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## Patents

### Procedure

Even though the Supreme Court recently reiterated that fees may be shifted in patent infringement suits in “exceptional circumstances,” emeritus professor Lee Hollaar outlines in this BNA Insight how well-prepared plaintiffs in software-based suits can avoid having fees shifted to them. Among other things, he advocates having a technical advisor, who will not testify at trial but can be a sounding board for the plaintiff’s attorneys, and who can help determine if there are any claim elements that support a finding of noninfringement.

## Avoiding Fee-Shifting as the Plaintiff in a Software-Based Patent Suit



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### Introduction

The demise of patent reform legislation this Congress<sup>1</sup> likely caused most patent owners (and especially those characterized by some as “trolls”) to breathe a sigh of relief. But the death of the bill may be because two unanimous U.S. Supreme Court opinions had just made one major section unnecessary, and activity to change the Federal Rules of Civil Procedure would eliminate the need for a second section.

This is not the first time that the Supreme Court has addressed an issue in patent law while Congress was considering legislation to overrule a problematic position of the Federal Circuit. While Congress was considering patent reform legislation in 2005 that, among other things, would make it harder for a patent owner who was not currently using the invention to get an injunction,<sup>2</sup> the Supreme Court held that there was no shortcut to an injunction, and that the traditional four-

<sup>1</sup> See “Patent Litigation Abuse Bill Halted in Senate As Leahy Calls for More Targeted Agreement,” *BNA’s Patent, Trademark & Copyright Journal*, 88 P.T.C.J. 304 (May 21, 2014).

<sup>2</sup> H.R. 2975, the Patent Act of 2005, Sec. 7.

factor test applies equally to patent disputes.<sup>3</sup> The injunction provision, which had caused disagreement between the proponents of the legislation, was not present when the patent reform bill was introduced the next year.

## In Congress

The changes to the patent statutes would have dramatically changed how experts are employed in patent litigation, particularly for software-based inventions. These changes were intended to partially address the perceived problems caused by so-called “patent trolls,” particularly by shifting a prevailing party’s litigation expenses to the losing party.

Fee-shifting (sometimes called “loser pays”) in patent cases has been permitted by statute since 1946. But since 2005, the Federal Circuit has set an unreasonably-high standard for the award of fees to a prevailing defendant. “Absent misconduct in conduct of the litigation or in securing the patent,” the Federal Circuit held, fees “may be imposed against the patentee only if both (1) the litigation is brought in subjective bad faith, and (2) the litigation is objectively baseless.”<sup>4</sup> And if that were not a hard enough threshold to meet, the Federal Circuit subsequently clarified that litigation is objectively baseless only if it is “so unreasonable that no reasonable litigant could believe it would succeed,”<sup>5</sup> and that litigation is brought in subjective bad faith only if the plaintiff “actually know[s]” that it is objectively baseless.<sup>6</sup>

Late last year, the House passed<sup>7</sup> H.R. 3309 which, among other things, allows a trial court to award “reasonable fees and other expenses” to the prevailing party “unless the court finds that the position and conduct of the nonprevailing party or parties were reasonably justified in law and fact or that special circumstances (such as severe economic hardship to a named inventor) make an award unjust.”<sup>8</sup> Similar legislations appears to have died in the Senate for this Congress.

**An “exceptional case” under 35 U.S.C. § 285 is one that “stands out from others with respect to the substantive strength of a party’s litigating position . . . or the unreasonable manner in which the case was litigated.” It need be shown only by a preponderance of the evidence.**

Besides its fee-shifting provisions, the House bill threw in two other complications for a patent owner

<sup>3</sup> *eBay Inc. v. MercExchange LLC*, 547 US 388, 78 U.S.P.Q.2d 1577 (2006).

<sup>4</sup> *Brooks Furniture Mfg., Inc. v. Dutailier Int’l, Inc.*, 393 F.3d 1378, 1381 (2005).

<sup>5</sup> *iLOR, LLC v. Google, Inc.*, 631 F.3d 1372, 1378 (2011).

<sup>6</sup> *Id.*, at 1377.

<sup>7</sup> “House Approves Patent Litigation Reform Legislation With Reduced Senate Bill Next,” *BNA’s Patent, Trademark & Copyright Journal*, 87 P.T.C.J. 259 (Dec. 5, 2103).

<sup>8</sup> H.R. 3309, Sec. 3(b).

about to file infringement litigation. First, it eliminated the present Form 18 from the Federal Rules of Civil Procedure. This “notice pleading” example form essentially only requires a patent owner to say “I own patent number X and you infringe it,” and the Federal Circuit has held that nothing more is required.<sup>9</sup> Instead, the House bill required very particular pleading, including identifying each accused process, machine, manufacture, or composition of matter alleged to infringe and, on a claim-element-by-element basis, how the limitation of the claim element is met.<sup>10</sup>

It also limited discovery before the “Markman” claims construction order to information necessary for the court to determine the meaning of the claims.<sup>11</sup> And the House bill directed the Judicial Conference to consider modifying the current discovery rules so that “The discovery of computer code shall occur after the parties have exchanged initial disclosures and other core documentary evidence.”<sup>12</sup>

Combined with the enhanced pleading requirements, this meant that a patent owner would not have been able to file an infringement action with only bare allegations, obtain the source code or other information from the defendant to see what is being done, and then put together its infringement contentions. If the patent owner could not show that it had a factually-justified reason for filing the suit, it would likely be liable for all the litigation expenses of the defendant, which could be a million dollars or more.

## In the Courts

On April 29, 2014, the Supreme Court put its own stamp on the fee-shifting question. In two unanimous decisions,<sup>13</sup> the Court held that an “exceptional case”<sup>14</sup> is “simply one that stands out from others with respect to the substantive strength of a party’s litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated.”<sup>15</sup> And that need be shown only by a preponderance of the evidence, rather than the Federal Circuit’s “clear and convincing evidence” requirement,<sup>16</sup> and that the trial judge’s decision must be reviewed for abuse of discretion, rather than less-deferential de novo review.<sup>17</sup>

Addressing another part of the House bill, the Judicial Conference Advisory Committee on Civil Rules has proposed dropping all the forms (and in particular Form 18) from the Federal Rules of Civil Procedure,

<sup>9</sup> *In re Bill of Lading Transmission and Processing System Patent Litigation*, 681 F.3d 1323, 103 U.S.P.Q.2d 1045 (Fed. Cir. 2012), holding that the enhanced pleading requirements required by the Supreme Court in *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544 (2007) and *Ashcroft v. Iqbal*, 556 U.S. 662 (2009), are not applicable to patent cases.

<sup>10</sup> H.R. 3309, Sec. 3(a).

<sup>11</sup> H.R. 3309, Sec. 3(d).

<sup>12</sup> H.R. 3309, Sec. 6(a)(C)(v).

<sup>13</sup> *Octane Fitness, LLC v. ICON Health & Fitness, Inc.*, 82 U.S.L.W. 4330, 2014 BL 118431, 110 U.S.P.Q.2d 1337 (U.S. April 29, 2014), and *Highmark Inc. v. Allcare Health Management System, Inc.*, 82 U.S.L.W. 4328, 2014 BL 118430, 110 U.S.P.Q.2d 1343 (U.S. April 29, 2014).

<sup>14</sup> 35 U.S.C. § 285.

<sup>15</sup> *Octane*, slip opinion at 7-8, 110 U.S.P.Q.2d at 1341.

<sup>16</sup> *Octane*, slip opinion at 11, 110 U.S.P.Q.2d at 1343.

<sup>17</sup> *Highmark*, slip opinion at 4-5, 110 U.S.P.Q.2d at 1346.

noting that “the purpose of providing illustrations for the rules, although useful when the rules were adopted, has been fulfilled” by “many excellent alternative sources for form.”<sup>18</sup>

But even while Form 18, and the Federal Circuit’s lowered pleading standard based on that form, survive, it provides no safety for a patent owner who has not made an element-by-element effort to determine if it is reasonable that there is infringement before filing suit, since Form 18 requires the plaintiff to state unequivocally that “The defendant has infringed and is still infringing by making, selling, and using [things] that embody the patented invention.” Not having made “an inquiry reasonable under the circumstances” would be a violation of Rule 11, or at least make the case “exceptional.”

Whether because of Congressional action or the courts reacting to the Supreme Court decisions, the result of not being properly prepared before filing a patent infringement suit may be that you may have to pay the defendant’s attorneys’ fees and other litigation expenses, which can easily run into the millions of dollars.

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The Federal Circuit recently affirmed sanctions of over \$200,000 where a patent owner “did not make a reasonable inquiry into its claims” of infringement by the defendant.<sup>19</sup>

It is important to note that the Supreme Court simply made it easier to show that a patent case was “exceptional” before fees can be shifted to the losing party, and even the House bill, while making “loser pays” the default, provides a way to avoid fee-shifting. As noted in the report accompanying the House bill, “there is no presumption that the nonprevailing party’s position was not reasonably justified simply because it lost the case. Even if a plaintiff’s complaint is rejected by the judge or jury, the plaintiff is immune from a fee award so long as its position had a reasonable basis in law and fact.”<sup>20</sup>

**So, When Is a Case “Exceptional”?**

As is all too often the case, the Supreme Court did not give a clear indication of when a case is “exceptional,” instead saying that the Federal Circuit’s restricted reading was not in line with the normal meaning of the term.

There was no indication whether, when determining the norm in litigation, the court should look at all cases

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<sup>18</sup> “Preliminary Draft of Proposed Amendments to the Federal Rules of Bankruptcy and Civil Procedure, Request for Comments,” August 2013, at 329. <http://www.uscourts.gov/uscourts/rules/preliminary-draft-proposed-amendments.pdf>.

<sup>19</sup> See “Rule 11 Sanctions Affirmed When No Support For Expanded Claim Construction Arguments,” *BNA’s Patent, Trademark & Copyright Journal*, 88 P.T.C.J. 376 (June 5, 2014), discussing *Source Vagabond Sys. Ltd. v. Hydrapak, Inc.*, Fed. Cir. No. 2013-1270.

<sup>20</sup> H.Rept. 113-279, at 58.

or just patent cases, although since most trial judges have experience with only a handful of patent cases, it is likely that they will be looking at how other complex cases were litigated when deciding whether a case was exceptional.

It is likely that the judge will place an emphasis on how the case started out, and in particular whether the infringement suit was warranted in light of the patent and what could be known about the alleged infringement. If it looks like the patent owner went off “half-cocked,” it’s likely that attorneys’ fees and costs will be awarded. But if the judge is impressed by the documented diligence before a suit is filed, it is unlikely that fees will be shifted to the patent owner even if the patent owner loses the case.

Of course, an “exceptional case” and the shifting of the litigation costs can only occur when there is a case in court. On its face, it will not affect the “troll” who sends out letters threatening legal action but offering to license the alleged infringement for a fee that is often substantially less than the cost of litigating.<sup>21</sup> However, it may substantially lessen the cost of responding to such a letter, by simply asking the patent owner to provide its infringement analysis, knowing that it is unlikely that such an analysis was done and that without it, the filing of a potentially-expensive infringement suit is unlikely.

And it means that if the letter is threatening enough to allow the filing of a suit for a declaration of non-infringement, it may be possible for the alleged infringer to collect the cost of bringing that suit from the patent owner sending a letter charging infringement without an adequate and documented analysis.

Clearly, to avoid a finding that a case is “exceptional” and having to pay the costs of the alleged infringer, the patent owner should conduct and document a thorough infringement analysis before filing suit. In one of the first holdings following the Supreme Court’s decisions, the trial court described the actions of the patent owner as “a prototypical exceptional case,” in part because even though the patent owner “claims to have conducted ‘weeks’ of infringement analysis,” it “offers no facts to support this conclusory claim.”<sup>22</sup>

**A Particular Problem for Method Claims**

To prevail in a patent infringement case, the patent owner must show that each and every element (sometimes called a limitation) of a claim is present in the accused device. For a method claim, it is also generally necessary that each element’s act is performed by the accused infringer and that every step be performed in the United States.

For physical objects, it is generally possible to determine whether a particular claim element is present. It may require buying the accused device and taking it apart, doing a chemical analysis of a compound, or otherwise reverse engineering the object, but that is often

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<sup>21</sup> Some states have made this an unfair trade practice, and there are bills pending in Congress to address this demand letter problem. See, for example, “Three State Legislatures Pass Bills Against Patent Royalty Demand Letters,” *BNA’s Patent, Trademark & Copyright Journal*, 97 P.T.C.J. 1147 (March 17, 2014).

<sup>22</sup> *Lumen View Technology, LLC, v. Findthebest.com, Inc.*, 13 CIV. 3599, SDNY, Opinion & Order of May 30, 2014.



simply a question of money and time, which will be more justifiable if the alternative is paying the defendant's litigation costs.

But for method claims, and particularly those claims common in software-based patents, it may not be possible to determine if the alleged infringer uses the same steps as in the claim. Since the patent is to the way something is done, not its results, simply saying that it "does the same thing" is not sufficient.

And it may not be possible to determine what the alleged infringer is actually doing before filing the infringement suit and seeing its source code in discovery. But that may be too late to avoid sanctions.

For example, consider this hypothetical claim:

A method comprising:

[a] displaying a plurality of button images;

[b] clicking on one of the plurality of button images;

[c] selecting an action to be performed from a lookup table based on which button was clicked; and

[d] performing that action.

Elements [a] and [b] do not require the examination of the source code for the allegedly-infringing system to determine whether they are present or not. You can tell whether [a] is performed just by looking at the screen of the system to see if there are "button images" being displayed, because the element does not depend on *how* they are being displayed. And element [b] is not even performed by the computer software, but instead by a user of the system. Many actual claims have elements where it is as easy to determine whether they are present without having to look at any software source code. For element [d], you can observe whether the selected action is performed.

But claim element [c], where it is necessary to determine how the selection is being done ("from a table of actions" rather than by having a separate program snippet for each button or a set of tests to determine what action is to be performed), presents a problem. Given the alleged infringer's source code, it should be simple to determine how the selection is performed. But before the infringement suit is filed, it is unlikely that the patent owner will have the alleged infringer's source code to make that determination.

It needs to be said that many, if not most, software claim elements are not as specific as [c] in the example. It is far more likely that the claim element would not be specific to using a lookup table since that limitation would only be necessary if during the prosecution of the application the examiner had found prior art that used a different way of selecting the action to be performed, and the examiner could be persuaded that using a lookup table was not obvious in light of that prior art.

Most software-based patents, instead, are criticized for the breadth of their claims through the use of general language for the steps of their method. One noted commentator has suggested that the steps of a software-based patent be considered "functional claiming," and be limited to the particular implementations that are actually disclosed in the patent.<sup>23</sup> However, if such an approach were to be adopted, then the problems associated with example claim element [c] would be present in *every* claim element that is a computer-implemented step in the method, making determination

of whether something infringes the patent or not an extremely difficult task.

## **"Reverse Engineering" Might Not Be Possible**

In early software cases, there was often talk about "disassembling" or "decompiling" a program to get a copy of its source code to examine. Often it seems like you fed the program of interest into something and out came the corresponding source code, almost by magic.

Even then, the disassembly was difficult to do for complex programs, and by its nature it did not give you the comments in the source code describing what was being done, and sometimes why. (One particularly telling comment in a case where I was an expert reviewing the source code said that a change had been made to "avoid infringing a crappy patent," an admission that before the change the patent was likely being infringed. Such admissions in the comments are rare, though.)

But disassembly may not even be possible if you do not have access to the actual program in a way that allows you to use it as input to the disassembler. If the program is not distributed, but instead is run on a server that users access or is run "in the cloud" rather than on the user's computer, it may not be possible to have access to the program before discovery after filing suit.

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**Just because code that may represent a claim element is present in a program does not mean that it is ever executed so there is infringement.**

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Moreover, the computer programs of today are not the assembly language programs where a disassembler produced a good starting point for understanding how a program operates. The days where a programmer wrote a single line of source code for each machine-level instruction, and the program was relatively short, are long gone. Now, most programs are written using a higher-level programming language, where each source code line can result in dozens of machine instructions. Because optimizing compilers also rearrange the machine instructions to make the program run more efficiently, it is very difficult to determine what instructions even correspond to a particular unknown line of source code.

And programs have become far larger and complex as compilers have made them easier to write and maintain. It is not uncommon to find even simple applications programs larger than the largest programs of the 1980's.

With modern development systems, such as those commonly used in writing programs for smartphones such as the iPhone or Android, much of the code is not written by the applications programmer, but instead consists of runtime routines that are called by the application to provide things like window or menu manipulation, and an overall runtime system is really in control, deciding when a particular snippet of the application program is run. Just because code that may represent a claim element is present in a program does not mean that it is ever executed so there is infringe-

<sup>23</sup> Mark A. Lemley, "Software Patents and the Return of Functional Claiming," *Wis. L. Rev.*, Vol. 2013, No. 4, pp. 905-964.

ment. It may be “dead code,” from a previous version of the application program (and possibly from before the patent was issued) or code that did not work as desired and was abandoned.

With such systems, or with systems that use procedures stored with a database management system for some data manipulation, even getting the source code in discovery may not be sufficient to show infringement. You really cannot be sure whether code is actually used without running it within the development system used to produce the application.

## A Hopeful Note

But other trends in software systems may make it less difficult to determine if a particular claim element is present.

Sometimes, you have the source code, or at least the portions that you need to determine if a claim element is present, without even realizing it. For a web-based application, there may be scripting code that is part of a web page. While normally hidden from the user, most browsers provide a way of displaying the source for a page, including any scripts. (For Internet Explorer or Mozilla, you just type Ctrl-U and it pops up in a new window.)

While we normally think of source code being converted to machine code, and only the machine code being distributed, in order to be runnable on a variety of machines and operating systems, for some programming languages the actual source code (often including comments) is distributed and is “interpreted” by the language processor as it is run.

In one case involving a device whose code may be infringing one or more patents, the device in question was purchased for testing. But we also took the covers off and found that it was using a commonly available microprocessor card that stored its programs in a flash memory. Removing that flash memory and imaging it on another processor confirmed the operating system that was being used and allowed us to see that the program files were written in PERL, an interpreted language. Even though the defendant was resisting discovery and had not produced all the files requested, we were able to determine the techniques being used from the source code that had been inadvertently provided when the device was purchased.

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**For software-based patents, trial preparation should begin by hiring a technical advisor, who should know how to find infringement or explain why there isn't any.**

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But if the source code is not available, one can often determine if there is a plausible case for infringement by external observation of the program as it runs or by seeing what it has changed. In one case where I was the expert for the patent owner, it was possible to determine whether the claimed method of repartitioning a disk drive was infringed by using a disk block editor to observe what things had been moved on the disk by the

alleged infringing operation and what things remained in their original location. Similarly, an examination of what is stored on a database server using its management tool may show that the operations of a claim are being done.

Sometimes, based on the specifics of the patent claims, it is possible to develop simplified tests to determine if there is infringement or not. For the repartitioning patent, I used a disk that had only a handful of files, but those files were selected to make it easy to see what was going on. That was not only a good way to determine possible infringement, but if the case had come to trial would be a good demonstrative exhibit that the judge or jury would have little problem understanding.

In today's world of distributed (client-server) systems, sometimes looking at the messages between programs will indicate that there is infringement. But just as distributed systems give the ability to look at what is happening between parts of an overall system, they also may complicate the infringement analysis. It may be that no single entity performs all the steps of the method in the United States, and so neither the user running the client program nor the company operating the server infringe.<sup>24</sup> This is often the result of poor claim drafting by the patent owner, but suing for infringement when you should know that there is no infringement because of the way the claims are drafted is likely to be an “exceptional case.”

One also needs to be looking, perhaps even harder, for indications that there is *not* infringement. You cannot determine if you have a plausible case before filing it by overlooking things that hurt your theory of infringement. For example, in one case where I was a consultant, the patent owner felt there was infringement after looking at some of the things changed in messages as they were processed by the device felt to infringe. But there were other parts of the message that they ignored that would be more likely if another technique that did not infringe were being used. In discovery, we found that the non-infringing technique was indeed being used.

## What to Do

The trial judge should be impressed with the thoroughness of the pre-filing preparation, even if the case is eventually lost. After all, if it were a certainty that there was infringement, it is likely that the case would never get to trial.

The benefits of that preparation continue after a warranted suit is filed with more focused discovery requests, since you know what you need to prove your case and do not have to fight overreaching requests for “all source code” and you can be framing your claims construction request to cover the alleged infringement without appearing to be overreaching and being able to avoid known prior art.

For software-based patents, the process starts by hiring a technical advisor unless the attorney is completely familiar with the current software techniques. The technical advisor should not only be one who can find (or claim to find) infringement, but should also play the role of devil's advocate, telling you why there may not

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<sup>24</sup> See *Limelight Networks, Inc. v. Akamai Technologies, Inc.*, 82 U.S.L.W. 4439, 2014 BL 151636, 110 U.S.P.Q.2d 1681 (U.S. June 2, 2014).

be infringement. That will allow you to understand any weaknesses in the case at a time where you might be able to do something about them.

This is in sharp contrast to the “troll” patent suits that caused the renewed interest in Congress and the courts in fee-shifting, where little if any investigation is done before sending a threatening letter or even filing suit. Even in legitimate infringement suits, experts often are not hired until they are necessary, sometimes just weeks before expert reports are due and well after the critical Markman claims interpretation phase has ended and fact discovery has closed. Good experts hate that, because it means that they are often trying to find a way to save the theory of the case, rather than help come up with a theory that can support itself.

Most likely, this technical advisor will not be your testifying expert. You want to be able to speak freely with your advisor on the issues and let the advisor tell you bluntly the problems with the case as he or she sees it, without the worry that those feelings may come out in a deposition. Instead, the technical advisor can help you find testifying experts for specific aspects of the litigation, without having them form opinions on other aspects that might be troublesome.

Often, a testifying expert in software-based litigation functions more as a translator than an expert, telling the court what is present in the source code in a way that they can understand. But a better way to do that is to use the deposition testimony of the defendant’s developers or others familiar with how the programs operate. The technical advisor can help frame the questions to be asked in a deposition to get that information, and can later explain what was said and place it in the context of the case.

The key task for the technical advisor is to help the attorneys determine if there are any claim elements that

show non-infringement. Nothing will hurt you more before the judge than pressing a claim that is clearly baseless, and it can color the judge’s feeling about other claims that may be supportable.

For other elements, make a good-faith effort to determine if they are present or not, trying not to ignore indications of non-infringement. If source code is not available, then you will have to look at other indicia to see if there is infringement. But unless marketing information clearly says that a particular thing is being done, be very careful basing your determination solely on sales literature or other documentation, since it can be more aspirational than accurate, and you do not want to find out well into the case that it was never done by the defendant.

You’ll want to document why you feel there is infringement, or whether infringement is at least plausible in light of the information that was available to you. That will help you in preparing the complaint, discovery requests, and answering any interrogatories regarding why you feel that there is infringement. And while the document should be considered privileged during the litigation, it can be “Exhibit 1” to defend against any request for fee shifting at the end of the case.

The way for patent owners to avoid fees being shifted to them in an “exceptional case” is to make their case truly “exceptional” in a good way. The preparation and litigation should be something the judge points to in other cases as the way alleged patent infringement should be litigated. It is highly unlikely that any judge will shift the attorneys’ fees and costs to the patent owner in such a case, regardless of its eventual outcome.