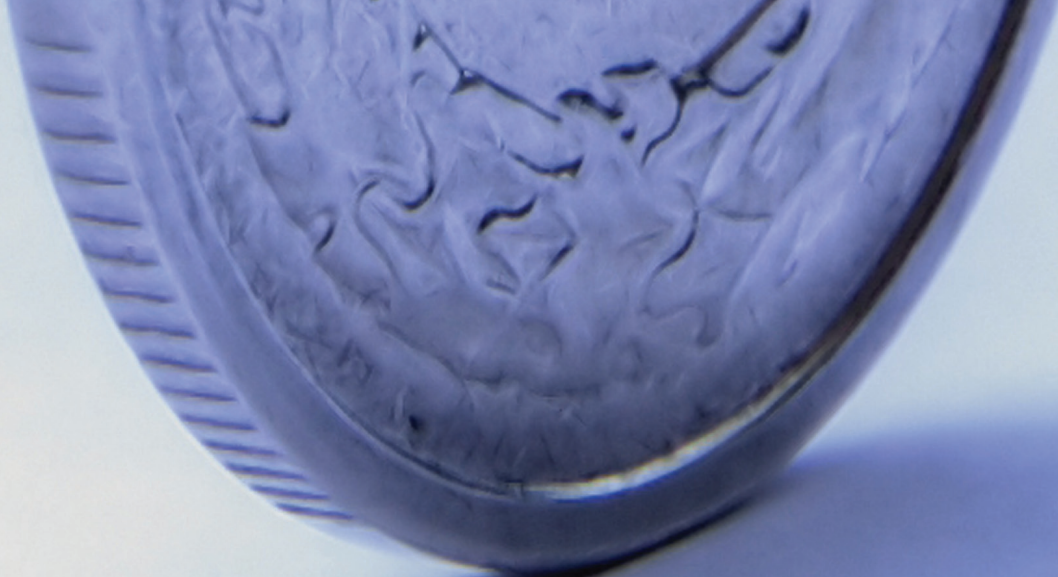
But certain practitioners who have recently prosecuted broad process claims recognize that – at least for now – perhaps the clearest path to patent eligibility is including process features that are either tied to a particular machine, or that transform a specific article or thing. The “m-or-t test” is, appropriately, alive and well at the USPTO, is a central focus in any patent-eligibility inquiry, and is the touchstone for the USPTO's recent guidelines to examiners on this issue.

The contours of patent-eligible subject matter in the United States in some ways remain unclear even years after the Supreme Court's decision in *Bilski v. Kappos*. Exactly which types of “processes” are both patent-eligible and not “abstract ideas” remains to be decided by the Federal Circuit and other adjudicative and rule-making bodies in the United States. In short, the USPTO, the BPAI, the ITC, U.S. district courts, patent practitioners, and “clients” of these groups (whether seeking patents themselves, questioning the validity of patents asserted against them, or evaluating the potential value of patents available to them via license or otherwise) await additional guidance from the Federal Circuit concerning *Bilski*'s application in particular technology areas. Cases currently pending before the appeals court are sure to impact at least medical-device, computer software, and other high-tech industries in the United States.



**BANKRUPTCY**





# Taking the Intellectual Out of Intellectual Property Licenses Under Section 365 of the Bankruptcy Code

By

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The purpose of this article is to provide for a bankruptcy or restructuring professional a practical overview of the law related to the licensing of intellectual property in a Chapter 11 bankruptcy case, absent the confusing and often daunting intellectual property terms, and academic analyses of section 365 of the Bankruptcy Code.

## I. Introduction

In the hypothetical world of an average Chapter 11 case, issues related to intellectual property licenses are often (and properly) categorized as a unique subset within the broader scope of section 365 of the Bankruptcy Code. Whereas nearly every Chapter 11 case involves some fight related to a lenders' cash collateral, Debtor in Possession financing, a nonresidential lease agreement, or the confirmability of a plan of reorganization, a full-blown battle regarding the license of intellectual property occurs less frequently. However, over the past few years, as large companies have developed diverse asset portfolios across the entire spectrum of tangibility (read: Google, Amazon, Apple), the acquisition and disposal

of intellectual property has become a more central facet of profit growth.

While some companies embark on a strategy of feasting on tens of thousands of patents for prospective prophylactic purposes,<sup>1</sup> other companies have entire business models based on agreements to use technology for which another owns the intellectual property.<sup>2</sup> Such a relationship is almost always memorialized in a license agreement. In other words, two companies can be "married" with respect to a single technology. Such licensing relationships are as follows: The intellectual property owner (the "licensor") agrees to marry (i.e., not to sue) the company using the intellectual property (the "licensee") and to stay in shape throughout the marriage (i.e., improve the technology underlying the intellectual property) in return for chocolate, flowers, jewelry, hugs and kisses (i.e., money). Like any other business, those involved in such intimate relationships might file for bankruptcy. And when companies seek the protection of the Bankruptcy Code, the symbiotic engagement occasionally ends in a messy divorce—usually when one party wants to stay married while the

<sup>1</sup> See Pletz, Google's Bid for Motorola Triggered by Nortel Patent Sale, Crains (Sept. 13, 2011) (<http://www.chicagobusiness.com/article/20110913/NEWS08/110919956>).

<sup>2</sup> A slight distinction should be made between intellectual property and technology. Technology is a tangible or intangible chattel. Intellectual property is a legal right with respect to that chattel. For example, a mobile phone display that reacts to the touch of a finger is technology. The patent creating the right to use that display is the intellectual property. See Levy & Yang, Advanced Licensing Agreements: Volume One, Practising Law Institute No. G-995 (2010) ("[T]echnology is a thing, while IP is a legal right. Failure to make a distinction between the two leads to ambiguity in the meaning of [ ] contractual provisions.").

other does not. It is such a divorce that leads to the issues that are the subject of this article.

The term intellectual property is often an unparticular parlance that includes patents, trademarks, and copyrights of ideas, products, technology, and art.<sup>3</sup> The Bankruptcy Code, on the other hand, includes a more limited meaning to the term: trade secrets, inventions, process designs or plants protected under Title 35 of the U.S. Code (i.e., patents); patent applications; plant varieties; works of authorship protected under Title 17 of the U.S. Code (i.e., copyrights); and mask work under Chapter 9 of the Copyright Laws.<sup>4</sup> Trademarks and other intellectual property covered by the Latham Act<sup>5</sup> are conspicuously missing from the Bankruptcy Code definition.<sup>6</sup> For the purposes of this article, the use of the term “intellectual property” will refer to the general meaning, unless explained otherwise.<sup>7</sup>

The license agreement (a “license”) for the use of intellectual property can come in one of several forms, and like any other contract, can have manifest customizations pertaining to the parties or property being licensed. On a primary level, the predominate general category of licenses are exclusive licenses (i.e., the intellectual property owner agrees not to marry any one else) and non-exclusive licenses (i.e., the intellectual property owner can marry others, with limitation), among many others. Secondary to the exclusive/non-exclusive categorization is what the underlying intellectual property is: a patent, a copyright, a trademark, etc. On the lowest level, a license, like any contract, is defined by the particular rights or limitations it includes.

Several extremely remarkable articles, cited herein, have been written on this subject, including detailed academic overviews of issues involving intellectual property and bankruptcy. This article is meant to provide a practitioner with a strong knowledge of the Bankruptcy Code the ability

to efficiently plan for the “big ticket” issues that might be present in a particular license related circumstance.<sup>8</sup> This article will first broadly describe types of licenses common for businesses, focusing on the rights created, as opposed to the underlying technology. Second, this article will address the basics of section 365 of the Bankruptcy Code, as applicable to licenses, including overviews of section 365(c) and 365(n). Third, this article will lay out a handful of issues and considerations (i) generally with respect to licenses; (ii) with respect to the Debtor as licensee; and (iii) with respect to the Debtor as a licensor. This article will not address, beyond cursory reference or notation, issues related to the sale of intellectual property under section 363 of the Bankruptcy Code; the detailed academic discussion of the tension between bankruptcy law and patent or trademark law; or the history of intellectual property in bankruptcy.

## II. A Brief Overview of Licenses

A license is a permission to use an intellectual property right under defined conditions.<sup>9</sup> A license is “merely a waiver of a right to sue or prosecute the licensee for conduct that, absent the license, would be actionable.”<sup>10</sup> With respect to a patent, for example, a license is a waiver by the owner of the patent of its right to “exclude the licensee from making, using, selling, offering for sale, or importing” the particular technology.<sup>11</sup> The licensee agrees to pay for this right in a particular manner specified in the license agreement.<sup>12</sup>

A license is distinguishable from the more absolute transfer of rights in intellectual property known as an assignment.<sup>13</sup> An assignment is an agreement to convey the entire interest in intellectual property to another party.<sup>14</sup> With a license, the party that owns the intellectual property still retains all of its rights that it has not specifically waived by agreement.<sup>15</sup> For the purposes of this section, the intellectual property will be a patent, unless otherwise stated.

<sup>3</sup> See Black’s Law Dictionary (9th ed. 2009) (defining intellectual property as “1. A category of intangible rights protecting commercially valuable products of the human intellect. The category comprises primarily trademark, copyright, and patent rights, but also includes trade-secret rights, publicity rights, moral rights, and rights against unfair competition. 2. A commercially valuable product of the human intellect, in a concrete or abstract form, such as a copyrightable work, a protectable trademark, a patentable invention, or a trade secret.”).

<sup>4</sup> 11 U.S.C.A. § 101(35A).

<sup>5</sup> 15 U.S.C.A. §§ 1051 to 1141n.

<sup>6</sup> See S. Rep. No. 100-505, at 7; see also Meisler et al., *Rejection of Intellectual Property License Agreements Under Section 365(n) of the Bankruptcy Code: Still Hazy After All These Years*, 19 Norton J. Bankr. L. & Prac. 163, 166 (2010) (providing a detailed description of the congressional intent for not including trademarks in the definition of intellectual property).

<sup>7</sup> As explained herein, the definition of intellectual property under the Bankruptcy Code with respect to § 365 is really only relevant with respect to the rights of a licensee under section 365(n).

<sup>8</sup> For example, this article will not discuss the basics of the assumption or rejection of executory contract, and claims related to such assumption or rejection. This article presupposes the readers’ basic knowledge of the Bankruptcy Code. Additionally, this article presumes that the reader is generally familiar with the everyday terms patent, trademark, and copyright.

<sup>9</sup> McCarthy et al., *McCarthy’s Desk Encyclopedia of Intellectual Property*, 338 (The Bureau of National Affairs, Washington DC 3d ed. 2004).

<sup>10</sup> Brunsvold & O’Reilly, *Drafting Patent License Agreements* § 1.02 (5th ed. 2004) (hereinafter “DPLA”); *TransCore, LP v. Electronic Transaction Consultants Corp.*, 563 F.3d 1271, 90 U.S.P.Q.2d 1372 (Fed. Cir. 2009).

<sup>11</sup> DPLA § 1.02.

<sup>12</sup> Royalties are discussed in more detail, in Section IV.B of this article.

<sup>13</sup> Mueller, *An Introduction to Patent Law*, 329 (Aspen Publishers 2006) (a license “is not a transfer of ownership of the patent[.]”).

<sup>14</sup> See *Waterman v. Mackenzie*, 138 U.S. 252, 255, 11 S. Ct. 334, 34 L. Ed. 923 (1891) (providing the oft-cited explanation distinguishing between a patent license and assignment).

<sup>15</sup> Although the assignment/license issue seems relatively straightforward in the abstract, issues arise when an agreement that is called a license transfers all exclusive rights including the licensee standing to sue to enforce a patent. See, e.g., *International Gamco, Inc. v. Multimedia Games, Inc.*, 504 F.3d 1273, 1276, 84 U.S.P.Q.2d 2017 (Fed. Cir. 2007) (“In such a case, the ‘exclusive licensee’ is effectively an assignee.”) (internal citation omitted).

## A. Exclusive License

An exclusive license has been described as something more than a license, but something less than an assignment.<sup>16</sup> An exclusive patent license generally includes (i) a promise from the patent holder not to exploit the patent on its own behalf; and (ii) a promise from the patent holder not to permit the use of the patent other than by the licensee.<sup>17</sup> Thus, “[a]n exclusive license is one in which the [intellectual property] owner agrees to license to the licensee only... [and] usually presumes that the [licensor] will not compete with the exclusive licensee” with respect to the technology or product.”<sup>18</sup>

With respect to the abstention from permitting others<sup>19</sup> to use the patent, depending on the nature of the patent, it is possible for several licensees to have exclusive licenses pertaining to only a portion of the patent rights.<sup>20</sup> For example, a license might provide the exclusive use of the patent in a certain geography, for a certain field of use (i.e., a defined service market or product market), or for a certain amount of time.<sup>21</sup> With respect to a patent license providing a field of use restriction, there can be “multiple” exclusive licenses for a particular field—this is commonly called a “limited exclusive license,” as distinguished from the more absolute “unlimited exclusive license.”<sup>22</sup> With respect to copyrights, “there is a clear line of differentiation between the legal significance of exclusive and non-exclusive licenses.”<sup>23</sup> Particularly, an exclusive licensee is regarded as “the owner of the particular right of copyright that is exclusively licensed,” and, as with the assignment of other intellectual property, “the licensee has the right to sue for infringement of the licensed right.”<sup>24</sup> As discussed below, the copyright distinction is important when evaluating the ongoing obligations of the parties to the license for the purposes of section 365 of the Bankruptcy Code.

One of the more significant transfers of rights to a licensee involves the authority to enforce or defend the underlying intellectual property. As discussed above, when intellectual property is assigned (i.e., all substantial rights have been

transferred), the assignee has standing to sue in its own name.<sup>25</sup> It is possible for an exclusive licensee to have standing to sue to enforce or defend intellectual property without the licensor joining in such an enforcement suit.<sup>26</sup>

## B. Non-exclusive License

A non-exclusive license is “the simplest type of license” in that it is merely an assurance by the licensor to the licensee that it will be immune from suits with respect to acts that are within the scope of the license.<sup>27</sup> Put differently, “[a] nonexclusive license embodies the notion of freedom to operate,” and is thus “an encumbrance on the patent, and bids to future assignees of the patent as well.”<sup>28</sup> Generally, the licensor will make no other promises as to how it will use the intellectual property or “exercise its monopoly” over the technology.<sup>29</sup> Unlike an exclusive license, the licensor is free to license the intellectual property to other companies without violating the rights of the licensee. Unlike exclusive licensees, the non-exclusive licensee will not have standing to enforce the patent or intellectual property against other companies.<sup>30</sup> Thus, a non-exclusive license “simply protects the licensee from being sued for infringement.”<sup>31</sup>

## C. Common Clauses, Terms and Sections

As a result of the license being a contract, there are innumerable ways to customize a license to a particular pair of parties. What follows is a brief list of types of clauses, rights, and protections that are commonly found in an intellectual property license agreement, and a simple explanation of what each is or means. As most practitioners will recognize, some of these clauses are generally found in most commercial contracts. However, with respect to intellectual property, what might be common in one type of license (i.e., a patent license) might be different from another (i.e., a copyright or trademark license). Indeed, as one court has recently found, something as simple as a letter agreement between two parties that mentions licensing rights might be a license agreement.<sup>32</sup>

<sup>16</sup> DPLA § 1.02. The U.S. Patent Code § 261 specifically authorizes the exclusive license of patents.

<sup>17</sup> Ying, *The Plain Meaning of Section 365(c): The Tension Between Bankruptcy and Patent Law in Patent Licensing*, 158 U. Pa. L. Rev. 1225, 1239 (2010).

<sup>18</sup> Mueller, *An Introduction to Patent Law* at 329.

<sup>19</sup> *International Gamco*, 504 F.3d at 1273 (offering several examples of exclusive field of use licenses).

<sup>20</sup> *International Gamco*, 504 F.3d at 1273.

<sup>21</sup> DPLA § 2.03.

<sup>22</sup> See McCarthy, *McCarthy's Desk Encyclopedia of Intellectual Property* at 339.

<sup>23</sup> McCarthy, *McCarthy's Desk Encyclopedia of Intellectual Property* at 343.

<sup>24</sup> McCarthy, *McCarthy's Desk Encyclopedia of Intellectual Property* at 343.

<sup>25</sup> *International Gamco*, 504 F.3d at 1276.

<sup>26</sup> See *Waterman*, 138 U.S. at 255.

<sup>27</sup> DPLA § 2.01.

<sup>28</sup> Levy and Yang, *Advanced Licensing Agreements: Volume One*, Practising Law Institute No. G-995 at 14.

<sup>29</sup> Ying, 158 U. Pa. L. Rev. at 1240.

<sup>30</sup> Ying, 158 U. Pa. L. Rev. at 1240; see also DPLA § 2.01.

<sup>31</sup> Mueller, *An Introduction to Patent Law* at 330.

<sup>32</sup> See *In re Spanion Inc.*, 2011 WL 3268084 at \*7 (D. Del. 2011) (holding that a letter agreement's “clear language demonstrates that the parties entered into a valid contract by exchanging promises” that created a binding patent license agreement).



Clause, Right, Protection	Explanation
The Grant	This is where (i) the intellectual property and technology are described; (ii) the exclusivity is described; (iii) the duration of the license; and (iv) how the licensee may use the property (i.e., field of use).
Royalties	Perhaps the most important clause beyond the grant, the royalties sections will provide a detailed explanation of the price paid for the license. Examples of royalties and other consideration payments are described in part IV.C.1.
Improvements	This deals with the issue of “what happens to subsequent improvements to the licensed intellectual property.” <sup>*</sup> An improvement includes a subsequent modification or enhancement to the licensed intellectual property by either the licensee or the licensor after the license is executed. In each case, “the question is whether the improvement must be shared with the other party.” <sup>†</sup>
Warranties and Indemnification	The most important warrant is that the licensor has the right to license the intellectual property. The licensor might “avoid making express or implied warranties as to merchantability or fitness for a particular purpose.” <sup>‡</sup> Additionally, parties will clearly define whose burden it is to defend certain claims with respect to the intellectual property.

Quality Control (Trademarks)	For trademarks, in order for a mark to be validly licensed, the licensor must exercise control over the nature and quality of the goods or services sold by the licensee under the licensed mark. <sup>§</sup> This is commonly called “quality control.” The term “naked licensing” refers to the licensing of a mark without quality control, which raises the risk that the public can be deceived by a mark on a lackluster product. <sup>**</sup> Without a quality control provision (where the licensor asserts quality control over the mark) “courts will deem the license invalid.” <sup>††</sup>
Clause, Right, Protection	Explanation
Field of Use Restriction	This is a provision in an intellectual property license that restricts the licensee to use of the licensed property only in a defined product or service market. <sup>‡‡</sup> This might be found in the grant, but can also be its own section of a license.
Use Requirement (Trademark)	Trademark law requires that the owner of a mark continue to use the mark; use by a licensee inures to a licensor. If a trademark was not used prior to the execution of the license, the licensor may have abandoned the mark. <sup>§§</sup>
Confidentiality	Licenses, particularly software/copyright licenses, will often have mutual obligations to keep confidential the source code developed by the other.

<sup>\*</sup> Port et al., Licensing Intellectual Property 283 (Carolina Academic Press 1999).

<sup>†</sup> Port, Licensing Intellectual Property 283.

<sup>‡</sup> Port, Licensing Intellectual Property at 284.

<sup>§</sup> McCarthy, McCarthy's Desk Encyclopedia of Intellectual Property at 341.

<sup>\*\*</sup> McCarthy, McCarthy's Desk Encyclopedia of Intellectual Property at 341.

<sup>††</sup> Port, Licensing Intellectual Property at 285.

<sup>‡‡</sup> McCarthy, McCarthy's Desk Encyclopedia of Intellectual Property at 238.

<sup>§§</sup> Port, Licensing Intellectual Property at 285.

### III. Applicable Overview of Section 365

#### A. Whether an IP License Is Executory

Section 365 of the Bankruptcy Code provides, among other things, the Debtor with authority to assume (continue to perform and optionally assign to another party) or reject (cease to perform and breach) an “executory contract” subject to approval by the bankruptcy court.<sup>33</sup> As most bankruptcy practitioners learned in their professional infancy, the Bankruptcy Code does not define the term executory contract. The most prevalent definition utilized by courts provides that an executory contract is “a contract under which the obligation of both the bankrupt and the other party to the contract are so far unperformed that the failure of either to complete performance would constitute a material breach excusing performance of the other.”<sup>34</sup> In other words, a prepetition contract is executory when both sides are still obligated to render substantial performance.<sup>35</sup>

Intellectual property licenses are generally found to be executory contracts so long as “there are ongoing, material obligations on both sides.”<sup>36</sup> In deciding whether a license is executory, courts have found a combination of the following, among others, to be “obligations to render substantial performance”: payment of royalties,<sup>37</sup> reporting requirements, servicing and maintenance requirements, abstaining from licensing to other companies, and obligations related to the upgrading or improvement of the technology.<sup>38</sup> Indeed, at least one court has found that mutual ongoing duties to maintain the confidentiality

of the source code of software under a software/copyright license agreement is enough to make a contract executory.<sup>39</sup>

With respect to exclusive licenses, the exclusive right provided by the licensor has been found to be an unperformed obligation by the licensor.<sup>40</sup> At least one commentator has published a detailed academic analysis regarding the issue of the “executoriness” of exclusive licenses.<sup>41</sup> With respect to the idea that exclusive licenses could be assignments in certain circumstances, the commentator has argued that “the fact that an IP agreement grants exclusive rights to the licensee cuts in favor of the transaction being characterized as a transfer because it represents a more complete conveyance of rights than a non-exclusive license and may have fewer strings... attached.”<sup>42</sup> However, the courts that have assessed the exclusivity-assignment issue have often done so when analyzing the right of the licensee to transfer its rights, as opposed to the executoriness of the license.<sup>43</sup> With respect to non-exclusive licenses, the relinquishment of enforcement of its monopoly with respect to an individual licensor is generally found to be an ongoing material obligation.<sup>44</sup>

As a general premise for practitioners, intellectual property licenses, regardless of whether they are exclusive or non-exclusive, will be analyzed no differently than any other executory contract in a bankruptcy case: so long as there are ongoing<sup>45</sup> mutual material obligations, a license should be found to be an executory contract. Thus, the issue of executoriness with respect to intellectual property is generally not unique beyond their terms and subject matter.

<sup>33</sup> 11 U.S.C.A. § 365(a).

<sup>34</sup> Countryman, *Executory Contracts in Bankruptcy*: Part I, 57 Minn. L. Rev. 439, 460 (1973).

<sup>35</sup> In re Riodizio, Inc., 204 B.R. 417, 421, 30 Bankr. Ct. Dec. (CRR) 308, 37 Collier Bankr. Cas. 2d (MB) 868 (Bankr. S.D.N.Y. 1997). Some courts use the “functional approach” and “some performance due” tests. The test under the functional approach to determine whether a contract is executory is by balancing the benefits of assumption or rejection that would be realized by the debtor: Riodizio, 204 B.R. at 424. The definition under the some-performance-due approach is “a contract is executory if each side must render performance, on account of an existing legal duty or to fulfill a condition, to obtain the benefit of the other party’s performance.” Riodizio, 204 B.R. at 424.

<sup>36</sup> Meisler, 19 Norton J. Bankr. L. & Prac. 164; Menell, *Bankruptcy Treatment of Intellectual Property: An Economic Analysis*, 22 Berkeley Tech. L.J. 733, 20-21 (2007); see In re Catapult Entertainment, Inc., 165 F.3d 747, 33 Bankr. Ct. Dec. (CRR) 1058, 41 Collier Bankr. Cas. 2d (MB) 858, Bankr. L. Rep. (CCH) P 77886 (9th Cir. 1999); Institut Pasteur v. Cambridge Biotech Corp., 104 F.3d 489, 30 Bankr. Ct. Dec. (CRR) 221, 37 Collier Bankr. Cas. 2d (MB) 588, 41 U.S.P.Q.2d 1503, Bankr. L. Rep. (CCH) P 77242 (1st Cir. 1997); In re DAK Industries, Inc., 66 F.3d 1091, 27 Bankr. Ct. Dec. (CRR) 1185, 34 Collier Bankr. Cas. 2d (MB) 531, Bankr. L. Rep. (CCH) P 76648 (9th Cir. 1995) (an instance of when a nonexclusive license is not viewed as “executory”); In re Interstate Bakeries Corp., 447 B.R. 879, 884 (W.D. Mo. 2011) (“While trademark license agreements are usually held to be executory contracts, they are not universally considered executory.”).

<sup>37</sup> The payment of royalties alone with no obligations by either party to the contract should not be enough to make a contract or license executory. Lubrizol Enterprises, Inc. v. Richmond Metal Finishers, Inc., 756 F.2d 1043, 1046, 12 Bankr. Ct. Dec. (CRR) 1281, 12 Collier Bankr. Cas. 2d (MB) 310, 226 U.S.P.Q. 961, Bankr. L. Rep. (CCH) P 70311 (4th Cir. 1985).

<sup>38</sup> Menell, 22 Berkeley Tech. L.J. 733 at 20.

<sup>39</sup> In re Sunterra Corp., 361 F.3d 257, 42 Bankr. Ct. Dec. (CRR) 222, 51 Collier Bankr. Cas. 2d (MB) 1276, Bankr. L. Rep. (CCH) P 80068 (4th Cir. 2004).

<sup>40</sup> Meisler, 19 Norton J. Bankr. L. & Prac. 164; In re Select-A-Seat Corp., 625 F.2d 290, 292, 6 Bankr. Ct. Dec. (CRR) 1384, 23 C.B.C. 192 (9th Cir. 1980); In re HQ Global Holdings, Inc., 290 B.R. 507, 40 Bankr. Ct. Dec. (CRR) 262 (Bankr. D. Del. 2003).

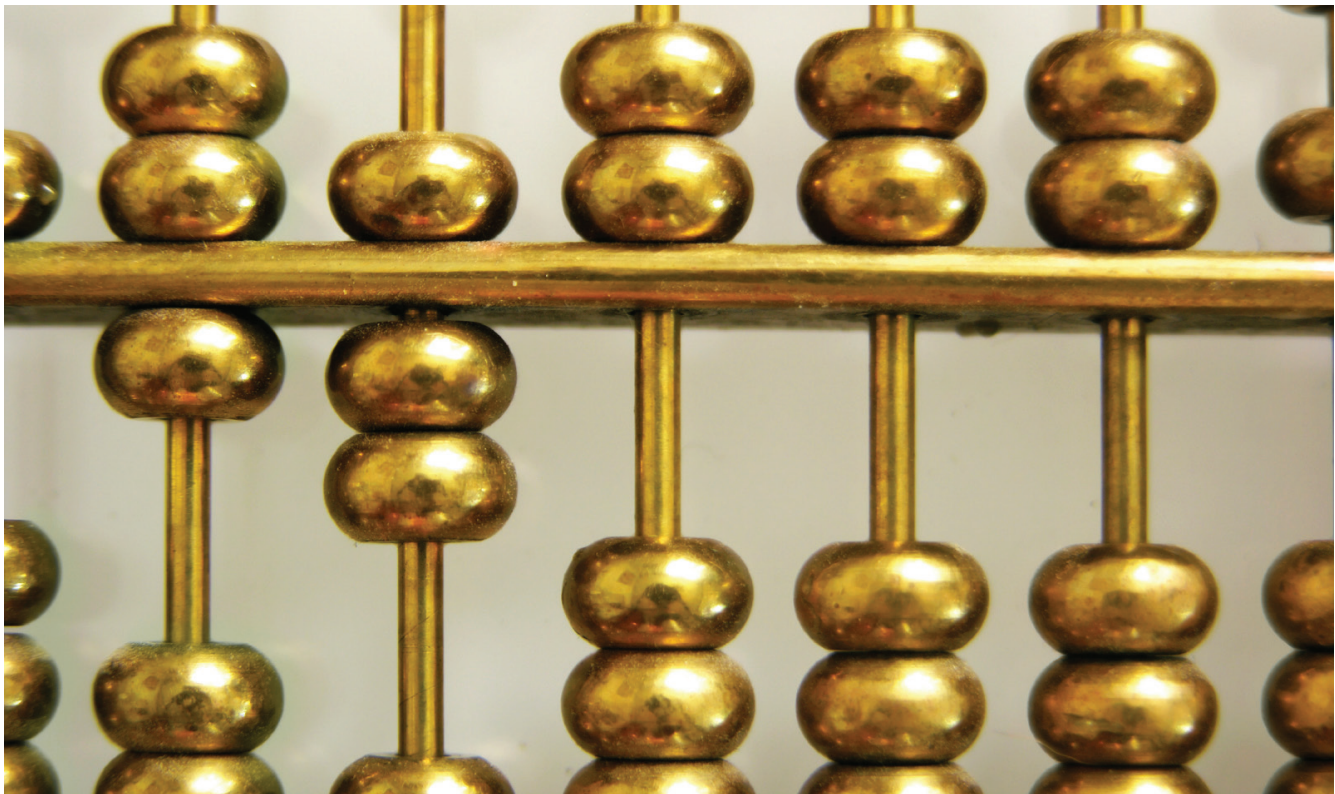
<sup>41</sup> Meisler, 19 Norton J. Bankr. L. & Prac. 164; In re Select-A-Seat Corp., 625 F.2d 290, 292, 6 Bankr. Ct. Dec. (CRR) 1384, 23 C.B.C. 192 (9th Cir. 1980); In re HQ Global Holdings, Inc., 290 B.R. 507, 40 Bankr. Ct. Dec. (CRR) 262 (Bankr. D. Del. 2003).

<sup>42</sup> Menell, 22 Berkeley Tech. L.J. 733 at 23.

<sup>43</sup> For example, cases discussed herein fall into this category.

<sup>44</sup> Meisler, 19 Norton J. Bankr. L. & Prac. 164.

<sup>45</sup> If a licensor has performed its obligations under a particular license, a court might find that there are not material, mutual obligations. In re Quintex Entertainment, Inc., 950 F.2d 1492, 1495-96, 26 Collier Bankr. Cas. 2d (MB) 143, 21 U.S.P.Q.2d 1775, Bankr. L. Rep. (CCH) P 74396 (9th Cir. 1991) (copyright right exclusive distribution license not executory once work was complete); In re Gencor Industries, Inc., 298 B.R. 902, 913 (Bankr. M.D. Fla. 2003) (irrevocable license with no material obligations for parties not executory); In re Exide Technologies, 340 B.R. 222, 46 Bankr. Ct. Dec. (CRR) 95 (Bankr. D. Del. 2006), appeal denied, judgment aff’d, 2008 WL 522516 (D. Del. 2008), vacated and remanded, 607 F.3d 957, 53 Bankr. Ct. Dec. (CRR) 57, 95 U.S.P.Q.2d 1405, Bankr. L. Rep. (CCH) P 81779 (3d Cir. 2010), as amended, (June 24, 2010) and cert. denied, 131 S. Ct. 1470, 179 L. Ed. 2d 299 (2011) (a license that was nonterminatable despite a material breach is not executory). It worth noting that at least one court has found that despite a license agreement’s monetary consideration being fully paid, there can still be “continuing material duties and obligations of both parties” to the agreement. See In re Aerobox Composite Structures, LLC, 373 B.R. 135, 139, 48 Bankr. Ct. Dec. (CRR) 180, 58 Collier Bankr. Cas. 2d (MB) 511 (Bankr. D. N.M. 2007).



## B. Section 365(c)(1)—The or/and Assignment Issue

One of the more pervasive issues—and the one more frequently dissected in law review articles—regards the interpretation of section 365(c)(1) with respect to licenses.<sup>46</sup> Section 365(c)(1) provides, in relevant part, as follows:

The [debtor] may not assume or assign any executory contract... of the debtor; whether or not such contract... prohibits or restricts assignment of rights or delegation of duties, if... (1) applicable law excuses a party, other than the debtor, to such contract... from accepting performance from or rendering performance to an entity other than the debtor..., and (2) such party does not consent to such assumption or assignment[.]<sup>47</sup>

Section 365(c) seems to provide that if a debtor assumes a contract, it can then assign the contract, notwithstanding an anti-assignment clause in the agreement, so long as the applicable law and the other party to the contract are not offended. Indeed, it seems “clear that a contract may not be assigned under section 365 if ‘applicable law’ would bar its assignment to a third party outside of bankruptcy.”<sup>48</sup>

However, there is a disagreement among some circuit courts of appeal as to whether section 365(c) applies to the assumption of a contract even if the debtor has not yet decided to, or never will, assign the contract. Thus, reading “*may not assume or assign*” in the disjunctive (i.e., assumption is separate from assignment), section 365(c) can be read to bar the assumption of a license agreement because the applicable law bars the assignment of that type of agreement. The interpretational possibilities are really only an issue relevant to the debtor-licensee because if a debtor-licensor was not able to assume or/and assign a license, the Debtor licensor could reject the license, which would trigger 365(n) rights for the licensee, and the Debtor could relicense the intellectual property (assuming it is not exclusive), or sell it under section 363 of the Bankruptcy Code.

The dual interpretations of section 365(c) have resulted in the formation of two different approaches: the hypothetical test and the actual test. The following subsections will briefly and succinctly demystify these two approaches. While these approaches have their geneses and broader applications in non-intellectual property-related decisions, this article will refer primarily to the applicable intellectual property licenses cases, to the extent possible.<sup>49</sup>

<sup>46</sup> There are two scholarly articles that provide excellent overviews of these issues, including historical and theoretical perspectives, as related to trademarks and patents, respectively. Steele, *Actual or Hypothetical: Determining the Proper Test for Trademark Licensee Rights in Bankruptcy*, 14 Marq. Intell. Prop. L. Rev. 411 (2010); Ying, cited in *passim*.

<sup>47</sup> 11 U.S.C.A. § 365(c) (emphasis added).

<sup>48</sup> Indyke et al., *Ending the “Hypothetical” vs. “Actual” Test Debate: A New Way to Read Section 365(c)(1)*, 16 J. Bankr. L. & Prac. 179 (2007).

<sup>49</sup> For example, the hypothetical test has its origin in a case regarding the supply of missile launchers and accessories to the United States government. See *Matter of West Electronics Inc.*, 852 F.2d 79, 18 Bankr. Ct. Dec. (CRR) 287, Bankr. L. Rep. (CCH) P 72351, 34 Cont. Cas. Fed. (CCH) P 75526 (3d Cir. 1988).



## I. Hypothetical Test

Applying the hypothetical test, or the disjunctive test, the court will ask, “hypothetically without looking to the individual facts of the case, any executory contracts could be assumed under applicable federal law.”<sup>50</sup> Put differently, the courts that apply the hypothetical test have found that the plain language reading of section 365(c)(1)(A) is not “assume *and* assign” but is “may not assume and may not assign,” if the applicable nonbankruptcy law excuses the non-debtor party from performance (i.e., the other party does not consent) if the contract was hypothetically assigned. The draconian reality of the hypothetical test is that even when the debtor indicates no interest in assigning the license, assumption is prohibited if assignment is prohibited.<sup>51</sup>

To date, the Third, Fourth, Ninth and Eleventh Circuit Courts of Appeal have adopted the hypothetical test with respect to license agreements or other executory contracts.<sup>52</sup> Thus, bankruptcy courts in these jurisdictions should first determine the applicable law, and second, if the applicable law is that the particular license agreement cannot be assigned, regardless of the debtors’ intention to assign, then the license will not be able to be assumed, and the debtor will be stripped of all rights.

## 2. Actual Test

Under the actual test, or conjunctive test, if a debtor seeking to assume the license has no actual intent to assign a contract that it seeks to assume, then applicable nonbankruptcy law barring assignment will not prevent such assumption.<sup>53</sup> Courts applying the actual test will make “a case-by-case inquiry into whether the non-debtor party... *actually* was being ‘forced to accept performance

under its executory contract from someone other than the debtor party with whom it originally contracted.”<sup>54</sup> Thus, if under the particular transaction the debtor would assume and continue to perform under the executory contract, then the court will not “simply presume as a matter of law that the debtor in possession is a legal entity *materially* distinct from the prepetition debtor with whom the nondebtor party... contracted.”<sup>55</sup>

The First Circuit Court of Appeal and Fifth Circuit Court of Appeal<sup>56</sup> are the only circuit courts that have formally adopted the test. However, it is arguable that the actual test is the “majority” approach used by bankruptcy courts outside of the hypothetical test circuits.<sup>57</sup> Additionally, another variation of the actual test has developed over the past few years, which focuses on the use of the term “trustee” in section 365(c).<sup>58</sup> These cases have reasoned that because the Bankruptcy Code does not state that the words “‘trustee’ are to be construed to mean ‘debtor’ or ‘debtor in possession,’” it makes sense to prevent the trustee from assuming or assigning a contract, but not the party that originally entered into the contract with the nondebtor.<sup>59</sup> Thus, “where the debtor in possession seeks to assume, [section] 365(c)(1) does not prohibit assumption of the contract by the debtor in possession and cannot operate to allow the non-debtor party to the executory contract to compel the Debtor to reject the contract.”<sup>60</sup> While the rationale is different, the *Footstar* line of cases seems to play out the same as the actual test so long as no trustee has been appointed.

## C. Section 365(n)

Section 365(n)<sup>61</sup> of the Bankruptcy Code applies to the rights of a nondebtor licensee when a debtor licensor

<sup>50</sup> In re N.C.P. Marketing Group, Inc., 337 B.R. 230, 234, 78 U.S.P.Q.2d 1853, Bankr. L. Rep. (CCH) P 80431 (D. Nev. 2005), aff’d, 279 Fed.Appx. 561 (9th Cir. 2008), cert. denied, 129 S. Ct. 1577, 173 L. Ed. 2d 1028 (2009).

<sup>51</sup> Davis, Finding Common Ground: Resolving Assumption And Assignment Of Intellectual Property Licenses In Chapter 11 Bankruptcy Through Adoption Of The Actual Test, 8 J. Intell. Prop. L. 243, 246 (2010).

<sup>52</sup> West Electronics, 852 F.2d 79 (government contracts); Sunterra Corp., 361 F.3d 257 (software licenses); Catapult Entertainment, Inc., 165 F.3d 747 (patent license); In re James Cable Partners, L.P., 27 F.3d 534, 537, 25 Bankr. Ct. Dec. (CRR) 1499, 31 Collier Bankr. Cas. 2d (MB) 1104 (11th Cir. 1994) (franchise agreements).

<sup>53</sup> Levy and Yang, An Introduction to Patent Law at 1252; see Summit Inv. and Development Corp. v. Leroux, 69 F.3d 608, 28 Bankr. Ct. Dec. (CRR) 200, 34 Collier Bankr. Cas. 2d (MB) 1351, Bankr. L. Rep. (CCH) P 76695 (1st Cir. 1995); Institut Pasteur, 104 F.3d 489.

<sup>54</sup> Institut Pasteur, 104 F.3d at 493 (internal citations omitted).

<sup>55</sup> Institut Pasteur, 104 F.3d at 493.

<sup>56</sup> See *Bonneville Power Admin. v. Mirant Corp.* (In re Mirant Corp.), 440 F.3d 238 (5th Cir. 2006). The Mirant court adopted the actual test with respect to section 365(e)(2)(A). However, in reaching its holding, the court relied on cases addressing section 365(c). Id. at 248-251.

<sup>57</sup> See In re Jacobsen, 2011 WL 482828 at \*5 (Bankr. N.D. Miss. 2011) (“the overwhelming majority of cases that have addressed this issue convinces this court that the ‘hypothetical test’... is erroneous.”); Ying at 1252; Steele, 14 Marq. Intell. Prop. L. Rev. at 438; Indyke, 16 J. Bankr. L. & Prac. at 183.

<sup>58</sup> See In re Footstar, Inc., 323 B.R. 566, 570, 53 Collier Bankr. Cas. 2d (MB) 1476 (Bankr. S.D. N.Y. 2005) (“I agree with the outcome reached by the majority of the courts, which have adopted the ‘actual test,’ but I suggest a somewhat different focus for analysis of Section 365.”); In re Aerobox Composite Structures, LLC, 373 B.R. 135 (Bankr. D.N.M. 2007).

<sup>59</sup> Footstar, 323 B.R. at 571; see also Aerobox, 373 B.R. at 142 (using the same rationale).

<sup>60</sup> Aerobox, 373 B.R. at 142.

<sup>61</sup> This article does not address the history leading up to section 365(n) and the *Lubrizol* case. *Lubrizol Enterprises, Inc. v. Richmond Metal Finishers, Inc.*, 756 F.2d 1043, 12 Bankr. Ct. Dec. (CRR) 1281, 12 Collier Bankr. Cas. 2d (MB) 310, 226 U.S.P.Q. 961, Bankr. L. Rep. (CCH) P 70311 (4th Cir. 1985). This Journal previously published the preeminent discussion on the subject 365(n), which remains up to date. Meisler, 19 Norton J. Bankr. L. & Prac. 163.



rejects a license.<sup>62</sup> Section 365(n) of the Bankruptcy Code was promulgated particularly to prevent a licensor from entering bankruptcy and using the power to reject to strip a nondebtor licensee of all of its rights.<sup>63</sup> To prevent this outcome, under section 365(n), if a debtor-licensor rejects the license, the licensee can either treat the license as having been terminated, or retain its rights under the contract as they existed moments before the bankruptcy filing, for the duration of the license, including extensions to that duration “of right under applicable nonbankruptcy law.”<sup>64</sup>

Section 365(n) includes particular requirements as to the rights of both the licensee and the debtor. If the licensee elects to retain its rights, then section 365(n) provides the following: (i) the debtor must allow the licensee to exercise its rights under the licensing agreement; (ii) the licensee must continue to make royalty payments; (iii) the licensee will have waived any bankruptcy or nonbankruptcy right to setoff debts with the licensor; (iv) the licensee will have waived its right to administrative expense claims under the license; and (v) the trustee must continue to provide the licensed intellectual property.<sup>65</sup> Additionally, during the “gap period” between the filing of the debtors’ petition and the decision to reject the license, the debtor-licensor must continue to perform under the license as provided in the license.<sup>66</sup>

Importantly, section 365(n) refers to the Bankruptcy Code definition of intellectual property. As explained above, this definition excludes the term “trademark” and any reference to trademark laws. A peculiar Third Circuit Court of Appeals concurring opinion related to a sales agreement that included a trademark license has recently led commentators to note that it might be possible to either draft a trademark license that is nonrejectable because it is not an executory contract, or convince a bankruptcy judge that 365(n) is meant to apply to trademarks licenses combined with other agreements.<sup>67</sup> However, as explained below, there is little precedent that has specifically acknowledged these possibilities.

## IV. Approaching the Issues Related to Section 365 and Licenses

The purpose of this section is to identify a few issues and

considerations that a practitioner might consider with respect to representing either a licensor or licensee that has filed for bankruptcy. As referenced throughout this article, there have been published within the past year many articles providing detailed discussions of these issues. This section will merely highlight the more prominent issues and considerations.

### A. Licensee and Licensor—Know What the License Says

One important overall consideration that relates to representing either a licensee or licensor in bankruptcy is to understand what the license agreement provides and requires. While this seems like an elementary consideration, if the agreement is not deemed to be an executory contract, then the powers provided by section 365 of the Bankruptcy Code simply will not apply. The Third Circuit decision in *Exide* is exemplary of why this determination is the threshold for all license issues.

In *Exide*, the debtor-battery maker (*Exide*) sold a large portion of its industrial battery business a decade before filing for bankruptcy.<sup>68</sup> The sale was memorialized and controlled by three agreements that involved physical manufacturing plants, equipment, inventory and certain items of intellectual property.<sup>69</sup> The bankruptcy court, in a separate and unchallenged decision, held these three related agreements to be one agreement.<sup>70</sup> The trademark license aspect of the agreement granted the buyer a perpetual, exclusive, royalty-free license to use the “*Exide*” trademark in the industrial battery business.<sup>71</sup> A decade after the asset sale, which included the license, *Exide* decided that it wanted to reenter the industrial battery industry. The attempt to reenter its old business with a new name was unsuccessful; and *Exide* filed for bankruptcy.

While in bankruptcy, *Exide* sought to reject the agreement, which included the license, ostensibly in order to regain the right to the mark and reenter the industrial battery business. However, the Third Circuit rejected *Exide*’s arguments that the agreement was executory on account of certain of the mark-related obligations in the agreement, including quality control, indemnity and use restrictions.<sup>72</sup> Particularly, the court, upon reviewing in-detail the “substantial performance” cases under the controlling laws, found that over the ten years after entering into the

<sup>62</sup> 11 U.S.C.A. § 365(n).

<sup>63</sup> Jeanfreau, Intellectual Property Issues In Bankruptcy, 1 Bloomberg Corp. L.J. 371, 373 (2006).

<sup>64</sup> 11 U.S.C.A. § 365(n)(1).

<sup>65</sup> 11 U.S.C.A. § 365(n)(2) and (3).

<sup>66</sup> 11 U.S.C.A. § 365(n)(2 to 4).

<sup>67</sup> In re *Exide Technologies*, 607 F.3d 957, 53 Bankr. Ct. Dec. (CRR) 57, 95 U.S.P.Q.2d 1405, Bankr. L. Rep. (CCH) P 81779 (3d Cir. 2010), as amended, (June 24, 2010) and cert. denied, 131 S. Ct. 1470, 179 L. Ed. 2d 299 (2011) (J Ambro, concurring and analyzing the legislative history of section 365(n)); see, e.g., Eisenbach, Third Circuit Decision Suggests Another Way For Trademark Licensees To Protect Against License Rejection In Bankruptcy, In The (Red) Bus. Bankr. Blog, (June 30, 2011), <http://bankruptcy.cooley.com/2010/06/articles/business-bankruptcy-issues/third-circuit-decision-suggests-another-way-for-trademark-licensees-to-protect-against-license-rejection-in-bankruptcy/>.

<sup>68</sup> *Exide*, 607 F.3d at 960.

<sup>69</sup> *Exide*, 607 F.3d at 960.

<sup>70</sup> *Exide*, 607 F.3d at 960.

<sup>71</sup> *Exide*, 607 F.3d at 961.

<sup>72</sup> *Exide*, 607 F.3d at 963.

agreement, the buyer-licensee had performed nearly all of its duties under agreement—including simply operating under the agreement and paying the \$135 million sale price.<sup>73</sup> The court held that failure to perform the remaining ongoing obligations related to the license aspect “would not affect the substantial performance of the Agreement.”<sup>74</sup> Thus, *Exide* was not able to utilize section 365(n) because the agreement was not executory.

One lesson that can be derived from *Exide* is that just because an agreement has a licensing aspect, or is called a license, does not mean that it will automatically be deemed to be an executory contract. *Exide* shows the particularity with which a court might evaluate an entire agreement, including the persnickety or even boilerplate clauses in a common licensing agreement. Another lesson is that it is possible for a court, as the bankruptcy court in *Exide* did, to find multiple contemporaneous agreements, including a license, to be a single agreement. The result might be that despite there being ongoing IP related obligations, other aspects of the agreement might have been substantially performed so as to diminish the relevance of the ongoing IP obligations.<sup>75</sup>

## **B. Debtor as Licensee—365(c)(1) Considerations**

As mentioned above, section 365(c)(1) issues are really only relevant to the debtor-licensee because if a debtor-licensor was not able to assume or/and assign a license, the debtor-licensor could reject the license, which would trigger section 365(n) rights for the licensee, and the Debtor could relicense the intellectual property (assuming that it is not exclusive), or sell it under section 363 of the Bankruptcy Code. What follows are three considerations with respect to debtor-licensee representations.

### **I. Hypo or Actual—Identify the Jurisdiction Where Filing Might be Possible**

To the extent a company has significant licenses it is important to decide geographically where it might be possible to file a petition. As discussed above, while

many bankruptcy courts have adopted the actual test, four circuits (the Third, Fourth, Ninth and Eleventh) have adopted (or seem to have adopted) the hypothetical test. The potential onerous effect of the hypothetical test could result in a situation where the debtor-licensee seeks to reorganize and continue to utilize the licensed intellectual property, but the licensor objects to the assumption of the agreement. In such a case, if the intellectual property is not assignable under the applicable law, the debtor could be forced to reject the license—and possibly abolish its chance to reorganize.

## **2. Know the “Applicable Law” for the “Applicable Intellectual Property”**

As discussed above, section 365(c)(1) refers to the “applicable law” that might excuse the non-debtor party to such contract from accepting performance from or rendering performance to an entity other than the debtor. One way to phrase this issue is “does the law require consent of a party to a contract if the other party wants to assign it.” The applicable law is generally the federal common law (i.e., federal court made law) or the statute creating the intellectual property rights.<sup>76</sup> Thus, secondary only to the jurisdiction in which a debtor might file, is what the applicable law provides with respect to the assignability of the particular intellectual property license.

With respect to a patent license, courts have held that under federal common law, a non-exclusive patent license is personal and nonassignable without consent.<sup>77</sup> Courts have held the same with respect to exclusive patent licenses.<sup>78</sup> Applying federal copyright law, courts have found that nonexclusive copyright licenses are not assignable without consent,<sup>79</sup> but courts might generally find that exclusive copyright licenses are essentially transfers that do not require the consent of the licensor in order to assign.<sup>80</sup> Whether a trademark license is assignable without the consent of the licensor is without a definite answer. The prevalent case on the issue was affirmed by the Ninth Circuit without an opinion, and

<sup>73</sup> *Exide*, 607 F.3d at 963.

<sup>74</sup> *Exide*, 607 F.3d at 964.

<sup>75</sup> In *Exide*, the court pointed to, among other things, the payment of the \$135 million sale price. *Exide*, 607 F.3d at 963 (finding substantial performance to be “paying the full \$135 million purchase price and operating under the Agreement for over ten years.”)

<sup>76</sup> See, e.g., *In re CFLC, Inc.*, 89 F.3d 673, 679, 29 Bankr. Ct. Dec. (CRR) 520, 36 Collier Bankr. Cas. 2d (MB) 297, 39 U.S.P.Q.2d 1518 (9th Cir. 1996) (providing a detailed description as to why federal common law applies to patents); *Catapult*, 165 F.3d at 754-55.

<sup>77</sup> *CFLC*, 89 F.3d at 679 (providing a detailed description as to why federal common law applies to patents); *Catapult*, 165 F.3d at 754-55.

<sup>78</sup> See, e.g., *Aerobox*, 373 B.R. at 141; *In re Hernandez*, 285 B.R. 435 (Bankr. D. Ariz. 2002).

<sup>79</sup> *In re Patient Educ. Media, Inc.*, 210 B.R. 237, 240, 31 Bankr. Ct. Dec. (CRR) 49 (Bankr. S.D. N.Y. 1997).

<sup>80</sup> See 17 U.S.C.A. § 201(d)(2) (providing that the holder of the exclusive license is entitled to all the rights and protections of the copyright owner to the extent of the license); compare *Patient Educ. Media*, 210 B.R. at 243, and *In re Golden Books Family Entertainment, Inc.*, 269 B.R. 300 (Bankr. D. Del. 2001) with the nonbankruptcy case *Gardner v. Nike, Inc.*, 110 F.Supp. 2d 1282 (C.D. Cal. 2000), *aff’d*, 279 F.3d 774, 61 U.S.P.Q.2d 1529 (9th Cir. 2002), for additional opinion, see, 30 Fed.Appx. 726 (9th Cir. 2002) (holding that copyright licensee lacked authority to transfer its rights under exclusive license without original licensor’s consent).

the Supreme Court denied a *writ for certiorari*.<sup>81</sup> In that case, the Court found that under federal common law, trademarks are personal to the assignee and nonassignable without the consent of the licensor.<sup>82</sup> Very recently, the Seventh Circuit, in dicta, stated that “as far as we’ve been able to determine, the universal rule is that trademark licenses are not assignable in the absence of a clause expressly authorizing assignment.”<sup>83</sup>

### 3. The End Game Matters

Fights involving a debtor-licensee are really fights about consent. At the outset of a bankruptcy, it might not be knowable if a reorganized debtor should seek to exploit a license, or the debtor should try to sell the right to exploit it (i.e., assign). Moreover, it might not be possible to discern whether the licensor will try to fight an assumption (perhaps the market has shifted and the terms of the license are no longer favorable) or refuse to consent to an assignment. The logical hedge for a large company with significant licensee-side assets that is considering filing for bankruptcy is probably to identify a venue that (i) follows the actual test, and (ii) has considered (either in bankruptcy or under federal common law)<sup>84</sup> issues related to the assignment without consent of the licensor, with respect to the relevant intellectual property.

### C. Debtor as Licensor—Section 365(n)

Section 365(n) of the Bankruptcy Code is discussed in great detail by nearly every commentator on the subject of intellectual property licenses. Below is a brief discussion of three practical issues and considerations related to the rejection of a license by a debtor-licensor.

## I. Payment of Royalties

As mentioned above, if the licensee elects to continue to use the intellectual property under the rejected license, section 365(n) particularly requires the licensee to “make all royalty payments due under the contract.”<sup>85</sup> One issue that might arise is whether a payment under a license agreement is a royalty or something else—“royalty” is not defined in the Bankruptcy Code. In practice, a license agreement may include several different payment structures, only some of which are actually called “royalties.”<sup>86</sup> Consideration paid for the grant of a license takes many forms including a specified lump sum to be paid after the execution of the license, installments over a period of time, a specified amount of money coupled with a “reverse license” extended under the licensee, or numerous other forms.<sup>87</sup> Royalties, however, are generally considered premised on “incremental payments proportioned in some way to the extent of use of the licensed inventions.”<sup>88</sup>

Courts have tended to broadly define “royalties” in the context of section 365(n).<sup>89</sup> For example, in one case a license agreement that was the subject of rejection included “a \$1,250,000 license fee—\$300,000 to be paid within ten days of execution of the agreement with the balance due in \$50,000 monthly payments.”<sup>90</sup> Following the rejection, the licensee, which elected to maintain its rights under section 365(n), appealed the bankruptcy court’s order which contained a revised structure for the license fee.<sup>91</sup> The district court affirmed the order and payment structure finding that “[d]espite the nomenclature used in the agreement, the license fees to be paid by [the licensee] are royalties in the sense of section 365(n).”<sup>92</sup> Thus, despite the payment being called a “license fee” and increments being fixed regardless of use or revenue generated from the underlying technology, a court might use royalty to mean the payment of consideration in general.<sup>93</sup>

<sup>81</sup> N.C.P. Marketing, 337 B.R. 230.

<sup>82</sup> N.C.P. Marketing, 337 B.R. 235.

<sup>83</sup> In re XMH Corp., 647 F.3d 690, 695, 55 Bankr. Ct. Dec. (CRR) 56, 99 U.S.P.Q.2d 1393 (7th Cir. 2011).

<sup>84</sup> See, e.g., XMH, 647 F.3d at 695 (“The term ‘applicable law’ means any law applicable to a contract, other than bankruptcy law; Sunterra, 361 F.3d at 261 n.5; In re Pioneer Ford Sales, Inc., 729 F.2d 27, 28, 11 Bankr. Ct. Dec. (CRR) 1303, 10 Collier Bankr. Cas. 2d (MB) 524, Bankr. L. Rep. (CCH) P 69740 (1st Cir. 1984); In re Wellington Vision, Inc., 364 B.R. 129, 135 (S.D. Fla. 2007).”).

<sup>85</sup> 11 U.S.C.A. § 365(n)(2)(B).

<sup>86</sup> Menell, 22 Berkeley Tech. L.J. 733 at 44.

<sup>87</sup> Brunsvold, Drafting Patent License Agreements § 10.00.

<sup>88</sup> Brunsvold, Drafting Patent License Agreements § 10.00.

<sup>89</sup> In re Prize Frize, Inc., 32 F.3d 426, 25 Bankr. Ct. Dec. (CRR) 1615, 31 Collier Bankr. Cas. 2d (MB) 1422, 31 U.S.P.Q.2d 1861, Bankr. L. Rep. (CCH) P 76039 (9th Cir. 1994); In re CellNet Data Systems, Inc., 327 F.3d 242, 41 Bankr. Ct. Dec. (CRR) 72, 50 Collier Bankr. Cas. 2d (MB) 27, 66 U.S.P.Q.2d 1667, Bankr. L. Rep. (CCH) P 78842 (3d Cir. 2003) (“renewed” royalties after a sale related rejection are still royalties under 365(n)).

<sup>90</sup> Prize Frize, 32 F.3d at 427.

<sup>91</sup> Prize Frize, 32 F.3d at 427.

<sup>92</sup> Prize Frize, 32 F.3d at 429.

<sup>93</sup> Some commentators have, nevertheless, advised licensees to “[n]egotiate narrowly defined royalty payments and clearly differentiate royalty fees from fees for ongoing licensor affirmative obligations such as maintenance, service and upgrades,” or to particularly define the rights the licensee might have under section 365(n). Ward & Mendenhall, Prospectively Planning for Bankruptcy in Licensee Transactions, 8 ABI Tech. & Telecom. Committee Newsl., no. 1, (Jan. 2011), [http://www.abiworld.org/committees/newsletters/techtelcomm/vol8num1/transactions.html#\\_ftnref](http://www.abiworld.org/committees/newsletters/techtelcomm/vol8num1/transactions.html#_ftnref). It is unclear whether either of these drafting techniques would overcome an objection to their application in bankruptcy.



## 2. Improvements and the State of the Intellectual Property

The section 365(n) election allows the licensee to retain its rights as they existed “immediately before the case commenced.”<sup>94</sup> While, in some instances, the rights of the parties under the license agreement at the petition might be clear,<sup>95</sup> in other instances, it might be impossible to return to the state of the technology or property at the time of rejection or election. This issue arises with respect to “improvements” to the intellectual property.

As discussed above in the table in Section II, an improvement is a subsequent modification or enhancement

to the licensed intellectual property by either the licensee or the licensor after the license is executed. Often the parties will agree whether improvements are covered by the license. Such clauses are particularly important when the technology is in early stages of development and the licensee is reluctant to license the technology without continued access to technological advancements.<sup>96</sup> As is the case with software, which is often continuously being improved by both parties, it might be impossible or even inequitable to force the licensee to retroactively return the technology to the prepetition form.<sup>97</sup>

At least one court has acknowledged this issue,<sup>98</sup> and

<sup>94</sup> 11 U.S.C.A. § 365(n)(1)(B).

<sup>95</sup> *Spanson*, 2011 WL 3268084, at \*9 (“Apple was bound to refrain from disbaring Spanson as an Apple supplier, and Spanson was barred from pursuing any claims against Apple related to the patents that Samsung allegedly infringed.”).

<sup>96</sup> Menell, 22 Berkeley Tech. L.J. 733 at 41.

<sup>97</sup> See Meisler, 19 Norton J. Bankr. L. & Prac. 170.

<sup>98</sup> In re Centura Software Corp., 281 B.R. 660, 669, 39 Bankr. Ct. Dec. (CRR) 249 (Bankr. N.D. Cal. 2002).



allowed for the rejection date to be used for determining the state of the intellectual property.

Other courts, however, might take a more literal approach and not allow the licensee to retain any rights to intellectual property that did not exist as of the commencement date.<sup>99</sup> Commentators have argued that allowing the licensee to use postpetition improvements is supported by the legislative history.<sup>100</sup> However, it seems clear that the duties of the licensor should be severed as of the petition date.<sup>101</sup>

### 3. Applicability to Combined IP Licenses

Section 365(n) applies only to intellectual property under the Bankruptcy Code definition. As such, trademarks are particularly excluded. However, one bankruptcy court decision stirred controversy when it held that the rejection of a sublicense agreement that covered a secret formula for the distillation of rum and a trademark should be “equitably” decided with respect what rights could be retained under section 365(n) by the licensee.<sup>102</sup> Thus,

the court seems to have suggested that if a trademark is combined with licenses of bankruptcy-defined intellectual property, then rights to continue to operate under the entire agreement might be possible.<sup>103</sup>

Despite this holding, the only other opinion on a related issue seems to have disagreed with the combined-license holding, and split a combined license into two separate licenses.<sup>104</sup> However, at least one commentator has argued that courts still “may extend the protections of section 365(n) to a nondebtor licensee’s use of a trademark in certain mixed license agreement.”<sup>105</sup> From the perspective of the debtor-licensor, this commentator recommends executing separate licenses based on the Bankruptcy Code definition of intellectual property to avoid “bifurcation” of a combined license by a court, and “reduce[d] the risk that a bankruptcy court would find a trademark protected by section 365(n).”<sup>106</sup> This is sound advice in that applying section 365(n) to the mark could decrease the value of the mark (potentially to zero if it is an exclusive mark).<sup>107</sup> Nevertheless, it seems to ignore the fact that no court has applied 365(n) to trademarks.<sup>108</sup>

<sup>99</sup> In re Szombathy, 1996 WL 417121 at \*9 (Bankr. N.D. Ill. 1996), rev’d in part on other grounds, 1997 WL 189314 (N.D. Ill. 1997).

<sup>100</sup> See Meisler, 19 Norton J. Bankr. L. & Prac. 170; Menell, 22 Berkeley Tech. L.J. 733 at 43.

<sup>101</sup> Meisler, 19 Norton J. Bankr. L. & Prac. 170; Menell, 22 Berkeley Tech. L.J. 733 at 43.

<sup>102</sup> In re Matusalem, 158 B.R. 514, 516, 29 U.S.P.Q.2d 1519, Bankr. L. Rep. (CCH) P 75480 (Bankr. S.D. Fla. 1993).

<sup>103</sup> Matusalem, 158 B.R. at 521-23; Menell, 22 Berkeley Tech. L.J. 733 at 37-38.

<sup>104</sup> See Centura, 281 B.R. at 671.

<sup>105</sup> Meisler, 19 Norton J. Bankr. L. & Prac. 167.

<sup>106</sup> Meisler, 19 Norton J. Bankr. L. & Prac. 167.

<sup>107</sup> An interesting scenario would in a case like *Exide* where the parties have agreed to combine many agreements for the purpose of a bankruptcy decision, and the agreements included noncovered intellectual property.

<sup>108</sup> As mentioned, one commentator has suggested that *Exide* provides a rationale for this. See Eisenbach, In The (Red) Bus. Bankr. Blog, (June 30, 2011). However, this case did not get to the question of whether trademarks are intellectual property because the agreements at issue were found not to be executory.

A close-up photograph of a fountain pen with a silver-colored nib and a black barrel, resting on a light-colored document. Below the pen, a horizontal line is drawn on the paper, with the word "Signature" printed in a light, serif font. The entire image is overlaid with a semi-transparent brown filter.

# Other Hot Issues

Signature \_\_\_\_\_

# Seeking Disapproval: Presidential Review of ITC Orders

By  
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*and*  
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*Law360, New York (November 10, 2011, 12:51 PM ET)* – A recent trend in patent litigation is the increasing importance of litigating in the U.S. International Trade Commission. By the first half of 2011, there had already been a record number of ITC investigations alleging intellectual property infringement.<sup>1</sup> This increased interest in the ITC as a forum for patent cases is likely due to the 2006 U.S. Supreme Court decision in *eBay Inc. v. MercExchange LLC*,<sup>2</sup> which made it more difficult to get an injunction for patent infringement.

Instead, patent holders are increasingly bringing cases in the ITC, which has the authority to stop the importation of infringing products. One important, and somewhat obscure, aspect of ITC investigations is that its final decisions become effective unless disapproved by the president.

This peculiarity of ITC procedures was highlighted recently in the smartphone wars being waged between Google Inc., Apple Inc., Samsung Electronics Co. Ltd and mobile telecommunications service providers. Verizon Communications recently called on the president to declare that he would disapprove

any ITC decision that blocked the importation of wireless devices.<sup>3</sup>

It seems extremely unlikely that any president would issue such a blanket statement. Historically, presidents have used disapproval authority only five times since the ITC's formation. Despite its rarity, however, presidential disapproval of an unfavorable ITC decision should not be overlooked as a possible last-ditch strategy for ITC litigants.

## Background on the ITC

The ITC is a federal agency with quasi-judicial authority. Under Section 337 of the Tariff Act of 1930, a party may request that the ITC bring an investigation into cases of patent, trademark or copyright infringement, as well as other intellectual property violations.<sup>4</sup>

ITC cases are first heard by an administrative law judge. The ALJ's decision is subject to review by the full commission, which then issues a final decision. The primary remedy for a finding of infringement is an order to stop infringing products at the border.<sup>5</sup> The ITC may also issue an order to stop the sale of infringing products already in the United States.<sup>6</sup>

<sup>1</sup> Jenna Greene, Record Number of ITC Cases Filed in First Half of 2011, *The National Law Journal*, July 5, 2011. The ITC's records indicate that while 56 investigations were instituted in 2010 by Oct. 1, 2011, 56 investigations had already commenced. See [http://www.usitc.gov/press\\_room/337\\_stats.htm](http://www.usitc.gov/press_room/337_stats.htm), retrieved on Oct. 10, 2011.

<sup>2</sup> *eBay Inc. v. MercExchange LLC*, 547 U.S. 388 (2006).

<sup>3</sup> Holman W Jenkins Jr., *Obama and the Smartphone Wars*, *The Wall Street Journal*, Aug. 24, 2011.

<sup>4</sup> See 19 U.S.C. § 1337(a).

<sup>5</sup> See 19 U.S.C. § 1337(d).

<sup>6</sup> See 19 U.S.C. § 1337(f).



Under Section 337(j)(2), a final decision of the ITC only becomes effective after 60 days.<sup>7</sup> But before that 60-day period expires, the president may “for policy reasons” disapprove an ITC decision.<sup>8</sup> This disapproval is not appealable.<sup>9</sup> In 2005, the president delegated this authority to the U.S. Trade Representative.<sup>10</sup>

## Strategies for Seeking Presidential Disapproval

Because presidential disapprovals are exceedingly rare, it may not make sense for most parties to incur the expense of lobbying the president (or U.S. Trade Representative) to disapprove an unfavorable ITC determination. Analysis of the five instances in which the president has disapproved an ITC order, as well as the strategy recently used to seek such a disapproval can give some guidance in deciding whether a concerted lobbying campaign might be effective.

## Damage to the Industry

The most common basis for urging presidential disapproval is the alleged damage an ITC ban would cause to the affected industry, a reasoning relied on in three of the five presidential disapprovals.<sup>11</sup> The industries involved in these cases, all decided in the 1970s and '80s, included paper, welded stainless steel pipes, and computer memory chips.<sup>12</sup>

A review of these successful damage-to-industry cases, however, yields little specific insight, as the disapprovals are short on factual detail.<sup>13</sup> It appears that the success in overturning these ITC orders may have had more to do with the relative lobby strengths of the affected industries than anything else.

On the other hand, it appears more may be learned from the recent unsuccessful lobbying efforts by Qualcomm Inc. On June 7, 2007, the ITC ordered a ban on the importation of chips made by Qualcomm used in cell phones because it determined that the chips infringed a patent for the conservation of battery power owned by Broadcom Corp. Qualcomm lobbied the president for a disapproval arguing

that the ban would not only affect Qualcomm but also cell phone manufacturers and wireless operations.<sup>14</sup>

One industry group estimated that the ban would result in up to \$21.1 billion in damages to U.S. industry.<sup>15</sup> Qualcomm also raised concerns that the ban would hinder public safety by inhibiting the use of handsets to locate people calling 911.<sup>16</sup> Ultimately, the Obama administration decided not to issue a presidential disapproval.

Based on the Qualcomm example, an argument for presidential intervention relying on damage to the industry must surmount a very high bar. Although unsuccessful, the strategies employed by Qualcomm were well constructed and hold important lessons. A party making this argument should emphasize the damage to the entire industry, not just to itself. The effect on all the industries that could be affected by the ban should be considered.

If possible, a party should commission a study that shows billions of dollars that could be lost to the national economy. In the current economy, it seems likely that a party urging disapproval could get its senators and representatives involved by emphasizing the possible lost tax revenue and jobs.

Finally, such a party should consider how the ban will go beyond just commercial concerns, such as Qualcomm's argument regarding possible danger to the public. Other potent argument could be based on detrimental effects to national security or the environment.<sup>17</sup>

## ITC Order is Contrary to the Executive's Interpretation

Besides the direct effect that a ban would have on the economy, a presidential disapproval has been issued when the reasoning of the ITC went against a statutory interpretation of the executive branch. In that case, the president stated that the ITC's interpretation of the trademark laws conflicted with that of the U.S. Department of the Treasury.<sup>18</sup>

<sup>7</sup> 19 U.S.C. § 1337(j)(2).

<sup>8</sup> *Id.*

<sup>9</sup> *Duracell Inc. v. U.S. Int'l Trade Comm'n*, 778 F.2d 1578 (Fed. Cir. 1985).

<sup>10</sup> Assignment of Certain Functions Under Section 337 of the Tariff Act of 1930, 70 Fed. Reg. 43251 (July 26, 2005). The current U.S. trade representative is Ambassador Ronald Kirk. See <http://www.ustr.gov>, retrieved on Oct. 10, 2011.

<sup>11</sup> See Presidential Determination of April 22, 1978, 43 Fed. Reg. 177898 (April 22, 1978) (disapproval of Inv. No. 337-TA-20); Presidential Disapproval of Determination of the U.S. International Trade Commission in Investigation No. 337-TA-82, 46 Fed. Reg. 32361-01 (June 22, 1981); Presidential Disapproval of a Section 337 Determination, 52 Fed. Reg. 46011-02 (Dec. 3, 1987) (disapproval of Inv. No. 337-TA-242).

<sup>12</sup> *Id.*

<sup>13</sup> *Id.*

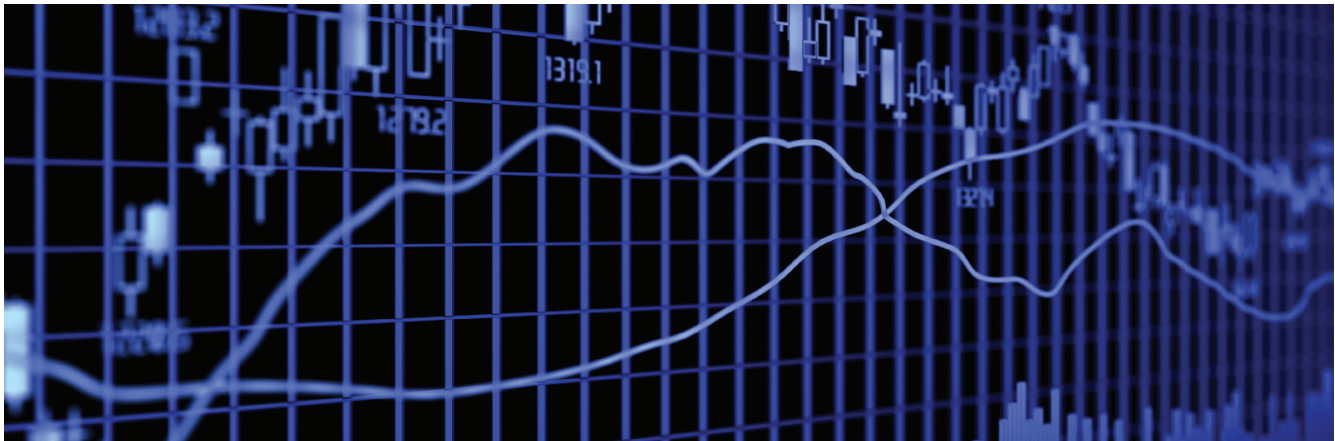
<sup>14</sup> Marguerite Reardon, *Qualcomm Cell Phone Ban to Take Effect*, CNET News, Aug. 6, 2007.

<sup>15</sup> *Id.*

<sup>16</sup> *Id.*

<sup>17</sup> These arguments are similar to the public interest factors which allow the ITC to modify an exclusion order despite a finding of infringement. These factors are “[1] the public health and welfare, [2] competitive conditions in the United States economy, [3] the production of like or directly competitive articles in the United States, and [4] United States consumers.” 19 U.S.C. 1337(d). Recently, on October 19, 2011, the ITC finalized a new rule requiring litigants before the ITC to file a separate statement explaining how an ITC action would affect the public interest factors. See 76 Fed. Reg. 64810 (Oct. 19, 2011) (notice of new ITC Rule 210.8(b)).

<sup>18</sup> Determination of the President Regarding Certain Alkaline Batteries, 50 Fed. Reg. 1655-01 (Jan. 11, 1985) (disapproval of Inv. No. 337-TA-165).



Accordingly, when seeking a presidential disapproval, one should think about arguments in this vein. For example, several recent cases before the Supreme Court and Federal Circuit have dealt with the issue of subject matter eligibility under Section 101 of the Patent Act.<sup>19</sup> In these cases, the government has submitted amicus briefs outlining the government's position.

An illustration is *The Association for Molecular Pathology v. U.S. Patent and Trademark Office*, which addressed the issue of whether isolated human genes are patent-eligible.<sup>20</sup> The argument against patent-eligibility represented in the solicitor general's amicus brief was rejected by the Federal Circuit.<sup>21</sup> This area of the law is unsettled, so if a product affected by an ITC order involves (or is analogous to) an isolated gene, a party could argue that under the executive's interpretation the patent is invalid and should not be the basis for an ITC ban.

## The Ban Could Spark a Trade War

Another reasoning cited in presidential disapprovals is the effect the ban would have on the United States' trade relations. Two of the disapprovals declared this as a reason for the disapproval.<sup>22</sup> In one, the President asserted concerns that a ban based on a "process patent" may not comply with international obligations.<sup>23</sup>

In the other, the presidential disapproval declared that the ITC ban would be viewed by the United States' trade partners as contrary to internationally agreed-upon procedures for anti-dumping violations.<sup>24</sup> Both of these disapprovals referenced the possibility of retaliation by trade partners if the ITC orders were allowed to stand.

And it appears that the President's concern is justified, as actions by the ITC have indeed sparked retaliatory actions by the U.S.'s trading partners. For example, in 2002, the European Union filed a complaint in the World Trade Organization in response to the ITC's ruling on steel imports.<sup>25</sup> Thus, another possible strategy for a party affected by an ITC import ban is to highlight the possibility of trade retaliation. If possible, the affected countries' trade representatives should be enlisted to lobby on the party's behalf. Warnings of a possible trade war could sway the case towards disapproval.

## Conclusion

The presidential disapproval is a powerful weapon in the ITC practitioner's toolkit. A party that has lost at the ITC should consider pursuing a presidential disapproval. While issued very infrequently, the effect of totally negating an ITC order makes the pursuit of a presidential disapproval worth examining.

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<sup>19</sup> See, e.g., *Bilski v. Kappos*, 130 S. Ct. 3218 (2010); *Prometheus Lab. Inc. v. Mayo Collaborative Serv.*, 8 F.3d 1347 (Fed. Cir. 2010), cert. granted, 131 S. Ct. 3027 (2011).

<sup>20</sup> *The Ass'n for Molecular Pathology v. USPTO*, No. 2010-1406, 2011 (Fed. Cir. July 29, 2011), reh'g denied Sept. 13, 2011 and Sept. 16, 2011.

<sup>21</sup> *The Ass'n for Molecular Pathology*, 2011, at \*18. The authors believe that this case was the first time that one department of the executive branch (i.e., the U.S. Justice Department) filed an amicus brief in support of a party adverse to another such department (i.e., the U.S. Patent and Trademark Office of the Commerce Department).

<sup>22</sup> 43 Fed. Reg. 17789 (disapproval of Inv. No. 337-TA-20); Presidential Disapproval of the Determination of the U.S. International Trade Commission in Investigation No. 337-TA-99, *Certain Molded-In Sandwich Panel Inserts and Methods for Their Installation*, 47 Fed. Reg. 29919-02 (July 9, 1982).

<sup>23</sup> 47 Fed. Reg. 29919-02 (disapproval of Inv. No. 337-TA-99).

<sup>24</sup> 43 Fed. Reg. 17789 (disapproval of Inv. No. 337-TA-20).

<sup>25</sup> Richard Senti, *A New Transatlantic Trade War*, *Intereconomics*, May/June 2002.

# Patent Reform Legislation Has Passed: What You Need to Know Now

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Client Alert, September 12, 2011*



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On September 8, 2011, the U.S. Senate passed H.R. 1249, sending comprehensive patent reform legislation to be signed into law by President Obama. The bill, entitled “Leahy-Smith America Invents Act,” makes many changes to U.S. patent law, including the adoption of a first inventor-to-file standard.

Other reforms include new definitions of prior art, new post grant and *inter partes* review proceedings, a supplemental examination procedure, a new provision on joinder in patent suits, a provision eliminating invalidity based on failure to disclose the best mode, a limitation on tax strategy and human organism patents, a special procedure for challenging business method patents, a limitation on false patent marking suits, and new fee provisions, among other changes.

While many of these provisions will not become effective until one year after the bill is signed into law, some take effect immediately upon or shortly after enactment. Here is a summary of those provisions that are effective upon signing or in the near future.

## **Joinder**

The patent bill adds a section limiting the parties that may be joined in a single action to those defendants making, using, importing, offering for sale, or selling the same accused product or process. Notably, accused

infringers may not be joined solely on the grounds that they each have infringed the patent or patents in suit. This change may greatly curtail suits brought against a vast number of unrelated defendants. Instead, it appears that plaintiffs will only be able to join related parties in a single suit. This amendment applies to any action commenced on or after the date of enactment.

## **Best Mode**

The patent bill eliminates the failure to disclose “the best mode contemplated by the inventor of carrying out his invention” from the listed infringement defenses. This provision is set to take effect on the date of enactment and will apply “to proceedings commenced on or after that date.”

## **Inter Partes Reexamination**

Among many reforms here, only the standard for declaring *inter partes* reexamination will go into effect immediately upon enactment. Requests for *inter partes* reexaminations will no longer be granted upon a showing of a “substantial new question of patentability.” Rather, requesters will have to show “a reasonable likelihood that the requester would prevail with respect to at least one of the claims challenged in the request.” This new standard will apply for a transitional one year period commencing upon enactment. At the expiration of the

one year period, the new *inter partes* review procedure becomes effective and replaces *inter partes* reexamination. The new *inter partes* review procedure will include this same standard.

## U.S. Patent & Trademark Office (USPTO) Fees

The reform legislation includes a number of fee changes that will soon take effect. First, the bill adds a 15% surcharge that applies to all general statutory patent fees, effective 10 days after enactment. The surcharge on a particular fee would last until the date that the Director sets or adjusts that particular fee for the first time pursuant to the Director's authority to set fees to recover the aggregate estimate costs for the operations of the USPTO.

Second, each application for an original patent that is not filed electronically will be subject to an additional \$400 fee. This provision takes effect 60 days after enactment.

Other new fee provisions include a 75% discount for the new classification of "micro entity." This category of discounted fees goes into effect as of the date of enactment, and the bill defines a qualifying micro entity applicant as one who (1) has not been named on more than four patent applications (other than foreign, provisional, or international applications), (2) did not have a gross income more than three times the median household income for the preceding year, (3) has not assigned the application to an entity whose income exceeded that amount, and (4) meets the small entity requirements set by regulation.

Also, effective 10 days after enactment is a \$4,800 fee for filing an application subject to the "Prioritized Examination" procedure. This procedure had been previously postponed by the USPTO due to funding concerns.

## Prior User Defense

The statutory prior user defense is expanded to cover a commercial use of the subject matter of a patent in the United States occurring at least one year before the effective filing date of the patent, either in connection with an internal commercial use or an arm's length commercial sale or transfer. This amendment applies to any patent that issues on or after the date of enactment.

## False Marking

The false marking statute is amended to limit plaintiffs in civil actions under this statute to the United States or those who have suffered a competitive injury as a result of a false marking violation. The amendment also exempts from violation the marking of a product with the number of a patent that covered the product but has expired. These provisions apply to all cases pending on, or commenced on or after, the date of enactment.

## Virtual Marking

The patent marking statute will be amended to include the following new marking alternative: "by fixing thereon the word 'patent' or the abbreviation 'pat.' together with an address of a posting on the Internet, accessible to the public without charge for accessing the address, that associates the patented article with the number of the patent." This amendment will apply to any case pending on, or commenced on or after, the date of the enactment.

## Tax Strategies

The patent bill adds a section that states "any strategy for reducing, avoiding, or deferring tax liability, whether known or unknown at the time of invention or application for patent shall be deemed insufficient to differentiate a claimed invention from the prior art." The provision expressly excludes inventions "used solely for preparing a tax or information return or other tax filing." This amendment applies to any patent application pending on or filed on or after the date of enactment and any patent issued on or after the date of enactment.

## Human Organisms

The patent bill adds a section that states "no patent may issue on a claim directed to or encompassing a human organism." This provision applies to any patent application pending on or filed on or after the enactment date.

## Ex Parte Reexamination

The patent bill includes an amendment that eliminates district court review of *ex parte* reexamination determinations. A patent owner may continue to seek appellate review by the Court of Appeals for the Federal Circuit. This amendment takes effect on the date of the enactment.

## Patent Term Extension

The patent bill adds a sentence that enlarges the time period for applying for patent term extension in certain circumstances. This amendment will apply to any term extension application pending on, filed after, or "as to which a decision regarding the application is subject to judicial review on," the date of enactment.

## Reserve Fund

The patent bill adds a provision establishing a Patent and Trademark Fee Reserve Fund for depositing fees collected in excess of the amount appropriated to the USPTO for that fiscal year. Annual appropriations acts will specify the extent to which the USPTO may use the amounts deposited. This amendment takes effect on October 1, 2011.



# Prosecution Laches: Defining an Equitable Doctrine of Patent Unenforceability

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The defense of prosecution laches has been available to accused patent infringers since the Federal Circuit's 2002 decision in *Symbol Technologies v. Lemelson*. This equitable doctrine allows a court to hold a patent unenforceable based on the patentee's delay in prosecuting the asserted patent.

In its *Cancer Research Technology v. Barr Laboratories* decision of November 2010, the U.S. Court of Appeals for the Federal Circuit reversed a district court's holding of patent unenforceability based on prosecution laches, concluding that the absence of prejudice during the period of the patentee's delay precluded that holding. Recently, the Federal Circuit denied en banc rehearing of this decision, and in strongly worded dissents, five of ten judges disagreed with the Court's requirement for a showing of prejudice, in the form of intervening rights, during the period of delay.

Given the deep division in the Federal Circuit, and because both the panel majority and the rehearing dissenters relied on the same U.S. Supreme Court cases in support of their positions, it seems that the definition of prosecution laches is ripe for high court review. A review of the Supreme Court's laches jurisprudence, however, appears to support the panel's requirement for prejudice to the accused infringer during the patentee's

prosecution delay.

## ***The Cancer Research Panel Decision***

On November 9, 2010, the Federal Circuit reversed a decision by the U.S. District Court for the District of Delaware holding Cancer Research's patent unenforceable for prosecution laches. The Federal Circuit held that the district court committed legal error in holding the patent unenforceable for prosecution laches in the absence of any evidence of prejudice, specifically the lack of intervening rights during the period of delayed prosecution.

Cancer Research's U.S. Patent No. 5,260,291<sup>1</sup> ("the '291 patent"), claims a genus of tetrazine derivative compounds and methods for treating cancer using those compounds. The original specification for the '291 patent was filed on August 23, 1982 and disclosed thirteen tetrazine derivative compounds identified as having valuable antineoplastic activity based on animal data. From 1983 to 1991, the U.S. Patent and Trademark Office examiner repeatedly rejected the claims for lack of utility and the applicant filed ten continuation applications instead of responding to the office actions. In 1991, Cancer Research obtained ownership of the patent application, filed another continuation application, and for the first time responded to the

<sup>1</sup> U.S. Patent No. 5,260,291.

examiner's utility rejection arguing that the disclosure of animal data in the original specification was sufficient to establish utility in humans. The examiner found the claims allowable, and the patent issued on November 9, 1993.

During the prosecution of the '291 patent, one of the claimed tetrazine compounds, temozolamide, advanced to human clinical trials and was approved by the U.S. Food and Drug Administration for the treatment of two different types of brain cancer. Temozolamide is marketed as Temodar®. The '291 patent was granted a patent term extension of 1,006 days and also a pediatric exclusivity period, and thus will expire in 2014.

In 2007, Barr filed an Abbreviated New Drug Application ("ANDA") seeking FDA approval for a generic form of Temodar® as well as a Paragraph IV certification that challenged the validity of the '291 patent. Cancer Research sued Barr for patent infringement, and Barr counterclaimed that the patent was unenforceable for prosecution laches and for inequitable conduct.

After a bench trial, the district court found the '291 patent unenforceable due to prosecution laches. The district court agreed with Barr that the delay caused by eleven continuation applications, ten abandonments, and no substantive prosecution for nearly a decade was unreasonable and unexplained. The district court entered final judgment in favor of Barr, and Cancer Research appealed.

On appeal, the Federal Circuit held that the doctrine of prosecution laches requires both an unreasonable and unexplained delay in prosecution and a finding of prejudice to the accused infringer. Moreover, the Federal Circuit held that "to establish prejudice, an accused infringer must show evidence of intervening rights, i.e., that either the accused infringer or others invested in, worked on, or used the claimed technology during the period of delay."<sup>2</sup> In arriving at this decision, the panel first cited *A.C. Aukerman Co. v. R.L. Chaides Const. Co.*<sup>3</sup> to support its holding that prosecution laches, like all laches defenses, requires a finding of prejudice. Then, the panel reviewed the Supreme Court cases underlying the doctrine, *Woodbridge v. United States*<sup>4</sup> and *Webster Electric Co. v. Splitdorf Electrical Co.*<sup>5</sup> The panel found that both these cases relied on unreasonable delay and its adverse effect on others working in the same field. In so doing, the panel noted

two other Supreme Court cases where a lack of intervening rights precluded a finding of prosecution laches,<sup>6</sup> and observed that its own *Symbol Technologies* decisions<sup>7</sup> relied on the existence of intervening rights.

The Court found that neither Barr nor anyone else developed or invested in temozolamide or any of the claimed tetrazine compounds between 1982 and 1991, noting that even Barr, who was entitled under the law to file an ANDA in 2003, did not do so until 2007. Therefore, neither Barr nor anyone else was prejudiced by the delay in the issuance of the '291 patent in 1993. In the Federal Circuit's view, the only consequence of the delay is that the '291 patent was not entitled to a term extension longer than the fourteen year exclusivity maximum under the Hatch Waxman Act. Accordingly, the Federal Circuit concluded that the district court committed legal error in holding the '291 patent unenforceable for prosecution laches in the absence of any evidence of intervening rights.

In a strongly worded dissent, Judge Sharon Prost disagreed with the panel's requirement of prejudice, and specifically intervening rights, to support unenforceability due to prosecution laches. Judge Prost penned her own review of the prosecution laches holdings of both the Supreme Court and the Federal Circuit, concluding that these cases did not compel a finding of prejudice. Furthermore, in her view, unreasonable prosecution delay inherently prejudices the public, so no particularized showing of intervening rights during the period of delay is necessary.

### The Rehearing Denial

On March 7, 2011, the Federal Circuit denied Cancer Research's petition for rehearing en banc. As the judges were evenly split, with five judges voting each way, there was no simple majority and the petition failed. Judge Prost dissented from the denial, and issued a detailed opinion in which Judges Gajarsa, Moore, and O'Malley joined.

Judge Prost's dissent, as in her panel dissent, focused on the harm to the public from unreasonably delayed patent prosecution. Citing *Woodbridge* and *Webster Electric*, her dissent parsed the Supreme Court's decisions in an effort to show that either unreasonable delay or intervening rights could result in patent unenforceability. Accordingly, she urged a "totality of the circumstances" test for prosecution laches, noting that the Supreme Court's recent patent

<sup>2</sup> *Cancer Research Tech. Ltd. v. Barr Labs. Inc.*, 625 F.3d 724, 729 (Fed. Cir. 2010) ("*Cancer Research*") (emphases added).

<sup>3</sup> 906 F.2d 1020 (Fed. Cir. 1992).

<sup>4</sup> 263 U.S. 50 (1923).

<sup>5</sup> 264 U.S. 463 (1924).

<sup>6</sup> *Crown Cork & Seal Co. v. Ferdinand Gutmann Co.*, 304 U.S. 159 (1938) and *General Talking Pictures Corp. v. Western Electric Co.*, 304 U.S. 175 (1938).

<sup>7</sup> *Symbol Techs., Inc. v. Lemelson Med., Educ. & Research Found., LP*, 277 F.3d 1361 (Fed. Cir. 2002) ("*Symbol Techs. I*"); *Symbol Techs., Inc. v. Lemelson Med., Educ. & Research Found., LP*, 422 F.3d 1378 (Fed. Cir. 2005) ("*Symbol Techs. II*"). In a third decision, granting a limited panel reh'g and denying a petition for reh'g en banc, the Federal Circuit extended its holding in *Symbol Techs. II* from the 76 asserted claims to all claims of the asserted patents, noting that "prejudice to the public as a whole has been shown here in the long period of time during which parties, including the [declaratory judgment] plaintiffs, have invested in the technology described in the delayed patents." *Cancer Research*, 625 F.3d at 731; *Symbol Techs., Inc. v. Lemelson Med., Educ. & Research Found. LP*, 429 F.3d 1051, 1052 (Fed. Cir. 2005).

cases<sup>8</sup> favored flexible tests over rigid formalism.<sup>9</sup>

#### *Why Did The Federal Circuit's Judges Come to Opposite Interpretations of the Supreme Court's "Prosecution Laches" Decisions?*

The strongly voiced concerns in Judge Prost's dissents suggest a deep division within the Federal Circuit on the issue of prosecution laches. The two Supreme Court decisions relied on by both the panel majority and Judge Prost provide some basis for sorting out the differences among the judges.

In *Woodbridge*, the inventor, Woodbridge, filed a patent application for an improved cannonball in 1852, the claims of which were allowed a few months later. At that time, Woodbridge requested that his application be held in the Patent Office's secret archives for one year. However, after more than nine years of inactivity, and shortly after the start of the Civil War, Woodbridge finally requested that his patent be issued, as well as requesting the allowance of additional, broader claims. The Patent Office refused to issue the patent, and Woodbridge's subsequent appeals were unsuccessful. However, by a special 1901 statute, Woodbridge was entitled to claim compensation for the use by the U.S. government of his cannonball invention as if a patent had issued in 1852, unless he had forfeited his right to a patent by "publication, delay, laches, or otherwise."<sup>10</sup> The Supreme Court noted that Woodbridge had intentionally delayed his patent for more than nine years, and had done so "for the admitted purpose of making the monopoly square with the period when the commercial profit from it would be highest."<sup>11</sup> In particular, the Court stated that "[m]any inventors were at work in the same field and had made advances in the art and the Government had used them."<sup>12</sup> Accordingly, while the *Woodbridge* opinion did not use the phrase "prosecution laches," it did affirm the Court of Claims's holding that "Woodbridge had forfeited or abandoned his right to a patent by his delay or laches."<sup>13</sup>

The Supreme Court's *Webster Electric* decision related to patents held by Webster Electric Co. ("Webster") based on an application originally filed in February 1910. Webster's original application issued as a U.S. patent in November 1916, and a divisional application was filed in 1915. Meanwhile, Webster had filed an infringement suit against Splitdorf Electrical Co. ("Splitdorf") based on another patent that had issued in 1914. In June 1918, Webster added two broader claims to its divisional application, which issued as a patent in September 1918 and was added to the suit

against Splitdorf in October 1918. The Court found that the subject matter of these broader claims was "in general use," and that Webster had "simply stood by and awaited developments" during the more than eight years between its 1910 application and its 1918 amendments.<sup>14</sup> The Court found that Webster's "delay was unreasonable, and, under the circumstances shown by the record, constitutes laches," requiring dismissal of the suit against Splitdorf.<sup>15</sup>

Although the Supreme Court's opinions in both *Woodbridge* and *Webster Electric* found that "laches" barred plaintiffs from enforcing their patent rights, neither decision outlines precisely what the court was referring to by the term "laches." In particular, neither opinion appeared to expressly require prejudice, nor did either decision expressly indicate that such prejudice must be shown by the presence of intervening rights during the period of unreasonable delay. Without a clear definition of the requirements of a laches defense based on prosecution delay, it is not surprising that both the *Cancer Research* panel and the en banc dissenters found support for their positions in these cases. It appears, however, that the judges may not have considered either the Supreme Court's laches opinions from around the time of *Woodbridge* and *Webster Electric*, or the Court's more recent decisions that considered the requirements of a laches defense.

#### *Does Laches Require a Showing of Prejudice During the Period of Unreasonable Delay?*

The Supreme Court's 1892 *Gallihier v. Cadwell* decision,<sup>16</sup> as well as the Court's recent laches jurisprudence, reveal consistency with the Federal Circuit's decision in *Cancer Research*.

In the *Gallihier* case, Cadwell had sued Mrs. Gallihier and others to quiet title to land in Tacoma, Washington. On the issue of laches, the Court noted that the value of the land had greatly increased between 1879, when Gallihier's homestead claim to the land expired, and 1886, when she asserted her claim against Cadwell. In explaining its reasoning for finding laches, the Court included the following discussion (emphasis added):<sup>17</sup>

[T]he question of laches turns not simply upon the number of years which have elapsed between the accruing of her rights, whatever they were, and her assertion of them, but also upon the nature and evidence of those rights, the changes in value, and other circumstances occurring during that lapse of years. The cases are many in which this defence has been invoked and considered. It is true, that by reason of their differences of fact no one case becomes an exact precedent for another, yet a uniform principle pervades

<sup>8</sup> *Cancer Research Tech. Ltd. v. Barr Labs. Inc.*, 2011 BL 51069 (Fed. Cir. Feb. 28, 2011) (Prost, J. dissenting) (citing *Bilski v. Kappos*, 561 U.S. \_\_\_, 2010 BL 146286 (June 28, 2010)); *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007); *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006)).

<sup>9</sup> Judge Dyk authored his own short dissenting opinion. In his view, prosecution laches does not require a showing of intervening rights, but he also rejected Judge Prost's proposed "totality of the circumstances" test as both confusing and unsupported by the Supreme Court's precedent.

<sup>10</sup> *Woodbridge*, 263 U.S. at 51.

<sup>11</sup> *Id.* at 56.

<sup>12</sup> *Id.* at 58.

<sup>13</sup> *Id.* at 51, 63.

<sup>14</sup> *Webster Electric*, 264 U.S. at 465.

<sup>15</sup> *Id.* at 466, 471.

<sup>16</sup> *Gallihier v. Cadwell*, 145 U.S. 368 (1892).

<sup>17</sup> *Gallihier*, 145 U.S. at 371-372 (emphasis added).

them all. They proceed on the assumption that the party to whom laches is imputed has knowledge of his rights, and an ample opportunity to establish them in the proper forum; that by reason of his delay the adverse party has good reason to believe that the alleged rights are worthless, or have been abandoned; and that because of the change in condition or relations during this period of delay, it would be an injustice to the latter to permit him to now assert them.

Thus, the Supreme Court's *Gallagher* opinion supports the proposition that the party asserting a laches defense must show prejudice during the period of unexcused delay, as required by the Federal Circuit panel in *Cancer Research*.

The Supreme Court's most recent discussion of the elements of a laches defense dates from 2002, in the *Nat'l R.R. Passenger Corp. v. Morgan*<sup>18</sup> opinion authored by Justice Clarence Thomas. There, the Court considered whether an employer may assert a laches defense against a late filed discrimination claim by an employee, stating that "a laches defense . . . bars a plaintiff from maintaining a suit if he unreasonably delays in filing a suit and as a result harms the defendant."<sup>19</sup> The Court relied on its earlier opinion in *Costello v. United States*,<sup>20</sup> which stated that "[t]his defense requires proof of (1) lack of diligence by the party against whom the defense is asserted, and (2) prejudice to the party asserting the defense."<sup>21</sup> The Court did not, however, address whether the elements were made out in that case, stating only that the defense may be raised "in the face of unreasonable and prejudicial delay."<sup>22</sup>

Furthermore, in the more than 100 years between the *Gallagher* and *Nat'l. R.R. Passenger Corp.* decisions, the Supreme Court has had five opportunities to address the issue of whether a lack of either unreasonable delay or prejudice prohibited the defendant from succeeding in its defense.<sup>23</sup> While no laches was found in any of these cases, the Court expressly stated that a lack of prejudice supported the decision reached in four of the five cases.<sup>24</sup>

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he has both the  
legal and technical  
background necessary  
to fully satisfy our  
requirements." –  
*Chambers USA 2011*

## Possible Supreme Court Review

In determining whether to grant any *certiorari* petition by Barr,<sup>25</sup> the Supreme Court may consider that the number of U.S. patents likely to be subject to a prosecution laches defense would seem to be decreasing as time marches on because the patent laws were amended in 1995 to set the expiration of U.S. patents at 20 years from their respective filing dates.<sup>26</sup> In addition, while the Supreme Court's recent patent jurisprudence has generally favored flexible tests over rigid requirements, more than 100 years of Supreme Court laches decisions support a bright line requirement of prejudice caused during the patentee's delay. Accordingly, it appears that even if *certiorari* were granted, the Supreme Court may let stand the Federal Circuit's *Cancer Research* panel decision.

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<sup>18</sup> 536 U.S. 101 (2002).

<sup>19</sup> *Id.* at 121.

<sup>20</sup> 365 U.S. 265 (1961). The Supreme Court's definition of laches in *Costello* rested on three of its earlier opinions, each of which found that both unreasonable delay and prejudice to the defendant were required to succeed in the defense. *Id.*, 365 U.S. at 282 (citing *Gallagher*, 145 U.S. at 372; *Southern Pacific Co. v. Bogert*, 250 U.S. 483, 488-490 (1919); *Gardner v. Panama R. Co.*, 342 U.S. 29, 31 (1951)).

<sup>21</sup> *Nat'l R.R. Passenger Corp.*, 536 U.S. at 121-122 (internal quotation marks omitted).

<sup>22</sup> *Id.* at 122.

<sup>23</sup> *Southern Pacific*, 250 U.S. at 488-490; *Gardner*, 342 U.S. at 30-32; *Costello*, 365 U.S. at 281-284; *Kansas v. Colorado*, 514 U.S. 673, 687-689 (1995); *New Jersey v. New York*, 523 U.S. 767, 806-807 (1998).

<sup>24</sup> *Southern Pacific*, 250 U.S. at 490 ("[T]he defendant was not prejudiced by the delay."); *Gardner*, 342 U.S. at 31 ("There is no showing that the respondent's position has suffered from the fact that the claim has not yet proceeded to trial on its merits."); *Costello*, 365 U.S. at 282 ("[T]he record is clear that the petitioner was not prejudiced by the Government's delay. . . ."); *New Jersey v. New York*, 523 U.S. at 806 ("The claim of prejudice that New York raises under the guise of a laches defense includes no prejudice in defending against suit. . . ."). One aspect of the definition of laches that was not addressed in any of these Supreme Court cases is whether a showing of intervening rights of "others," or "the public as a whole," would have been prejudice sufficient to support a finding of laches, as the Federal Circuit has suggested it could be. *Cancer Research*, 625 F.3d at 729, 731 (emphases added).

<sup>25</sup> Barr has requested and received an extension to file any petition for *certiorari* until July 28, 2011. See <http://www.supremecourt.gov/Search.aspx?FileName=/docketfiles/10a1085.htm>, retrieved May 17, 2011.

<sup>26</sup> See 35 U.S.C. § 154(a)(2) and enabling legislation. According to one source, however, as of December 2010 there were still approximately 600 pre-1995 unclassified patent applications pending in the U.S.P.T.O. See <http://www.patentlyo.com/patent/2010/12/old-schoolsubmarine-patents.html> (dated December 14, 2010; accessed April 15, 2011).



## Supreme Court Resolves Decades-Old Questions About Induced Patent Infringement

By  
**Christopher J. Gaspar**

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What do a deep-fryer maker, a used-car sales-man, and a bank officer have in common? They each played a prominent role in the U.S. Supreme Court's recent explanation of the new standard for inducement of patent infringement under 35 U.S.C. §271(b).

Last month, the Court decided *Global-Tech Appliances Inc. v. SEB S.A.*, — S.Ct. —, No. 10-6, 2011 WL 2119109 (May 31, 2011), and put to rest decades of debate about the circumstances under which an accused infringer has violated §271(b) by inducing another to infringe a patent. Specifically, the Court held that induced infringement under §271(b) requires knowledge that the induced acts constitute patent infringement. And this “knowledge” includes not only actual knowledge, but also willful blindness. It does not, however, include a “deliberate indifference to a known risk,” as the U.S. Court of Appeals for the Federal Circuit had earlier ruled.

### The Deep-Fryer Maker

SEB S.A. is a French maker of home appliances, including deep fryers. The deep fryer at issue here was for home use and had outside surfaces that stayed cool during the frying process. SEB sold the deep fryers in this country, and they were commercially successful. Inventive aspects of SEB's “cool touch” fryer design resulted in a patent, which the

company enforced against Global-Tech and others that sold infringing fryers.

Sunbeam Products Inc., a competitor of SEB, was one company alleged to infringe SEB's patent. Sunbeam had asked a subsidiary of Global-Tech (called Pentalpha) to supply it with particular deep fryers. Pentalpha “developed” a deep fryer for Sunbeam by buying an SEB fryer in Hong Kong and copying all but its cosmetic features. Importantly, because the SEB fryer bought abroad was made for sale in a foreign market, it bore no U.S. patent markings.

The next facts, recited here in the Supreme Court's own words, were central to the Court's analysis of the inducement question: “After copying SEB's design, Pentalpha retained an attorney to conduct a right-to-use study, but Pentalpha refrained from telling the attorney that its design was copied directly from SEB's.”<sup>1</sup>

### The Decisions Below

SEB sued Pentalpha for patent infringement and alleged, among other things, that Pentalpha violated §271(b) by actively inducing Sunbeam and others to sell Pentalpha's deep fryers in violation of SEB's patent rights. After a five-day trial, the jury found that Pentalpha had induced its customers to infringe, and that Pentalpha's infringement was willful.

<sup>1</sup> *Global-Tech Appliances Inc. v. SEB S.A.*, — S.Ct. —, No. 10-6, 2011 WL 2119109, at \*3 (May 31, 2011).

Pentalpha argued that there was insufficient evidence to support the jury's finding of induced infringement under §271(b) because the company did not actually know of SEB's patent until it received the notice of the Sunbeam lawsuit in April 1998. In addition to the jury, the Federal Circuit and Supreme Court also in turn rejected this argument.

The Federal Circuit affirmed the district court's judgment and held that induced infringement under §271(b) requires a plaintiff to "show that the alleged infringer knew or should have known that his actions would induce actual infringements" and that this showing must include proof that the alleged infringer knew of the patent.<sup>2</sup> Although the record contained no direct evidence that Pentalpha knew of SEB's patent before April 1998, the appellate court found adequate evidence to support a finding that "Pentalpha deliberately disregarded a known risk that SEB had a protective patent." The Federal Circuit explained that such disregard "is not different from actual knowledge, but is a form of actual knowledge."

### The Used-Car Salesman

Early in the Supreme Court's opinion, the Court explained the ambiguity in §271(b) that has caused decades of debate. That statute states: "Whoever actively induces infringement of a patent shall be liable as an infringer." The Court brought the ambiguity to life by employing a used-car salesman:

If a used-car salesman induces a customer to buy a car, the salesman knows that the desired result is the purchase of the car. But what if it is said that the salesman induced the customer to buy a damaged car? Does this mean merely that the salesman induced the customer to purchase a car that happened to be damaged, a fact of which the salesman may have been unaware? Or does this mean that the salesman knew that the car was damaged? The statement that the salesman induced the customer to buy a damaged car is ambiguous.

So is §271(b). In referring to a party that "induces

An inducer of infringement under §271(b) must know that it is causing another's infringement, not merely causing an act that constitutes infringement.

infringement," this provision may require merely that the inducer lead another to engage in conduct that happens to amount to infringement, i.e., the making, using, offering to sell, selling, or importing of a patented invention. On the other hand, the reference to a party that "induces infringement" may also be read to mean that the inducer must persuade another to engage in conduct that the inducer knows is infringement. Both readings are possible.<sup>3</sup>

To resolve the ambiguity, the Court relied on a combination of case law that predated the enactment of §271 in the Patent Act of 1952, and also *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476 (1964) (*Aro II*). That 1964 decision, said the Court, resolves the conflicting interpretations of §271(b) even though *Aro II* concerned §271(c), not §271(b). The Court's analysis included the following three steps.

First, the Court observed that §271(b) and §271(c) had a common origin in the pre-1952 understanding of infringement. Back then, said the Court, induced infringement was not considered a separate theory of indirect infringement liability. But when Congress enacted §271, it separated what had previously been regarded as contributory infringement into one category covered by section (b), and another covered by section (c). Second, the Court found that §271(c) contains exactly the same ambiguity as §271(b) and concluded that it would be "strange to hold that knowledge of the relevant patent is needed under §271(c) but not §271(b)."<sup>4</sup> Third, the Court noted that the *Aro II* majority had held that a contributory infringer under §271(c) must know "that the combination for which his component was especially designed was both patented and infringing." This holding compelled the Court to require the same knowledge for liability under §271(b) as for §271(c).

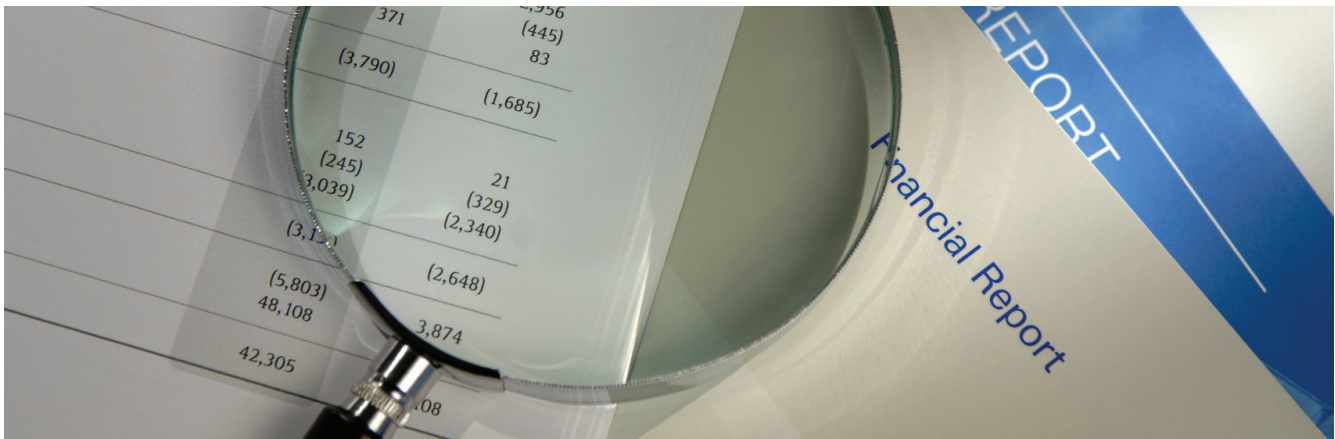
### The Bank Officer

Having resolved §271(b)'s ambiguity, the Court next addressed Pentalpha's argument that it did not actually know about SEB's patent, and thus could not have induced infringement. For this, the Court turned to a bank officer

<sup>2</sup> *SEB S.A. v. Montgomery Ward & Co.*, 594 F.3d 1360, 1376-77 (2010).

<sup>3</sup> *Global-Tech*, 2011 WL 2119109, at \*4-5 (citations omitted).

<sup>4</sup> *Id.* at \*6-7.



from 1899 and the doctrine of willful blindness from criminal law. In the process, the Court set aside the Federal Circuit’s “deliberate indifference to a known risk” analysis.

The Court noted that “courts applying the doctrine of willful blindness hold that defendants cannot escape the reach of these [criminal] statutes by deliberately shielding themselves from clear evidence of critical facts that are strongly suggested by the circumstances” because “defendants who behave in this manner are just as culpable as those who have actual knowledge.”<sup>5</sup> For example, an 1899 criminal statute prohibited a bank officer from willfully certifying a check drawn against insufficient funds. In *Spurr v. United States*, 174 U.S. 728, 735 (1899), the Court held that a willful violation would occur “if the [bank] officer purposely keeps himself in ignorance of whether the drawer has money in the bank.”

Over time, courts regularly applied the willful blindness doctrine and, in 1962, it was incorporated into a model penal code. The Court thus concluded that “[g]iven the long history of willful blindness and its wide acceptance in the Federal Judiciary, we can see no reason why the doctrine should not apply in civil lawsuits for induced patent infringement under 35 U.S.C. §271(b).”<sup>6</sup> One specific formulation of the doctrine that the Court endorsed is: “a willfully blind defendant is one who takes deliberate actions to avoid confirming a high probability of wrongdoing and who can almost be said to have actually known the critical facts.”

## The Dissent

In a dissenting opinion, Justice Anthony Kennedy agreed with the majority that §271(b) “must be read in tandem with §271(c), and therefore that to induce infringement a defendant must know ‘the induced acts constitute patent infringement.’”<sup>7</sup> But Justice Kennedy did not join in the majority’s application of the willful blindness doctrine. In short, the dissenting opinion voices Justice Kennedy’s

concern that it is a mistake to interpret a statute to require knowledge, but then hold that willful blindness will suffice.

The potential impact of the majority’s decision on cases other than patent cases was plainly on Justice Kennedy’s mind. In particular, the dissent noted that the majority “appears to endorse the willful blindness doctrine here for all federal criminal cases involving knowledge.”<sup>8</sup> Underscoring that concern, Justice Kennedy wrote that “this Court has never before held that willful blindness can substitute for a statutory requirement of knowledge.”

The dissent also noted that even *Spurr v. United States* did not suggest that blindness can substitute for knowledge and, instead, held only that certain statutory presumptions of knowledge were consistent with due process. While a deep-fryer maker, a used-car salesman, and a bank officer played important roles in the majority’s opinion, Justice Kennedy appears to have preferred that the criminal defense bar also join the cast. Indeed, the dissent expressed disappointment that the Court potentially endorsed broad application of the willful blindness doctrine without receiving briefing or argument from the criminal defense bar.

## The Lessons

In recent years, patent owners have alleged induced infringement with increasing frequency. It remains to be seen how *Global-Tech* may affect that trend. But in the meantime, *Global-Tech* may have settled two long-running debates and nevertheless prove to be among the most important patent cases of the new decade. First of all, an inducer of infringement under §271(b) must know that it is causing another’s infringement, not merely causing an act that constitutes infringement. Secondly, the doctrine of willful blindness applies to determine if an accused inducer possessed the requisite knowledge for infringement liability.

<sup>5</sup> Id. at \*8.

<sup>6</sup> Id. at \*8-9.

<sup>7</sup> Id. at \*10.

<sup>8</sup> Id. at \*11.

## Will Copyright Law Give Warner Bros. a Hangover?

**A tattoo artist's claim of copyright infringement could cost movie studio millions.**

By  
**Mark C. Scarsi**



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By all accounts, Warner Bros.' new movie, "The Hangover Part II," is a wild success on the road to becoming a box office blockbuster. Like the movie's premise, however, periods of euphoria can often lead to a painful hangover. What could cause Warner Bros.' hangover? Believe it or not, it's all about copyright law.

As was widely reported last week, Victor Whitmill, a Missouri "tattoo artist," brought an action against Warner Bros. seeking to stop the Memorial Day weekend opening of "The Hangover Part II." While District Court Judge Catherine Perry ultimately decided to let the movie open on schedule, Warner Bros. is not out of hot water. In fact, the comments Perry made at the injunction hearing should make Warner Bros. think about stocking up on Alka-Seltzer.

The dispute centers on a unique tattoo that Whitmill created for former heavyweight champion boxer Mike Tyson. Tyson appeared in the original "Hangover" movie sporting the tattoo, and "The Hangover Part II" features another character, played by Ed Helms, adorned with a tattoo similar to Whitmill's unique tattoo design. Whitmill argues that Warner Bros.' use of the tattoo design on Helms constituted copyright infringement. While the copyrightability of a tattoo may seem like a novel question, tattoo

art certainly fits squarely within the definition of copyrightable subject matter.

Under United States copyright law, an individual automatically receives a copyright (literally the right to make copies) for any of his or her "original works of authorship fixed in any tangible medium of expression." Section 102 is interpreted fairly literally, so if you doodle on your napkin at dinner, you have the right to prohibit others from copying your doodle. This is true even if you don't own the napkin!

Because copyrights can exist in so many things (pictures, sculptures, artwork, music, etc.), filmmakers routinely go through efforts to ensure they have the rights to copy the things that appear in their films. This clearance effort is time consuming and expensive, often amounting to more than 10 percent of the entire cost of a film.

With this background, it is easy to see why Whitmill stands to reap a significant windfall from "The Hangover Part II." Whitmill's design is an original work fixed in a tangible medium of expression (i.e., Tyson's face) and Warner Bros. copied it by placing it on Helms' face in its movie and promotional materials.

In opposing the injunction, Warner Bros. made several "creative" arguments, including that tattoos



cannot be copyrighted, that the copying was “fair use,” that Tyson had an implied license to allow the copying, and finally, that Whitmill’s failure to object to the first movie stopped him from objecting to the second. Perry reportedly dismissed each of these arguments as “just silly.” Perry went on to indicate that Whitmill has a strong likelihood of succeeding on his copyright infringement claim at trial. It appears that the only thing that prevented Perry from stopping the release of the movie was her concern for the vast number of third parties (theater

owners, etc.) that would be harmed by an injunction and her belief that Whitmill’s harm could be adequately remedied by a monetary judgment.

It seems that the only remaining question is how much Warner Bros. will have to pay Whitmill. Apparently, Whitmill’s pre-suit demand was \$30 million. With the positive signals from Perry and the massive success of “The Hangover Part II,” that number will certainly go up. Not a bad payday for an afternoon’s work at the tattoo parlor!



## Supreme Court Poised to Make Fundamental Change to the Nature of Patents

By  
Mark C. Scarsi



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Last week, the Supreme Court heard arguments in *Microsoft v. i4i*, a case regarding the appropriate standard of proof juries should use for validity challenges in patent litigation. Currently, courts require a heightened standard of “clear and convincing evidence.” Microsoft seeks to change the standard to a “preponderance of evidence.” While the question of which standard of proof to use may seem trivial to the casual reader, in patent litigation it is critically important. In fact, the Supreme Court’s decision in *Microsoft v. i4i* could change the fundamental nature of patents in the United States.

### Patent Procurement and Litigation

To obtain a patent, an inventor files an application with the United States Patent Office. A patent examiner reviews the invention disclosure against existing patents and articles (referred to as the “prior art”) to determine whether the proposed invention is new and non-obvious. If the patent examiner concludes that the invention meets the conditions of patentability, the Patent Office issues a patent. Because of the limited resources of the Patent Office however, a patent examiner cannot review all of the prior art. As a result, the Patent Office inevitably issues some patents for inventions that are not new and non-obvious.

In general, patent litigation involves claims by patent holders against defendants who are accused of practicing the patent. In response to these claims, defendants often attempt to prove that the patent in question is invalid because the prior art disclosed the invention at issue. Because defendants have greater incentive (and, often, greater resources) to search for prior art than a typical patent examiner, defendants often uncover art not considered by the Patent Office.

### Burden of Proof

While not required by statute, courts have long taken the position that a patent defendant must prove that a patent is invalid by “clear and convincing” evidence. This standard is in contrast to the traditional civil litigation “preponderance of evidence” standard. While the words standing alone may not seem so dissimilar, in practice, the two standards are very different. To prove an issue by a preponderance of evidence, you must produce more evidence favoring your position than opposing your position. In other words, you need slightly better than 50 percent of the evidence in your favor. However, proving something by “clear and convincing” evidence requires a higher threshold showing. While the “clear and convincing” standard is hard to reduce to a numerical percentage, plaintiff’s



lawyers are quick to point out that it is a heightened bar—some are fond of pointing out that it’s the same standard the government must meet in order to take someone’s children away.

### Supreme Court’s View

It is always hard to predict how the Supreme Court will rule in any particular case, but several of the justices do seem inclined to change the “clear and convincing” standard. The Court appears to be bothered by the incongruity of applying a heightened standard to prior art that the Patent Office never considered. For example, when counsel for the government argued that a heightened standard was appropriate given that the issuance of a patent is a decision made by an executive branch agency, Justice Alito retorted that the argument “doesn’t carry very much weight when the [prior art] was never considered by the [Patent Office].” Justices Scalia, Breyer, Sotomayor and Kagan seemed similarly skeptical of the legitimacy of a heightened standard.

Although some may question why the appropriate standard for patent validity is important enough for Supreme Court review, the outcome of this case will likely have a huge impact on the way we look at patents. For a long time, conventional wisdom has held that honoring patents helped spur invention, which in turn helped the economy. As a result, we hold U.S. patents on something of a pedestal. Over the past decade, however, we’ve seen that bad patents (i.e., patents that should never have been issued in the first place) have a countervailing deleterious impact. As Justice Breyer put it, “It’s a bad thing not to give protection to an invention that deserves it; and it is just as bad a thing to give protection to an invention that doesn’t deserve it. Both can seriously harm the economy.”

In resolving *Microsoft v. i4i*, the Supreme Court will decide much more than a burden of proof; it will determine if U.S. patents will continue to occupy their lofty place in the intellectual property lexicon.”

## Intellectual Property Interplay

By  
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*The 9th Circuit's Fleischer Studios decision provides a good opportunity to review the boundaries between intellectual property.*

While most readers will know the difference between a patent, a trademark and a copyright, the proper interplay between the law in these three disciplines is not always easy to decipher. At least that is what the 9th Circuit is finding out as its decision in *Fleischer Studio, Inc. v. A.V.E.L.A., Inc. et al.*, is being roundly criticized by a high powered group including the NFL, Major League Baseball and the Motion Picture Association of America.

### Patents and Copyrights

The U.S. Constitution authorizes Congress "to promote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries. Pursuant to this grant, Congress set up the copyright system, to protect works of authorship, and the patent system, to protect inventions. Per the Constitution, copyrights and patents must be of "limited duration." This means that all copyrights and patents eventually expire, leaving the copyrighted works and patented inventions in the public domain. Generally, patent terms run twenty years from the date of a patent application. Copyright terms have

been adjusted a number of times over the years, but an author creating a work today will have exclusive rights to the work for his or her lifetime, plus 70 years.

### Trademarks

Exclusive trademark rights are not designed to reward creators. To the contrary, trademark rights exist to protect consumers, who might otherwise be confused about the source of goods and services. While we often think of a trademark as a brand name (e.g., "Quaker" oatmeal), a trademark can take a myriad of other forms (e.g., the Golden Arches, Ronald McDonald or the "I'm lovin' it" catchphrase). A trademark holder can maintain a trademark indefinitely, as long as the trademark continues to fulfill its function as a source identifier.

### Interplay Between Patents, Copyrights and Trademarks

Due to the limited duration of patent rights and the indefinite duration of trademarks, there has been some concern that individuals or companies may claim trademark rights in an effort to extend their patent monopoly. In response to this concern, the Supreme Court adopted the utilitarian functionality defense, which held that utilitarian aspects of a product (e.g., hinges) could not be used as trademarks.





In the 1950s, the 9th Circuit sought to extend the utilitarian defense with the “aesthetic” functionality defense. Under this doctrine, aesthetic features of a product which drove consumer demand were also ineligible for trademark protection. The aesthetic functionality doctrine, however, was routinely criticized by courts around the country, including subsequent decisions of the 9th Circuit. As one later 9th Circuit Panel held in *Au-Tomotive Gold, Inc. v. Volkswagen of America, Inc.*:

[The aesthetic functionality defense] would be the death knell for trademark protection. It would mean that simply because a consumer likes a trademark, or finds it aesthetically pleasing, a competitor could adopt and use the mark on its own products. Thus, a competitor could adopt the distinctive Mercedes circle and tri-point star or the well-known golden arches of McDonalds, all under the rubric of aesthetic functionality.

In light of *Au-Tomotive Gold* and similar decisions, most practitioners believed that the aesthetic functionality doctrine was dead.

### ***Fleischer Studios Decision***

*Fleischer Studios* involved the unlicensed use of the Betty Boop character on dolls and handbags. In denying Fleischer’s trademark claims, the district court held Fleischer failed to timely introduce evidence that it owned the trademark rights to Betty Boop. In affirming the district court, the 9th Circuit, however, ignored the proceedings below and ruled against Fleischer based on the aesthetic functionality doctrine.

The 9th Circuit’s inexplicable revival of the long dead aesthetic functionality doctrine sent a shiver through the IP community. If the doctrine continues to live, countless valuable trademarks will be at risk. Fleischer Studios filed a petition for rehearing en banc and a number of prominent IP holders filed amicus briefs. While the IP community expects that the full 9th Circuit will reverse the panel’s decision, many of us will be interested to see if a viable argument will be made for the restoration of the doctrine.

# S.D.N.Y. Holds Electronically Stored Information Produced Pursuant to FOIA must Contain Metadata, Load Files

By  
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and  
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*Milbank Litigation Client  
Alert*, February 17, 2011



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Last week, in *National Day Laborer Organizing Network, et al. v. USICEA*,<sup>1</sup> Judge Shira A. Scheindlin of the United States District Court for the Southern District of New York ruled that electronically stored information (“ESI”) produced in response to FOIA requests must contain the metadata and load files for that ESI. Metadata is electronic information that describes, for example, how, when, and by whom ESI is created, modified, or distributed. Load files are used to import sets of ESI into a database for later review on a computer screen, and contain information that allows a database of electronic records to be searched using computerized tools.

## Background

In February 2010, National Day Laborer Organizing Network, Center for Constitutional Rights, and Immigration Justice Clinic of the Benjamin N. Cardozo School of Law (“Plaintiffs”) sought records pursuant to the Freedom of Information Act (“FOIA”) from four government agencies (collectively, “Defendants”). The records pertained to Secure Communities, a collaborative program established by the United States Immigration and Customs Enforcement agency and the Department of Justice that works with state and local law enforcement

agencies to improve and modernize the removal of criminal aliens from the United States.<sup>2</sup> Defendants resisted producing the records and argued that Plaintiffs’ requests would require production of millions of pages of documents. In April 2010, Plaintiffs sued to compel production.

The Court ordered Defendants to produce the documents by late January 2011. Shortly before that deadline, on December 22, 2010, Plaintiffs sent Defendants a Proposed Protocol Governing the Production of Records (“Proposed Protocol”) that specified the requested format for the production of ESI and a separate format for the production of paper records. Among other things, the Proposed Protocol requested that ESI contain metadata and load files to enable word searchability. The Court noted that the Proposed Protocol was partially based on a production protocol often used by the Securities and Exchange Commission and the Department of Justice Criminal Division when they request electronic records.

In early January 2011, Defendants produced five unsearchable PDF files, representing an amalgamation of various electronic and paper records, totaling less than three thousand pages. Plaintiffs sought assistance

<sup>1</sup> 10 Civ. 3488 (S.D.N.Y. Feb. 7, 2010).

<sup>2</sup> U.S. Immigration and Customs Enforcement, *Secure Communities* ([http://www.ice.gov/secure\\_communities/](http://www.ice.gov/secure_communities/)).

from the Court, asserting that the form in which the records was produced was “unusable.” Specifically, Plaintiffs complained that (1) the data was produced in unsearchable PDF format; (2) electronic records were stripped of their metadata; and (3) paper and electronic records were indiscriminately merged together into one PDF file. Plaintiffs also urged the Court to “so order” the Proposed Protocol.

The Court noted that the Proposed Protocol represented the first time Plaintiffs had made a written demand for load files and metadata. But the Court also pointed out that, on July 23, 2010, Plaintiffs had requested via email that the documents be produced by CD, with each document saved as a separate file and consecutively bates-stamped, and that Excel documents be produced in Excel format and not as PDF screen shots. The email had also asked Defendants to specify what format Defendants intended to use in producing the documents, and invited Defendants to contact Plaintiffs if they had any questions or concerns. Defendants’ counsel never replied to the email.

## The Court’s Analysis

The Court held that Defendants failed to fulfill their production obligations under both FOIA and the Federal Rules of Civil Procedure (the “Rules”).

FOIA provides that “[i]n making any record available to a person, an agency shall provide the record in any form or format requested by the person if the record is readily reproducible by the agency in that format.”<sup>3</sup> The “readily reproducible” requirement simply refers to an agency’s technical capability to create the records in a particular format.

Generally speaking, Rule 34 provides that the requesting party must specify the form of production of ESI, and permits the responding party to object and state the form it intends to use. Rule 34 also requires that parties attempt to resolve any disagreement over the form before bringing a motion to compel. And if the requesting party did not initially specify the form of production, the responding party may produce records in the form in which they are “ordinarily maintained” or in a “reasonably usable form.”<sup>4</sup> Additionally, if ESI is kept in an electronically searchable form, it “should not be produced in a form that removes or significantly degrades this feature.”<sup>5</sup>

In its analysis, the Court considered a 2008 decision from the Southern District of New York, *Aguilar v. Immigration and Customs Enforcement Division of the United States Department of Homeland Security*.<sup>6</sup> The *Aguilar* decision recognized the importance of metadata in document discovery and acknowledged “the need to produce reasonably accessible metadata that will enable the receiving party to have the same ability to access, search, and display the information as the producing party.”<sup>7</sup> Thus, the Court in *National Day Laborer* reasoned, “By now, it is well accepted, if not indisputable, that metadata is generally considered to be an integral part of an electronic record.”<sup>8</sup> The Court also reinforced the *Aguilar* decision’s guidance on the importance of load files and concluded that “it is by now well accepted that when a collection of static images are produced, load files must also be produced in order to make the production searchable and therefore reasonably useable.”<sup>9</sup>

Despite the lack of federal precedent in the FOIA context, the Court noted the uniform holding among state courts that, in the context of state freedom of information laws, metadata is part of public records and must be disclosed. Importantly, the Court was not persuaded by what it termed Defendants’ “lame excuse” for failing to provide documents with the metadata and load files—namely, that Plaintiffs failed to make a timely request for it. Indeed, the Court held that Defendants were on notice of Plaintiffs’ request for metadata and load files because of the language in the July 23 email. Moreover, the Court noted that, had Defendants not ignored Plaintiffs’ request to inform them of the form they intended to use or call Plaintiffs with questions, any ambiguities would have been resolved.

With regard to the Rules, the Court found that by producing all of the responsive documents in non-searchable PDF format, failing to indicate where each document began and ended, merging ESI with paper records, and failing to produce emails with attachments, Defendants violated both the explicit requests in the July 23 email and the Rules. In other words, the records were not produced in a “reasonably useable” format and instead were produced in a form that made it difficult or burdensome for the requesting party to use the information efficiently.

With regard to FOIA, Defendants argued that metadata is not recognized as an integral part of the electronic

<sup>3</sup> *National Day Laborer Organizing Network*, 10 Civ. 3488, at \*7, quoting 5 U.S.C. § 552(a)(3)(B) (effective Oct. 1, 1997).

<sup>4</sup> *Id.* at \*8, quoting Fed. R. Civ. P. 34(b)(2)(E)(ii).

<sup>5</sup> *Id.* at \*9, quoting Fed. R. Civ. P. 34, 2006 Advisory Committee Note.

<sup>6</sup> 255 F.R.D. 350 (S.D.N.Y. 2008).

<sup>7</sup> *Id.* at \*9-10, quoting *Aguilar*, 255 F.R.D. at 356.

<sup>8</sup> *Id.* at \*10.

<sup>9</sup> *Id.* at \*11.





record, and that FOIA is not synonymous with civil litigation discovery. The Court disagreed and instead held that because Defendants did not produce the documents in a “readily reproducible” format, it did not comply with FOIA. The Court viewed certain metadata as an “integral or intrinsic” part of an electronic record that must be produced under FOIA, and held that metadata maintained by an agency as part of an electronic record is “presumptively producible” under FOIA, unless the agency demonstrates that such metadata is not “readily reproducible.”<sup>10</sup> And regardless of whether Rule 34 applies in the FOIA context, Rule 34 should nevertheless inform “highly experienced litigators” as to what is expected of them when “making a document production in the twenty-first century.”<sup>11</sup>

## Conclusion

Judge Scheindlin’s most recent opinion on electronic discovery issues extends and further reinforces her messages in the often-cited *Zubulake* decisions. In particular, *National Day Laborer Organizing Network* suggests that whether or not metadata for responsive documents is requested expressly (and, the Court stated, “it should be”<sup>12</sup>), it may be inappropriate for a responding party to produce a mere collection of non-searchable electronic files. This case also reiterates Judge Scheindlin’s earlier insistence that parties “meet and confer” on the subject of discovery, particularly ESI discovery, and try to reach agreement where possible.

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<sup>10</sup> *Id.* at \*18.

<sup>11</sup> *Id.* at \*16.

<sup>12</sup> *Id.* at \*24.



## Federal Circuit Flags the 25 Percent Rule and Penalizes the EMV End Run

By  
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The rousing cheer that erupted coast-to-coast on Jan. 4 had nothing to do with a college bowl game. It was actually the patent defense bar heralding the Federal Circuit's recent pronouncement on patent damages in the *Uniloc v. Microsoft* decision. In *Uniloc*, the Federal Circuit struck down two "trick plays" that had become part of every plaintiff lawyer's game plan on damages: the 25 percent rule and the Entire Market Value (EMV) End Run. In doing so, the Federal Circuit went a long way towards leveling the playing field in patent cases.

### Flagging the 25 Percent Rule

The 25 percent rule is a "rule of thumb" that stands for the proposition that a licensee would typically be willing to license a patent for 25 percent of the profits the licensee would derive from the patent. The 25 percent rule was originally based on a mid-90s study of licenses entered into by a Swiss subsidiary of an American company. Over the years, expert after expert has relied on the 25 percent rule, adding to its apparent validity. Unfortunately, the 25 percent rule never made much sense for general application. The patent statute prescribes a reasonable royalty as an appropriate measure of damages for patent infringement. Under

Federal Circuit case law, a reasonable royalty is determined by looking at a hypothetical negotiation that would have occurred between the parties at the time the infringement commenced. While past licensing practices of the parties would certainly be relevant to this hypothetical negotiation, it is hard to see how the decades old practices of a Swiss company should fit into the mix. Despite the obvious flaw of this "tool," many courts accepted its use simply because it appeared to have achieved widespread acceptance.

In *Uniloc*, the Federal Circuit did not mince words in benching the 25 percent rule. The Court held "as a matter of Federal Circuit law that the 25 percent rule is a fundamentally flawed tool for determining a baseline royalty rate in a hypothetical negotiation. Evidence relying on the 25 percent rule of thumb is thus inadmissible under *Daubert* and the Federal Rules of Evidence, because it fails to tie a reasonable royalty base to the facts of the case at issue."

### Penalizing the EMV End Run

Under the prevailing patent jurisprudence, a plaintiff cannot claim damages based on the entire market value of an end product unless the patented technology creates the basis for the market demand for the product. For example, a plaintiff



holding a patent on an automobile battery cannot claim damages on the value of the entire automobile, without first showing that the battery created the market demand for the car. Because plaintiffs typically cannot meet this burden, they are unable, under the law, to use the entire market value of a product in damage calculations. Over the years, however, wily plaintiffs lawyers have developed a number of end runs around the EMV rule. One typical practice is to use the value of the end product as a “check” on the plaintiff’s damages number. For example, a plaintiff’s expert may calculate a damages number based on an appropriate royalty base and then compare that number to the EMV in an effort to show the “reasonableness” of the expert’s result. Another end run is to use the EMV to criticize the defendant’s expert. That play usually goes something like this:

**Q:** Now you understand that the defendant made XXX billion dollars on sales of the infringing products?

**Q:** And you are telling the jury that they should only have to pay XXX thousand dollars in damages?

**Q:** And you understand, don’t you, that your number amounts to .000001% of the money the defendant made from this product?

Neither of these end runs were fair for the defendant, because they both interjected the EMV into the jury’s deliberation without first establishing that the patent was the driver for the product sales.

Again, the Federal Circuit was swift in calling a penalty on these tactics. Per *Uniloc*, these tactics “are in clear derogation of the entire market value rule, because the entire market value of the accused products has not been shown to be derived from the patented contribution. Although there was no trophy awarded on Jan. 4, I think most members of the patent defense bar will agree that the good guys won the “Uniloc Bowl.”

## No Bright Line Rule in Recent Transfer Cases

By  
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Many have noted the recent decisions from the Federal Circuit regarding writs of mandamus as being clear statements that the Eastern District of Texas can no longer be considered an automatically binding, if somewhat arbitrary, litigation forum for all patent-owning plaintiffs.

Two relatively recent Federal Circuit decisions illustrate this. The first is *In re Microsoft Corporation*, which was decided in November 2010 but for which the Federal Circuit issued a precedential decision on Jan. 5, 2011. In that case, the Federal Circuit ordered the transfer, finding that the plaintiff tried to manipulate venue in anticipation of litigation by creating the illusion of connections to the Eastern District of Texas. Despite the plaintiff's transferring of documents to the district and incorporating in the state of Texas 16 days before filing suit, the Federal Circuit found that the plaintiff's attempts to make the Eastern District of Texas a convenient venue were unavailing. The Court transferred the matter to the Western District of Washington, finding that to be the more clearly convenient venue.

However, in the recent *In re Vistaprint Limited and OfficeMax Incorporated* decision, announced on Dec. 15, 2010, the Federal Circuit declined to establish a bright-line rule requiring transfer in each case where the plaintiff and defendants have no

direct connection to the district. In this case, despite the presence of certain convenience factors which otherwise would seem to support transfer, the Federal Circuit denied Vistaprint's writ of mandamus seeking an order of transfer.

ColorQuick L.L.C., a New Jersey limited liability company, filed suit against Vistaprint and OfficeMax in July of 2009 in the Eastern District of Texas. ColorQuick charged that the defendants infringed its patents related to the preparation of production data for printing. Defendants moved to transfer the case to the federal district court in Massachusetts where Vistaprint's wholly owned U.S. subsidiary, as well as many of the witnesses and documents, were located. While co-defendant OfficeMax is a Delaware corporation with its principal place of business in Illinois, the accused OfficeMax services were managed by Vistaprint.

The Texas district court denied the motion to transfer on March 23, 2010. In so holding, the court found that it had extensive experience with the patent-in-suit, including a hearing and claim construction opinion in a prior litigation. The court further noted that a co-pending case was also before the court between the plaintiff and another defendant involving the same patent-in-suit and similarly



accused services. The court held that the importance of judicial economy outweighed other considerations that might favor transfer.

The Federal Circuit agreed. In its opinion, the Court weighed the importance of convenience to the parties on the one hand, and the judicial economy served by the present venue on the other. Distinguishing its earlier precedent, the Federal Circuit declined to announce a bright-line rule, as had been suggested by *Vistaprint*, favoring convenience and instead recognized the importance of an individualized, *case-by-case analysis of the forum non conveniens* factors in decisions to transfer or maintain venue. These recent decisions from the Federal Circuit teach important lessons. First, they show that the Federal Circuit is unwilling to provide a bright-line rule for determining the most convenient venue in which a matter should be adjudicated. Second, although not a major factor cited in other recent Federal Circuit decisions on venue issues, judicial economy remains an important factor to consider in connection with the Section 1404(a) venue balancing test. That said, these cases also indicate that gamesmanship and attempts to manipulate venue by plaintiffs may be negatively received at the Federal Circuit. These recent cases are thus instructive for both plaintiffs and defendants alike.

Milbank associate Hannah Cannom contributed to this column.

“Christopher Chalsen is widely admired as a ‘keen strategist’ and a ‘diligent, practical and business-minded adviser’. His technology focus areas mirror those of the group as a whole, with electrical and computer technology dominant. His practice has a strong international flavour and he has considerable experience of representing foreign, and in particular Asian, clients in licensing negotiations with US companies.”

– *IAM Licensing* 250, 2011









# MILBANK INTELLECTUAL PROPERTY TEAM

# Milbank Receives 2011 ALA/Burton Award for Legal Achievement

## Firm Recognized for its Intellectual Property Year in Review 2010

NEW YORK, June 13, 2011 — Milbank has been chosen to receive a “Burton Award for Legal Achievement” for “Best Law Firm Publication.” This award recognizes the best publication by a law firm other than newsletters, compendiums on law, and books.

The 2011 Burton Awards was presented on June 13, 2011 at the Great Hall of the Library of Congress in an event at which U.S. Supreme Court Justice Sonia Sotomayor was the featured speaker.



*Larry Kass of Milbank, Tweed, Hadley & McCloy LLP accepts the Best Law Firm Publication Award from ALA President Karen Griggs.*



*Larry Kass (second from left) along with other recipients of the 2011 ALA/Burton Awards.*

Each year, The Burton Foundation, in association with The Library of Congress and its Law Library, recognizes excellence in legal writing, and encourages the use of clear language and the avoidance of legalese. The award for Best Law Firm Publication is co-sponsored by the Association of Legal Administrators.

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To discuss our Intellectual Property practice capabilities, please visit our website at [www.milbank.com](http://www.milbank.com) or contact any of the attorneys listed below.

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