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A quarterly newsletter from the Intellectual Property Practice Group at Thompson Coburn LLP

America Invents Act – Patent "Reform" But Possibly Not Simplification or Even Harmonization

By Anthony F. Blum

The U.S. now appears closer to a more substantial overhaul of the patent system than has been seen in many years. The "America Invents Act," sponsored by Sen. Patrick Leahy (D-VT), passed the Senate on March 8, 2011. More recently, Rep. Lamar Smith (R-TX) introduced a similar bill in the House of Representatives. The House Judiciary Committee approved that bill on April 14, 2011 and submitted its report to the full House on June 1, 2011. These similar bills would change the patent system, affecting such topics as post-grant review proceedings; prior-use defenses; false marking; pre-issuance submission by third parties; USPTO fee-setting authority; micro-entity fees; supplemental examination; residency of Federal Circuit judges; tax strategy patents; best mode; transitional post-grant review for business-method patents; and USPTO funding and satellite offices.

The proposed change from a First-to-Invent system to a First-Inventor-to-File ("FITF")

system is one of the most controversial issues. However, the details of this have not been widely discussed. Some reports incorrectly assume that it will harmonize U.S. law with those of the rest of the world. While the proposed legislation would move the U.S. further down the path to harmonization, major distinctions would remain. To understand these distinctions, Sections 102 and 103 regarding novelty and nonobviousness are discussed below.

As of now, Section 102 (novelty) is the same in both versions of the bill. Essentially, a person is entitled to a patent under this section unless (1) "the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention" or (2) "the claimed invention was described in a patent issued . . . or in an application for patent published or deemed published . . . in which the patent

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or application . . . names another inventor and was effectively filed before the effective filing date of the claimed invention.” Thus, this provides the first-to-file rule as has been heavily reported.

As expected, the new Section 102 would also change the system to provide for worldwide novelty. Thus, foreign sales and uses would be prior art under the proposed legislation. New Section 102 would also continue to allow for the use of secret prior art—similar to current Section 102(e)—except it appears to be even broader. U.S. patents and published applications would be prior art as of their earliest filing date, including a foreign filing date, under the plain language of the legislation. Under current law, these are only prior art as of the earliest U.S. filing date. Moreover, it appears that WIPO publications would no longer be secret prior art under the proposed legislation. It is not clear whether this is an intentional change or simply an oversight. Last, secret prior art will continue to be applicable under a Section 103 obviousness analysis. This is contrary to the European patent system in which secret prior art is only used for novelty and not in the inventive-step analysis.

While the above is the general rule for novelty under the proposed patent reform, there are a number of very important exceptions—which don’t exist in much of the rest of the world. As widely discussed, there is a one-year grace period for disclosures made by the inventor as well as for disclosures by another (in a public disclosure, patent or patent application) in which that subject matter was obtained from the inventor. See new Sections 102(b)(1)(A) and 102(b)(2)(A). This exception does not apply to disclosures by others not derived from the inventor—unlike under current law. Thus, the current one-year grace period is substantially weakened, as is expected in a FITF system.

Yet, there is another, less commonly discussed exception in the proposed legislation that would allow inventors to essentially swear behind such disclosures (and disclosures in secret prior art) if the inventor publicly disclosed the subject matter of the invention first, before those disclosures. See new Section 102(b)(1)(B) and 102(b)(2)(B). Basically, if an inventor publicly discloses his or her invention (such as in an academic publication) and then files within a year, disclosures, patents and applications by others after the inventor’s public disclosure but before the inventor’s filing date would not be prior art under the plain language of the legislation. This means that the system is not truly FITF. Sometimes the second (or subsequent) filer would actually be entitled to the patent under this exception. In these cases, the U.S. patent process would actually be more akin to a First-Inventor-to-Disclose-or-File system under the proposed legislation.

At this point, it is not entirely clear how the above exception would work in practice. For example, “publicly disclosed” is not defined. Presumably, the exception refers to enabling disclosures (such as in printed publications), but some commentators have suggested otherwise. Relying on such a different interpretation would be inadvisable, though, unless and until more guidance is provided. Doing so could inadvertently cause the loss of patent protection. In fact, it will continue to be more prudent to first file before any disclosure whatsoever—as is already recommended under current law—because it may be hard to show that the exceptions apply. For example, a public disclosure may have been derived from an inventor’s earlier disclosure, but it may not be possible to prove. Alternatively, the inventor’s prior public disclosure may not adequately enable the desired claims. Moreover, much of the rest of the world requires absolute novelty, so filing first is required if

patent protection is desired outside of the U.S.

While the pending versions of the “America Invents Act” do represent patent “reform,” they may not represent patent “simplification.” The reforms will not provide complete

harmonization with the rest of the world with respect to novelty and obviousness. But if passed, the proposed legislation would drastically alter the current patent landscape in the U.S.—whether positively or negatively remains to be seen.



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Research Corp.: Federal Circuit Signals Lowered Bar for Software Patent Eligibility

Indicates Shift of Focus Toward Quality of Disclosure

By Kristofer M. Biskeborn

A recent panel decision by the Federal Circuit indicates a likely shift in its approach to computer-related inventions. In *Research Corp. Technologies, Inc. v. Microsoft Corp.*, 627 F.3d 859 (Fed. Cir. 2010), the court showed a strong reluctance to invalidate claims to inventions “with specific applications or improvements to technologies in the marketplace” on the basis of ineligible subject-matter. The panel noted that the Patent Act’s definiteness, written description, and enablement requirements may be the preferred tools for limiting software patents.

***Bilski v. Kappos* – No Rigid Rules (Just Unanswered Questions)**

In June 2010, the Supreme Court’s decision in *Bilski v. Kappos* reaffirmed that the proper approach for testing subject-matter eligibility is to determine whether the claimed invention falls within any of three judicial exceptions: “laws of nature, physical phenomena, and abstract ideas.” The Court in *Bilski* held that the Federal Circuit’s “machine-or-transformation test” is not the sole or exclusive subject-matter test but is still a “useful and important

clue.” The Supreme Court in *Bilski* refused to create any rigid rules and provided very little guidance for lower courts. Thus, the law of patent eligibility continues to be in a state of flux, especially with respect to software and other computer-implemented processes.

Research Corp.: The Federal Circuit’s First Post-Bilski Foray in Software Patents

In December 2010, in its first case involving the patent eligibility of a software invention since *Bilski*, a Federal Circuit panel in *Research Corp.* decided in favor of the patentee, and concluded — without applying the “machine-or-transformation test” — that the claims in question were eligible for patent protection.

Research Corp.’s patents included method claims for halftoning grayscale and color images according to a particular mathematical function (a “blue noise mask”). The claims — like the claims struck down by the Supreme Court in *Bilski* — lacked any express recitation of a computer, machine, or any other hardware on which the method steps must be performed. Thus, the district court held the claims at issue invalid on summary judgment under the Federal Circuit’s “machine-or-transformation test.”

In a broad and remarkably pro-software-patent opinion, the Federal Circuit reversed. The court began by stating its intention to apply the “abstractness” exception narrowly, noting that to disqualify an invention, abstractness “should exhibit itself so manifestly as to override the broad statutory categories of eligible subject-matter [...].” The court noted that the invention addressed a “need in the art,” and in a holding with seemingly far-reaching implications, the court said:

The invention presents functional and palpable applications in the field of computer

technology. [...] [T]his 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.

As further support for its finding of patent eligibility for the asserted independent claims, the Federal Circuit cited structural limitations recited in unrelated claims in the same patents. This is remarkable because it is generally accepted that each claim’s validity stands or falls on its own.

The court implied that the bar for patent eligibility should be low because other sections of the Patent Act can guard against issues such as lack of clarity and overbreadth:

In section 112, the Patent Act provides powerful tools to weed out claims that may present a vague or indefinite disclosure of the invention. Thus, a patent that presents a process sufficient to pass the coarse eligibility filter may nonetheless be invalid as indefinite because the invention would “not provide sufficient particularity and clarity to inform skilled artisans of the bounds of the claim.” That same subject-matter might also be so conceptual that the written description does not enable a person of ordinary skill in the art to replicate the process.

This decision signals a shift toward a more lenient subject-matter bar in the Federal Circuit’s approach to software patents, and a likely increase in the court’s application of the definiteness, written description, and enablement requirements.

It is worth noting that Research Corp.'s invention was, in reality, an improvement to a technical process for computer-assisted image creation, while the claims at issue in *Bilski* were directed to a method of hedging investments (a pure "business method"). Whether the Federal Circuit would reach the same conclusion for a software invention for implementing a business method is still an open question. The answer to that question may soon be forthcoming, as the Federal Circuit recently heard oral arguments in two cases questioning the patent-eligibility of computer-implemented "business method" inventions (CyberSource and DealerTrack).

Conclusion

The legal landscape for software patents is an evolving area of the law, with lower courts clearly struggling with limited guidance. While *Bilski* leaves many questions unsettled,

the Federal Circuit decision in *Research Corp.* suggests that the Federal Circuit would like to steer the focus on software patent validity away from the "coarse filter" of subject-matter eligibility and toward the quality of disclosure requirements of definiteness, written description, and enablement. However, it remains to be seen whether the Federal Circuit will be as lenient on the issue of patent-eligibility toward software inventions that implement business methods.

Applicants with software inventions should be sure to include as much detail and structure as possible in their first patent application — preferably with multiple embodiments for each inventive concept — in order to preserve claim drafting flexibility during the examination process and avoid validity issues under the subject-matter eligibility and quality of disclosure requirements.

About the Author



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Akamai, Centillion, and McKesson: The Federal Circuit Continues to Grapple with the Issue of Joint Infringement

By Benjamin L. Volk

Patent owners can find themselves in a jam when multiple unauthorized parties cooperate to practice a claimed invention. Imagine a method claim in a patent with two steps – Step A and Step B. If two parties cooperate to perform this method, whereby Party 1 performs Step A while Party 2 performs Step B, a patent owner who wants to assert its patent against such joint activities is faced with what is known as a joint infringement problem. This problem can be particularly acute in areas such as networked computing and software, where the technology in question often inherently involves the joint interactions of multiple parties.

Following the Federal Circuit’s decisions in *BMC Resources, Inc. v. Paymentech, L.P.*, 498 F.3d 1373 (Fed. Cir. 2007) and *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318 (Fed. Cir. 2008), courts have applied a stringent “control or direction” requirement to determine whether a party can be held liable for direct infringement of a method claim when that party does not itself perform all steps of the method claim. “[W]here the actions of multiple parties combine to perform every step of a claimed method, the claim is directly infringed only if one party exercises ‘control or direction’ over the entire process such that every step is attributable to the controlling party.” *Muniauction*, 532 F.3d at 1329 (citing *BMC Resources*, 498 F.3d at 1380-81). In both the *BMC Resources* case and the *Muniauction* case, the court found that the patent owner was not able to show “control or direction” by a single party over the performance of the whole method, and thus no direct

infringement existed. A significant ramification of these decisions is that the patent owner was also unable to establish indirect infringement liability (i.e., on a contributory infringement theory or an inducement of infringement theory) against any party because of the absence of a direct infringer. These findings resulted in the patent owners the two cases effectively having unenforceable patents.

In a recent line of cases, the Federal Circuit continues to grapple with these issues, and the full Federal Circuit has now agreed to reconsider major aspects of its joint infringement jurisprudence in the *Akamai* and *McKesson* appeals, discussed below.

A Tale of Two Claims – Akamai and Centillion

Akamai and Method Claims:

In a December 20, 2010, panel decision, the Federal Circuit further elaborated on this “control or direct” requirement in the case *Akamai Technologies, Inc. v. Limelight Networks, Inc.*, 629 F.3d 1311 (Fed. Cir. 2010). In doing so, the *Akamai* case effectively removed the “direct” portion of the “control or direct” analysis from the test for joint infringement liability.

The *Akamai* case involved a patent directed toward how Internet web pages that include embedded objects can be delivered to computer users by content providers. Rather than hosting an embedded object in a web page on a content provider’s own server, the patented technology permitted the content

provider to instead store these embedded objects in a remote server network, presumably in an effort to increase the speed and reliability by which these embedded objects could be delivered to computer users who access the content provider's web pages. The operator of the remote server network thus provided a service to content providers to improve the Internet experience of the computer users who access the content provider's web pages. For this system to work, the URLs for the embedded objects needed to be re-pointed away from the content provider's server(s) to the server network of the remote server network operator. The patent described this process as "tagging" the embedded objects.

The defendant in the *Akamai* case operated a remote server network in competition with the patent owner. However, with respect to the method claim asserted against the defendant, the defendant did not perform the tagging step. Instead, the defendant's customers (the content providers) performed the tagging step. The patent owner alleged that despite the divided performance of the method steps, the defendant was still liable for direct infringement under a "control or direct" theory. In particular, the service contracts between the defendant and its customers, while not obligating the customers to use the defendant's hosting services for embedded objects, did require that those customers who chose to use defendant's hosting services for embedded objects perform the tagging step itself. As part of this, the defendant provided explicit and detailed instructions to its customers regarding how the customers were to perform the tagging step.

The jury returned a verdict in favor of the patent owner, presumably concluding that the defendant's instructions to its customers satisfied the "control or direct" requirement. However, the district court overturned that jury verdict in a judgment as a matter of law

(JMOL), and the patent owner appealed the case to the Federal Circuit.

On appeal, the Federal Circuit affirmed the district court's conclusion that the patent owner failed to establish sufficient evidence to show control or direction by the defendant over the tagging activities of its customers. In an extension of its holding from the *Muniauction* case, the Federal Circuit ruled:

This court therefore holds as a matter of Federal Circuit law that there can **only** be joint infringement when there is an **agency relationship** between the parties who perform the method steps or when on party is **contractually obligated** to the other to perform the steps. *Akamai*, 629 F. 3d at 1320 (emphasis added).

Within this new legal framework, the Federal Circuit concluded that the patent owner could not satisfy the "agency relationship" requirement of this test because the defendant's customers were not acting as agents of the defendant. As to the "contractual obligation" portion of the test, the court found that the service contracts between the defendant and its customers did not contractually obligate its customers to use the tagging feature. The customer was entirely free under the contract to choose whether to use the tagging feature. Therefore, because the contract permitted the defendant's customers not to use the tagging feature, the court concluded that the patent owner was unable to establish that the defendant's customers were contractually obligated by the defendant to perform the tagging step of the method claim.

Thus, despite explicit instructions from the defendant that directed the customer on how to perform the tagging step of a method claim, the Federal Circuit in *Akamai* concluded that the defendant was not liable as a direct

infringer under a joint infringement theory because no agency relationship existed between the defendant and the alleged joint actor and because there was no contract between the defendant and the joint actor that obligated the joint actor to perform the method step in question. As such, the Akamai case demonstrates the extreme difficulty that currently exists for a patent owner to establish liability for the infringement of a method claim in a joint infringement scenario.

Centillion and System/Apparatus Claims:

One month later, in a January 20, 2011, panel decision, the Federal Circuit issued a ruling in the case Centillion Data Systems, LLC v. Qwest Communications Int'l, Inc., 631 F.3d 1279 (Fed. Cir. 2011) that was more favorable toward patent owners in joint infringement scenarios, so long as the patent owner is able to assert "system" or "apparatus" claims against the alleged parties that operate the allegedly infringing system or apparatus.

The patent involved in the Centillion case was directed toward a networked computer system whereby telephone companies provided certain billing information to customers via the Internet for analysis. The claims in question were system claims that required both a telephone company's back-end computer system and a customer's personal computer (PC) to work in concert with each other. The telephone company back-end system stored billing data and generated billing reports. The customer PC ran software that analyzed the billing reports generated by and received from the telephone company back-end system. While customers downloaded this software from the telephone company computer system, the customers executed the downloaded software locally on their own PCs.

At the district court level, the patent owner lost on summary judgment because the district court concluded that the patent owner could

not establish sufficient control or direction by the defendant over its customers. However, on appeal, the Federal Circuit drew a distinction between this case and the BMC Resources/Muniauction/Akamai line of cases because this case involved system/apparatus claims rather than method claims.

The Federal Circuit found that it had never addressed the issue of the circumstances under which an infringing "use" under 35 USC §271(a) occurs in the context of a system claim having elements that are in the possession of more than one party. Relying heavily on its prior decision in NTP, Inc. v. Research in Motion, Ltd., 418 F.3d 1282 (Fed. Cir. 2005) (finding that a user located in the United States who makes use of a system was "using" that system in the United States for the purposes of 35 USC §271(a) by putting the system as a whole to beneficial use from the United States even though some components of that system were located in Canada), the Federal Circuit held that "to 'use' a system for purposes of infringement, a party must put the invention into service, i.e., control the system as a whole and obtain benefit from it." Centillion, 631 F.3d at 1284.

Based on this standard, the court concluded that:

- The defendant's customers could potentially be direct sole infringers because the customers put the claimed system as a whole into service and received the benefit from this service;
- The defendant could not be a direct sole infringer because it did not put the system as a whole into service (instead, it was their customers who initiated the operation of the system);
- The defendant could not be a direct infringer under a joint infringement theory because its customers were not

acting as agents of the defendant and because it did not contractually obligate its customers to use the system; and

- The defendant could potentially be an indirect infringer under indirect infringement theories if its customers are found to be direct infringers. *Id.* at 1284-87.

The Federal Circuit further considered whether the defendant faced any liability for “making” an infringing system that was a combination of the defendant’s back-end computer system and the customers’ PCs. On this issue, the court found that the defendant cannot be considered the “maker” of the system because it only made a portion of the claimed system. Instead, it was the customer, acting outside of the control or direction of the defendant, who “completes the system” by installing the software on their PCs and initiating its operation. *Id.* at 1287-88. As such, the court concluded that the defendant could not be a direct infringer of the system claims under a “making” theory.

By holding that customers can face liability for direct infringement by using a jointly administered system or apparatus and further holding that a system provider could then face liability for indirect infringement based on the customers’ direct infringement, the Centillion case provides a lifeline to patent owners whose patents have system or apparatus claims with elements that are administered by multiple parties.

The McKesson Case - A Plea for En Banc Consideration of Joint Infringement Issues

In an April 12, 2011, panel decision, the Federal Circuit once again considered joint infringement issues in the context of method claims in the case *McKesson Technologies Inc. v. Epic Systems Corp.*, No. 2010-1291,

2011 WL1518909 (Fed. Cir. 2011).

The asserted patent in the *McKesson* case involved networked software by which patients and doctors could interact with each other to share medical information and advice. The asserted method claims included a step that was performed by a patient and other steps performed by the doctors. In a divided 2-1 opinion, Judge Linn of the Federal Circuit found that the patent owner was unable to establish that the doctors exercised control or direction over the patients’ use of the software. Relying on *Akamai*, the court found that the patients’ interactions with the doctors did not create an agency relationship between the patients and the doctors, nor was a contractual obligation in existence that obligated the patients to perform the method steps. In doing so, the court rejected the patent owner’s argument that the special nature of the doctor/patient relationship translated into doctors exercising sufficient control or direction over their patients’ behavior.

In a concurring opinion, Judge Bryson agreed with Judge Linn’s resolution as a matter of precedent following the *BMC Resources*, *Muniauction*, and *Akamai* cases. However, he further noted that an en banc review of the joint infringement legal standard should be conducted by the full Federal Circuit because he believes a question exists as to whether this precedent is correct.

In a dissenting opinion, Judge Newman found for the patent owner, and she concluded that the legal standards set by the Federal Circuit panel decisions in the *BMC Resources*/*Muniauction*/*Akamai* line of cases conflict with past Federal Circuit precedent, particularly as to their effects on indirect infringement liability.

Judge Bryson’s call for an en banc Federal Circuit review of its joint infringement jurisprudence was answered shortly after the *McKesson* decision was handed down. On April

20, 2011, the Federal Circuit issued an order for an en banc rehearing of the Akamai case. The Federal Circuit vacated its panel decision in the Akamai case, and it requested that the parties submit new briefs addressing the following issue: "If separate entities each perform separate steps of a method claim, under what circumstances would that claim be directly infringed and to what extent would each of the parties be liable?" Next, on May 26, 2011, the Federal Circuit issued an order for an en banc rehearing of the McKesson case, and vacated its panel McKesson decision. Among the issues to be considered in the McKesson rehearing will be the circumstances under which indirect infringement liability can arise in joint infringement scenarios.

Thus, the legal framework for joint infringement liability may further shift following these en banc rehearings of the Akamai and McKesson appeals.

Conclusion

In view of this evolving legal landscape and the difficulties faced by patent owners in these joint infringement cases, patent applicants should strive to:

- Present claims in patent applications that are targeted toward a single party to the extent possible given the nature of the invention. Even with technologies that are inherently geared for joint operation by multiple parties (such as inventions involving networked computer systems and the like), opportunities will likely exist for drafting patent claims from the perspective of a single party so as to retain the ability to assert infringement against a single party without relying on joint infringement theories.
- Include a mix of system/apparatus and method claims in patent applications to fully protect an invention and retain the option of relying on the Centillion case to assert infringement based on a single party's use of a jointly administered system/apparatus.
- Use continuation patent applications to retain flexibility for adapting to future changes in the law.



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