

Software Patent Litigation

ABA Section of Litigation
Intellectual Property Litigation Committee Roundtable Discussion
April 2006

Daniel W. McDonald, Robert A. Kalinsky, & William D. Schultz
Merchant & Gould, P.C.

I.	Statutory Subject Matter - 35 U.S.C. § 101	2
II.	Infringement issues specific to software patents	4
III.	Prior Art Searching	6
IV.	Earlier Inventor Defense to Infringement - 35 U.S.C. § 273	7
V.	The Impact of Indemnity and other Contractual Obligations	8
VI.	Common Interest or Joint Defense Agreements	9
VII.	The Preservation / Production of Source Code And Electronic Discovery	10
VIII.	Standard Setting Organizations.....	13
IX.	Damage Issues Relating to Software Patents.....	15

POSSIBLE ISSUES FOR DISCUSSION

1. What are the “best” types of software patent claims to enforce? Why?
2. What types of software patent claims present problems for patentees and opportunities for accused infringers? Why?
3. What types of problems and success stories have you encountered in finding prior art to software patents?
4. Have your clients ever benefited from the prior user defense? Why isn’t it used more often?
5. Can you describe any situations in which indemnity agreements or relationships with vendors or customers played an important role in resolving a software patent infringement situation?
6. Has your experience with Joint Defense Agreements been positive or negative? Why?
7. Have you developed any creative, cost-effective ways to deal with electronic discovery?
8. What approaches have you used to determine damages or royalties for software patents?

INTRODUCTION

On one hand, Software patent litigation involves the same issues, more or less, that apply to any other kind of patent litigation. On the other hand, software patents present unique challenges with respect to virtually every issue in patent litigation. This paper identifies and addresses aspects of litigation issues that are unique to software patent litigation and issues which seem to arise more often in software patent litigation than in patent litigation in other technology areas.

I. **Claiming Options and Statutory Subject Matter - 35 U.S.C. § 101**

While the scope of patentable subject matter is expansive ("anything under the sun that is made by man"), the patentability of claims directed to software inventions was not blessed by the courts until the Supreme Court's *Diamond v. Diehr* decision. 450 U.S. 175 (1981). The claims in the *Diamond* case were directed to methods of manufacturing molded articles and recited the use of a computer to perform certain calculations and to control the process. The Supreme Court held that claims reciting a computer were not unpatentable *per se*, and that a process implemented by a computer can be patented if the process results in the transformation of an article. *Id.* Other software patent claims had been found to be unpatentable because they purportedly claimed mere mathematical algorithms. See *Gotschalk v. Benson*, 409 U.S. 63 (1972).

There are various claim formats that have been used to protect inventions related to computer technology. Standard claims formats, such as apparatus claims (e.g., "A computer system, comprising: module A; module B; and module C.") and method claims (e.g., A method for generating a graphical user interface, comprising: step A; step B; and step C.") can be used. A variety of specialized software-related claim formats beyond the standard apparatus and method formats have also been developed.

One type of software claim is the *Beauregard* claim, which is sometimes referred to as a computer-readable medium claim. *In re Beauregard*, 53 F.3d 1583 (Fed. Cir. 1995). This claim format is directed to computer-implemented steps or modules that are fixed in a computer-readable medium, as the following example illustrates:

A computer-readable medium having computer-executable instructions for performing a method comprising:
receiving a first signal from a first computer;

transforming the first signal into a second signal; and
communicating the second signal to a second computer.

The *Beauregard* claim format is particularly helpful in proving that manufacturers and sellers of computer-readable media such as CDs, DVDs, or hard drives are direct infringers.

Another prevalent software claim format is known as a *Lowry* or data structure claim. *In re Lowry*, 32 F.3d 1579 (Fed. Cir. 1994). This claim format is directed to a data structure typically used in an object-oriented software system as the following example illustrates:

A computer-readable medium having stored thereon a data structure, comprising:

a first data field containing data representing a first signal from a first computer; and

a second data field containing data representing a second signal that is transformed from the first signal; and . . .

The format is advantageous because it does not require any method steps to be performed to show infringement. Instead, direct infringement can be shown through the storage of the claimed data structure in a computer-readable medium.

Another format is referred to as a propagated signal claim. This claim format is directed to a signal that is encoded within an intangible medium, as the following example illustrates:

A modulated data signal having computer-executable instructions embodied thereon comprising:

a first module programmed to receive a first signal from a first computer;

a second module programmed to transform the first signal into a second signal; and

a third module programmed to communicate the second signal to a second computer.

The claim format is advantageous because direct infringement can be shown through the act of data communications that are transported over an intangible medium. No court to date has passed on the patentability of such claims.

The U.S. Patent and Trademark Office's (PTO's) treatment of these claims has been inconsistent. The PTO has allowed applications including such claims. *See, e.g.*, claim 6 of U.S. Patent No. 6,828,975. However, the PTO recently issued interim examination guidelines that define propagated signal claims as non-statutory subject matter. *See* Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility, 1300 OG 142

(November 22, 2005) (referred to as "Electro-Magnetic Signals"). The Interim Guidelines conclude as follows:

These interim guidelines propose that such signal claims are ineligible for patent protection because they do not fall within any of the four statutory classes of Sec. 101. Public comment is sought for further evaluation of this question.

Other specialized formats for claiming software inventions also exist. These include:

- API/Protocol claims - claims directed to programming interfaces between modules of a computer or protocols between computers; and
- Graphical User Interface claims - claims directed at interfaces between a user and a computer.

All of these specialized claim formats afford specific advantages or disadvantages when claiming software inventions and pursuing parties as infringers. The format affects the answers to such questions as:

- Who is the infringer?
- When and where does the infringement take place?
- What is the revenue stream and profit stream generated by the infringement?
- What is the appropriate base for a reasonable royalty?
- Who is a contributory infringer, or an inducer of infringement?
- Is there a duty to mark the patent number under 35 U.S.C. 287, and, if so, how?
- What constitutes prior art?

Several of these claim formats come into play as these issues are addressed below.

II. Infringement Issues Peculiar to Software Patents

To directly infringe a claim of the patent, a party must be practicing all limitations of the claim. *See, e.g., Canton Bio-Medical, Inc. v. Integrated Liner Techs., Inc.*, 216 F.3d 1367, 1370 (Fed. Cir. 2000). While the concept seems simple, in the software patent context, many claims are drafted to systems including a plurality of elements (or methods including a plurality of steps) that may not be practiced by any one party. Instead, such claims are only infringed through the collective activities of multiple parties. Further, sometimes not all of the limitations of a particular claim are located in the relevant jurisdiction, such as the United States. These

types of claims are sometimes referred to as "divided" claims because the claims can only be infringed by a collection of conduct by multiple parties, or a collection of conduct occurring within and outside the relevant jurisdiction. *See* Mark A. Lemley et al., *Divided Infringement Claims*, 33 AIPLA Q. J. 255 (2004).

Such divided claims make it difficult to prove direct infringement by a single party. Further, even indirect theories of infringement, such as inducement and contributory infringement under 35 U.S.C. § 271, require proof of underlying direct infringement. *Id.*; *Dynacore Holdings Corp. v. U.S. Philips Corp.*, 363 F.3d 1263, 1272 (Fed. Cir. 2004).

Therefore, it is important to consider which party, if any, actually practices all of the elements of a given claim. With claims directed to software systems with multiple components, the answer to this inquiry is sometimes that no single party practices all of the recited elements. This has led some courts to hold that such software claims are simply not infringed because no single party incorporates or performs all of the limitations of the claims. *See, e.g., Faroudja Laboratories, Inc. v. Dwin Electronics, Inc.*, No. 97-20010 SW, 1999 WL 111788 (N.D. Cal February 24, 1999) (finding no party liable for infringement of divided claim requiring three separate actors to perform all steps of the patented method).

Further, the location of the alleged infringing activity is important, particularly in the software patent context where activities such as those performed over networks such as the Internet are truly non-territorial. Territorial limitations can affect the liability of a party that implements a patented system with components located both in the U.S. and abroad. For example, in *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282 (Fed. Cir. 2005), the Federal Circuit was faced with considering the liability for RIM's computer system that included at least one component (i.e., its BlackBerry "Relay" component that receives email messages and routes them to the appropriate wireless network partner for delivery) that was required by NTP's system claims but was located in Canada. The Federal Circuit found liability based on the fact that RIM's system was placed into service and controlled within the United States, although it rejected a claim that the accused infringer practiced parallel method claims because it did not practice each step of the claimed method in the U.S.

Even Congress' statutory reaction to *DeepSouth*, 35 U.S.C. § 271(f), which provides liability for a party that provides components from with the U.S. for assembly abroad, may not entirely address the problem of divided claims. For example, in *Eolas Techs. Inc. v. Microsoft*

Corp., 399 F.3d 1325 (Fed. Cir. 2005), the Federal Circuit found Microsoft to be liable for infringement of computer readable program code claims under section 271(f) for its practice of shipping master disks including patented software abroad for replication. The issue of the divided claim in the software patent context presents significant issues.

III. Prior Art Searching

One of the primary complaints of opponents of software patents is that the U.S. PTO is ill-equipped to search the relevant software prior art, resulting in the issuance of many invalid software patents. *See Public Hearing on Use of the Patent System to Protect Software-Related Inventions*, Transcript Proceedings, San Jose, California, January 26 and 27, 1994. The failure of the Patent Office to amass an adequate collection of software prior art can be explained, at least in part, on the belief, in some quarters held until recent years, that software inventions were not patentable. Stobbs, Gregory A., SOFTWARE PATENTS § 9.02[E] (2000). While courts have addressed software-related patents for decades, even decisions as recent as *State Street Bank and Trust Co. v. Signature Financial Group*, 149 F.3d 1368 (Fed. Cir. 1998) reintroduced to some the concept that software-related technology is patentable.

As more inventors understand that software is patentable and seek patents, the patent prior art database has grown significantly. However, much software prior art remains unavailable through issued patents. The PTO has made strides to improve its software prior art collection. Stobbs, SOFTWARE PATENTS § 9.02[E]. Foreign patent offices also provide a good source of prior art, although they too are lacking much of the prior art software technologies. Many of the patent databases are now available online through patent authorities such as the U.S. Patent Office (www.uspto.gov) or the European Patent Office (www.espacenet.com), or through third-party providers, such as Delphion (www.delphion.com).

There are resources outside the traditional patent databases that also provide significant collections of software prior art. For example, LEXIS and DIALOG information services allow searches to be conducted across a wide expanse of databases ranging in content from patent to technology and industry information. These types of databases also allow for enhanced searching capabilities that are sometimes helpful in pinpointing desired information, such as the ability to conduct proximity word searches.

One specialized database of software prior art is maintained by the Software Patent Institute (www.spi.org), which includes source documents that are generally not otherwise available online. The documents include computer manuals, older textbooks and journal articles, conference proceedings, computer science theses, and other such materials. Other similar boutique prior art databases exist, such as IP.com's Prior Art Database (www.priorartdatabase.com).

Further, like many other research issues, Internet searches using traditional web-based search engines such as Google (www.google.com) and Yahoo (www.yahoo.com) can also identify fruitful prior art in some instances. Other sources, such as The Internet Archive (www.archive.org), offer software archives that preserve evidence of elusive software titles and previous versions of online content, helping to quickly identify software likely to have been in existence early enough to qualify as prior art.

Finally, the human factor can assist even when the technology is computer based. University professors and other experts in specific technologies can often be useful in pinpointing early public versions of software-related technologies and help provide the necessary clear and convincing evidence of the technology's features to provide valuable prior art evidence that may go uncovered in computer-based search efforts.

IV. Earlier Inventor Defense to Infringement - 35 U.S.C. § 273

Many software patents are really hybrid patents that include claims directed at methods of doing business that are implemented in software. In 1999, in part to address the concern that many had failed to patent methods of doing business on the erroneous belief that they could not be patented, Congress added section 273 to Title 35. This section provides a limited and personal defense to the infringement of claims directed to methods of doing or conducting business for one who practiced the technologies in secret before another patented it. The Act states as follows:

Section 273. Defense to infringement based on earlier inventor

. . .

(a)(3) the term "method" means a method of doing or conducting business;

(b)(1) In general. - It shall be a defense to an action for infringement under section 271 of this title with respect to any subject matter that would otherwise infringe one or more claims for a method in the patent being asserted against a person, if such person had, acting in good faith, actually reduced the subject matter to practice at least 1 year before the effective filing date of such patent, and commercially used the subject matter before the effective filing date of such patent.

To afford oneself of the defense, a party must prove by clear and convincing evidence a reduction to practice at least a year prior to the effective filing date of the patent. This defense differs from a prior use invalidity defense under 35 U.S.C. 102, in that the prior use defense under section 273 does not invalidate the patent, and because the activity necessary to assert the defense under section 273 need not qualify as prior art under section 102.

What constitutes methods of "doing" or "conducting" business under section 273 is an important inquiry. Depending on how these terms are construed, the scope of the defense can vary widely. Some provisions of section 273 argue for a broad interpretation of the defense beyond software-implemented methods, such as the portion of the statute that refers to business methods as those methods resulting in the "sale or other disposition of a useful end product." The legislative history and timing for the enactment of the statute may, however, suggest a more narrow reading. For example, the fact that the legislation was enacted shortly after the *State Street Bank* decision and that portions of the legislative history refer to the patent/trade secret dichotomy lead some commentators to believe that the defense is narrowly tailored for those parties who practice "business methods" in the narrower sense of those types of methods once believed by many to be unpatentable. H.R. No. 106-287(I), 106th Cong., 1st Sess. (1999). Even the narrower reading, however, likely is relevant to many software patents.

To date, no federal court has been tasked with interpreting the statutory provision.

PB Farradyne, Inc. v. Peterson, No.C05-03447 SI, 2006 U.S. Dist. LEXIS 3408, at *14 (N.D. Ca. January 13, 2006). Thus, the statute has yet to develop a track record as an effective weapon for accused infringers of software patents. As more hybrid software/business method patents make their way through the PTO and are enforced, this provision is likely to be cited more often as a defense. Only time will tell whether the defense evolves into an expansive safe harbor or a narrow skeleton of an umbrella.

V. The Impact of Indemnity Obligations and Vendor Relationships

Companies that are accused of infringing software patents often have license/contractual arrangements with third parties that have indemnification provisions. These licensor and vendor relationships can have an important impact on patent infringement defense strategy and litigation. Knowledge of the arrangements prior to suit enables the parties to prepare strategies on how and against whom to proceed.

Once a claim is asserted or an action is brought against a company, the company would be advised to determine whether third parties may be contractually bound to indemnify the defendant. Indemnity may arise by agreement, and may be implied under the provisions of the U.C.C. applicable in a given forum.

Also, it is important to determine which product(s) necessarily underlies the alleged infringement. Often, the accused is not a direct infringer at all, but merely one who supplies some item or component that itself does not embody the patent's claims. Thus, an option might be to direct the patentee to other parties. A company's product may be used by another who arguably does practice the claimed invention. Even if the client has not received the charge of infringement directly, it needs to assess its contractual and implied obligations to others to indemnify, defend, and hold harmless. Proactive steps may be wise, such as taking over defense on behalf of customers in a coordinated way, or bringing a declaratory judgment action as part of an effort to curtail efforts by the patentee to threaten customers.

Doing the investigation of these rights and obligations early will ensure rights are preserved and duties met. For example, many indemnity contracts provide that the failure to timely notify the indemnitor of the legal action waives or limits the duty to indemnify.

Beyond the issue of indemnification or coverage from third parties, defendants should consider whether to implead others that have potential liability. Bringing in third parties to the lawsuit may increase the resources available to investigate validity and contest the charges.

Furthermore, contacting others potentially affected by the infringement claim may give rise to benefits unrelated to duties to indemnify, defend, or hold harmless. For example, a vendor or licensor of a component of the system accused of infringement may be able to provide valuable information about prior art, expert witnesses, or other companies who have dealt with the patentee. As discussed below, common defendants or others with common interests against

the infringement accusations may join forces and create common interest groups that share costs of using experts and finding prior art, and otherwise may be helpful in developing and executing defense strategies.

VI. Common Interest or Joint Defense Agreements

While the issue of a common interest or joint defense agreement is not particular to software patent litigation cases, it is perhaps more common in software cases because a disproportionate number of multi-defendant patent enforcement efforts involve software technologies. The joint defense arrangement will vary in each case, but can be used to spread the litigation expenses among defendants, exchange confidential and privileged information, and develop thoroughly-vetted and consistent theories as to patent validity, claim interpretation and prior art.

Whether a joint defense agreement is the right approach and the terms of the agreement will vary based on the type of case and the individual defendant. If a defendant is in a unique position, i.e., a particular defense only applies to that defendant, a joint defense agreement may add little but expense and pressure to adopt positions regarding claim scope that are not in the party's individual best interests. On the other hand, differences in product design or infringement positions often provide little or no barrier to sharing resources regarding patent validity and unenforceability, which do not focus on the accused products. Thus, defendants are often able to spread the costs of conducting prior art searches, hiring experts and preparing pretrial Markman briefing. Moreover, in multi-defendant litigation, the judge managing the case typically will not only appreciate but expect a group of defendants to work together and develop consistency in their positions in advance of pretrial conferences to make the case progress in an orderly and streamlined fashion.

Once the decision is made to move forward with a joint defense agreement, the parties should consider whether and how to share litigation costs and fees. In some instances, each company will place an equal amount into an account that the team will use to pay expenses, such as expert fees, used to defend the case. Sharing of attorney fees is more problematic, and often is not part of the common interest agreement. Efforts are typically made to share tasks among counsel for the various defendants, with the defendants having the most at stake often bearing the brunt of such efforts.

Regardless of the arrangement, it should be in writing. This not only clarifies expectations, but is helpful to preserving privilege and confidentiality as to very sensitive work product. Other components of the written agreement should address:

- document management, including management of a central repository;
- confidentiality, during and after the litigation ends or parties settle;
- attorney/client privilege;
- escrow accounts for funds for experts and other expenses;
- work product issues;
- cross claims; and
- delegation of tasks (if possible).

VII. The Preservation / Production of Source Code And Electronic Discovery

Discovery in software cases oftentimes involves issues related to electronic discovery and the preservation and production of electronic files. In order to obtain the documentation required to successfully prosecute or defend a lawsuit, the parties must devise appropriate preservation and discovery strategy.

A. Preservation of Discovery

At the outset of a lawsuit relating to software or patents involving software, litigants should determine whether to send a letter to opposing counsel requesting the preservation of documents relating to the lawsuit. The hesitancy of sending such a letter in most instances is that "what is good for the goose is good for the gander," i.e. the sending party will be held to the same standards. Even before notifying opposing counsel to preserve documents, practitioners should verify that their own clients are preserving evidence.

The failure to preserve data may result in adverse inferences and sanctions. One decision has brought significant attention to the issue of preserving electronic documents. *Zubulake v. UBS Warburg LLC*, 229 F.R.D. 422 (S.D.N.Y. 2004) held that counsel must issue a litigation hold at the outset of litigation or when litigation is reasonably anticipated. The court also held that counsel should communicate with key players in the litigation (employees likely to have relevant information) regarding the duty to preserve documents. The court also found that

counsel should instruct all employees to produce electronic files of relevant active files. The failure to comply with these requirements resulted in significant adverse inferences and sanctions. Different courts, however, currently approach these issues in different ways.

Practitioners should be aware of the new Federal Rules of Civil Procedure which seek to standardize some rules regarding electronic discovery. The proposed rule changes can be found at the website <<http://www.uscourts.gov/rules/newrules6.html>>.

B. Preparing and Responding to Discovery Requests

Cases involving software oftentimes have programming language and technical lingo that is not familiar to litigating practitioners. At the outset of a lawsuit involving software patents, practitioners not familiar with writing and compiling software should consider hiring a consulting expert to assist in the development of strategies to preserve, request and review discovery. One should also consult with the client to determine what files and documents are relevant to the production of the software in suit. Regardless of the method, practitioners should learn the appropriate lingo of the software in suit. Examples of items that may be relevant in lawsuits involving software include:

- source code and related documentation;
- object code;
- design layouts, flow charts and related documentation;
- specifications and related documentation;
- designer notes;
- firmware;
- emails;
- backup copies of files; and
- third party software products used to develop the software.

Once the practitioner has a solid understanding of the types of requests that should be made, another issue to address is the format in which the software discovery should be produced. Requesting the source code from an opposing party and receiving millions of lines of code in a paper format may be of no use and expensive. Moreover, the source code that is printed out may

only be a redacted version of all that is embedded in the electronic file. Therefore, care should be taken to request code and documentation in a useful, readable, cost-effective form. Moreover, practitioners should pay careful attention to how the opposing party searched for relevant code and documentation, including the keywords used and the files that were searched.

Another issue that should be considered in producing software is any relevant contractual relationships with third parties. Oftentimes, portions of software were outsourced or developed by third party vendors that have strict confidentiality provisions in contracts. These contracts may not have provisions for the production of the code in a legal setting. If parties understand this may be an issue from the outset of the litigation, arrangements may be made amongst the parties and the third party vendor. Otherwise, subpoenas may be required to secure the necessary information, and relationships damaged.

Parties involved in software litigation should also consider the use of escrow agencies to transfer electronic files. This manages the disclosure risk for valuable documentation such as source code. Moreover, by placing source code in an escrow agency, the risk of alteration of that source code will be reduced, provided the escrow agency has the appropriate blocking software installed.

VIII. Standard Setting Organizations

Much software technology is based on industry-wide standards. This gives rise to many of the multiple-infringer situations discussed above in the context of common interest groups. When parties have patents that cover implementing an industry standard, unique questions arise as to whether the patent is valid or enforceable against others who are required to use that particular standard. These issues are typically variations on the defenses of estoppel, laches, implied license, acquiescence, and inventorship.

A. Levels of Restrictions Placed On Patentees Participating In Setting Industry Standards

The standard setting process assumes that, to be valuable and effective, a particular technology must gain widespread acceptance from companies who are otherwise competitors. The process creates tension between open availability of the technology to be adopted as a

standard, and the intellectual property interests of the individual companies participating in the process. Complicating the analysis is the frequency with which standard setting organizations (SSOs) do not clearly state or consistently enforce provisions relating to patent rights and disclosure duties. For example, SSO procedures may not have clearly required participants in the process to either waive issued or pending patent rights, or clearly limited their right to enforce undisclosed patents that cover use of the standards implemented. *See Rambus Inc. v. Infineon Tech., Inc.*, 318 F.3d 1081 (Fed. Cir. 2005).

While the restrictions placed on patent owners will vary depending on the particular standard and governing body, three main levels of restrictions apply. The first level imposes no license restrictions on the patentee, but usually requires that the patentee list the patents purportedly applicable to the standard. The second level requires compulsory licensing at a reasonable and nondiscriminatory (RAND) royalty rate. The second level is applied, for example, by the Joint Electronic Devices Engineering Counsel (JEDEC). JEDEC requires that patents under its standards must be licensed without compensation or under "reasonable terms and conditions that are demonstrably free of any unfair discrimination." JEDEC Manual of Organization and Procedure JM21-L, at Annex A1, <<http://www.jedec.org/Home/manuals/JM21L.pdf>>. The third level prohibits licensing once the invention of a patent becomes the industry standard—deeming the standard open for all.

Practitioners should investigate whether the software involved in a litigation matter is subject to an industry standard, and whether the patentee participated in the SSO. The standard-setting body may have specific rules on the use of patents that comply with the industry standard. *See, e.g.*, JEDEC Patent Policy Statement <http://www.jedec.org/Home/manuals/JEDEC_Patent_Policy Stmt.pdf>. The rules may require that the patentee license its patent for a reasonable and nondiscriminatory royalty rate. In other instances, the standards may have required the disclosure of all patents owned by the patentee that participated in standard-setting discussions.

B. Consequences For Failure To Follow Industry Standard Rules.

The SSO process creates the potential for patent applicants to participate in the SSO process but fail to disclose issued or, especially, pending applications. Patent applicants involved in SSOs may keep their application secret under U.S. patent law up through patent

issuance if foreign protection is waived, or 18 months if foreign protection is sought. Before 1995, all U.S. applications could be kept secret until issuance. This ability to maintain applications as secret increases the chances that an SSO participant may have failed to disclose a relevant application.

The risk is compounded in large companies whose SSO representatives may not be aware of, or appreciate the significance of, all pending applications of the company. Moreover, the *Rembrandts in the Attic* mentality may cause companies to exploit previously-untapped patents for license revenues, especially if they come under new management, without fully investigating commitments made in the SSO process years earlier.

Failure to comply with the rules for setting industry standards may cause the patentee to lose its right to enforce its patent on a number of grounds. The patentee's failure to disclose a patent or application during the standard setting process may operate as a waiver of its right to enforce the patent against users of the standard under the SSO's agreed-to procedures. Even where such a contractual waiver does not apply, the patentee's rights may be restricted or lost due to estoppel, laches, implied license, or waiver.

A patentee also may be liable for unfair competition or unfair trade practices if it fails to disclose patents to a standard setting group in which it participated. *See In re Dell Computer Corp.*, 121 F.T.C. 616 (1996) (finding that Dell's failure to disclose its patent covering the industry standard was an unfair method of competition affecting commerce and prohibiting Dell from enforcing its patent). Additionally, the intentional concealment of patents may result in antitrust violations. *See Rambus Inc. v. Infineon Tech., Inc.*, 330 F. Supp. 2d 679 (E.D. Va. 2004) (denying motion in limine to exclude testimony that Rambus procured patents based on standards it helped set; finding information relevant to non-patent laws, including anticompetitive conduct).

Practitioners representing defendants may also be able to use the industry standards to invalidate the patent. If the industry standard existed prior to the invention date of the patent, the claimed invention may be invalid. Additionally, issues regarding the proper inventor may arise based on joint development of the industry standard. Practitioners should put together a timeline that shows the claimed invention date and the public disclosures of the standards in their various stages of development to identify potential prior art or inventorship defenses.

IX. Damage Issues Relating to Software Patents

Patent litigation involving software patents, like other patent cases, will involve the issue of damages. Because the patents on software, however, are oftentimes more abstract than the common widget, software patents again present their own set of issues.

A. Failure to Mark as Limiting Damages in Software Patent Cases.

Under some circumstances, patent owners must mark their patented articles with the patent number in order to receive damages for past infringement. Section 287(a) of the Patent Act provides that the patentees “may give notice to the public” that their patented article is patented by placing on the article the word “patent” or the abbreviation “pat.” In situations where the character of the article is such that the patentee cannot mark directly on the patented article, the patentee may place the notice on the article’s packaging or on a label. While the language in the Patent Act is permissive, Section 287(a) also provides “In the event of failure so to mark, no damages shall be recovered by the patentee in any action for infringement, except when the infringer was notified of the infringement and continued to infringe thereafter.” In the event of such a failure to mark, damages are only recoverable for infringement that occurred after the notice.

Cases dealing with software patents present unique obstacles regarding the marking provisions because of the nature of the patented article involved. For instance, in *Soverain Software L.L.C. v. Amazon.com, Inc.*, 383 F. Supp. 2d 904, 383 F. Supp. 2d 904 (E.D. Tex. 2005), the defendant claimed the patentee failed to give notice regarding the alleged infringement of a method/apparatus patent until the lawsuit was filed. The court found that marking was necessary because the patentee and its licensees failed to mark the relevant web pages. Because the court did not find evidence of actual notice, past damages were not available.

The *Soverain* case presents issues regarding the patentee’s duty to mark, as well as the issue of licensee marking. Software patentees oftentimes involve a significant number of licensees. When a patentee licenses its patent, it should require and monitor to confirm that its licensees comply with the marking provisions. Indeed, consistent marking is required to comply with the marking statute. If the licensees do not comply with the statute, the patentee may lose the right to past damages.

The consistent use of marking on articles that are based on software patents will put the patentee in a position to be awarded past damages. But what if the marking is not consistent and the patentee wants to place infringers and potential infringers on notice? Herein lies the dilemma of a notice letter. A strict letter that places the infringer on specific notice may create the possibility of a declaratory judgment action. A more casual letter that merely encloses the relevant patent, on the other hand, may not create a reasonable apprehension of suit for the declaratory action, but it also may not be sufficient for providing actual notice.

2. Limitations on Damages for Induced or Contributory Infringement.

Liability may arise even for innocent or unknowing direct infringement. *Golden Blount, Inc. v. Robert H. Peterson Co.*, 438 F.3d 1354 (Fed. Cir. 2006). For inducement and contributory infringement, however, the lack of knowledge of another's patent may limit the recovery of damages that predate actual knowledge of the patent or the charge of infringement. See *MEMC Elec. Materials, Inc. v. Mitsubishi Materials Silicon Corp.*, 420 F.3d 1369, 1378 (Fed Cir. 2005) (requiring proof of knowledge of induced infringement with specific intent); *Golden Blount, Inc. v. Robert H. Peterson Co.*, 365 F.3d 1054, 1061 (Fed. Cir. 2004) (requiring knowledge that the combination for which its components were especially made was both patented and infringing and that defendant's components have no substantial non-infringing uses). This limitation will often apply even in the case of satisfactory patent marking.

Parties owning software patents may desire to maintain a careful watch on competitors in the industry that may induce or contribute to the infringement of a patent. Because simply marking will often not be sufficient to show the requisite knowledge for induced and contributory infringement, another strategy may be to place the potential infringers on actual notice. Actual notice may create a risk of triggering the "reasonable apprehension" of litigation which may support jurisdiction over an accused infringer's declaratory judgment action, but we save that issue for another day.