

## BULLETPROOFING METHOD CLAIMS FOR POST-*LIMELIGHT* ENFORCEMENT\*

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After *BMC*, the single entity rule served to protect unknowing actors who performed a single step of a claimed method by requiring that a single entity perform all steps of a claimed process or entirely control the use of the process. The federal circuit in *Akamai* has confirmed that rule for proof of direct infringement under §271(a), but has rejected that rule for proof of indirect infringement under §271(b). The Supreme Court has granted review.

Drafting commercially valuable method claims remains challenging for practitioners, given the nuanced laws of extraterritorial infringement, the control aspects of multi-party infringement, and the evolving judicial framework for evaluating divided infringement. Nevertheless, there are several time-tested strategies that should serve practitioners well regardless of the result reached by the Supreme Court in *Limelight*.<sup>1</sup>

Method claims should be drafted so that they can be enforced against a single direct infringer. A single inventive method can be claimed in pieces, where different independent claim sets are directed to different actors. Only essential method steps should be recited, so that the all elements rule does not bar a finding of infringement – if the accused infringer decides to parse out one or more steps to third parties. Method steps undertaken by a single entity should be claimed both affirmatively *and* in response to steps taken by other third parties. Responsive steps can be claimed in a way that describes the method step(s) carried out by the third party. Because some methods can be claimed as "systems," system claims should be used where possible since courts treat them differently than process claims. By thinking more strategically about the infringer(s) rather than the inventive method, patent owners can create patent claims that are more easily enforced and with greater uniformity.

### **The Akamai Decisions**

In *Akamai*,<sup>2</sup> the District Court overturned a jury verdict of infringement, holding as a matter of law that Limelight did not infringe the asserted claims of Akamai's '703 patent<sup>3</sup> because

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<sup>1</sup> Herein, *Akamai* is used to refer to the district court and federal circuit decisions, and *Limelight* is used to refer to the Supreme Court appeal of those decisions, since Limelight is the petitioner in the main appeal.

<sup>2</sup> *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 614 F. Supp. 2d 90 (D. Mass. 2009).

Limelight did not itself carry out all of the steps of the claimed methods. Rather, it instructed its customers how to carry out the claimed "tagging" step if they chose to, but did not direct them to do so. A panel of the Federal Circuit affirmed "[b]ecause Limelight did not perform all of the steps of the asserted method claims, and the record contain[ed] no basis on which to attribute to Limelight the actions of its customers who carried out the other steps."<sup>4</sup> Relying on *BMC*,<sup>5</sup> *Muniauction*,<sup>6</sup> and *Warner-Jenkinson*,<sup>7</sup> the court stated that "[i]t is well settled that direct infringement requires a single party to perform every step of a claimed method."<sup>8</sup>

A fractured *en banc* federal circuit held -- in a 6-5 *per curiam* decision -- that it was not necessary for a single party to perform all of the steps of the claimed method under §271(a) in order to establish liability for induced infringement under §271(b).<sup>9</sup> The court overturned its earlier panel decision in *BMC*, and reversed the "single entity" rule for proving indirect infringement. According to the court, proof that all steps of a claimed method had been carried out was still a requirement for proving inducement, but "[r]equiring proof that there *has been* direct infringement as a predicate for induced infringement is not the same as requiring proof that a single party would be *liable* as a direct infringer."<sup>10</sup>

Following the *en banc* opinion, Limelight petitioned for *certiorari*, seeking Supreme Court review based on the sole question of whether a defendant may be held liable for inducing patent infringement under 35 U.S.C. § 271(b) even though no one had committed direct infringement under § 271(a).<sup>11</sup> Akamai's response included a conditional cross-appeal, seeking broader review of the single entity rule for both sections 271(a) and 271 (b).<sup>12</sup> The Supreme Court granted Limelight's petition on January 10, 2014, but has not yet taken any action on Akamai's conditional cross-petition. The court's decision in *Limelight* will issue by the end of this term, June, 2014.

Drafting method claims to inventions that include steps performed by multiple actors was a practice whose popularity increased greatly after the *State Street Bank* case<sup>13</sup> and the

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<sup>3</sup> At issue were claims 19-21 and 34 of Akamai's U.S. Patent No. 6,108,703 (the "'703 patent").

<sup>4</sup> *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 629 F.3d 1311, 1314 (Fed. Cir. 2010).

<sup>5</sup> *BMC Res., Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1380 (Fed. Cir. 2007).

<sup>6</sup> *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318 (Fed. Cir. 2008).

<sup>7</sup> *Warner-Jenkinson Co., Inc. v. Hilton Davis Corp.*, 520 U.S. 17 (1997).

<sup>8</sup> *Akamai Techs.*, 629 F.3d at 1318.

<sup>9</sup> *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 692 F.3d 1301 (Fed. Cir. 2012) (*en banc*).

<sup>10</sup> *Id.* at 1308-09.

<sup>11</sup> *Limelight v. Akamai*, Petition for Writ of Certiorari, filed December 28, 2012, at i.

<sup>12</sup> *Akamai v. Limelight* Petition for Writ of Certiorari, filed February 1, 2013, at i.

<sup>13</sup> *State Street Bank and Trust Co. v. Signature Financial Group, Inc.*, 149 F.3d 1368 (Fed. Cir. 1998).

recognition that methods that included a client, a server, and data storage/manipulation were patentable.<sup>14</sup> After *BMC*, a trend toward the issuance of single-actor method claims could be observed for patent owners in certain types of technologies. And, at least since the *Akamai* court's *en banc* decision, patentees have been free to enforce method claims against indirect infringers absent proof that anyone would be liable for direct infringement.

But the Supreme Court has more to say about *Akamai* and the single entity rule. Until they do, the patent community remains in a claim drafting and enforcement limbo, unclear of what value multi-actor method claims will have after June of this year, or whether single actor claims can be easily avoided by transitioning essential claim elements to second actors.

### **What if *Akamai* is Upheld?**

If *Akamai* is upheld, claim drafters can continue to prepare method claims without regard to the individuals or entities who will carry out each of the component steps. So long as the process or method recites all of the steps of the claimed invention, an act of infringement can be proven. It will not be necessary to establish liability under §271(a) for direct infringement, only that the claimed method constituting infringement under §271(a) has been carried out. It remains to be seen how the Supreme Court will treat this issue, in view of §271's proscriptions against "whoever" carries out any of a series of acts, rather than against the occurrence of the acts themselves.

The affirmance of *Akamai* would certainly benefit software and internet patentees claiming processes that require users (clients) to interface with servers (directly or indirectly) to carry out functions or operations (purchases, calculations, transactions, etc.). An affirmance may be less interesting to device manufacturers who derive more value from patents directed to products and methods for using those products, rather than methods for processing and delivering content that may be displayed on those products.

Would patent owners be completely safe issuing and enforcing multi-actor method claims in the event *Akamai* is affirmed by the Supreme Court? Such claims would be economically valuable to the extent they could be enforced under §271(b).

### **The Offshore Practice of a Claimed Method Step**

What happens if the erstwhile §271(b) infringer moves one of the process steps outside of the United States? What value will post-*Akamai* multi-actor method claims retain?

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<sup>14</sup> After *State Street Bank*, then acting PTO Commissioner Dickinson attributed the 700% increase in the number of filings for software and business method patents directly to the court's conclusion that business methods constituted patentable subject matter. See Q. Todd Dickinson, "The USPTO - Our Challenges for the New Millennium," Remarks at the 11th Annual Fall CLE Weekend Seminar, Intellectual Property Law Section of the Virginia State Bar, September 10, 1999.

Certainly there would be no §271(a) infringement of any method claims where a single step is practiced outside of the United States. It seems well settled that direct infringement of method claims requires that all steps of the method be performed in the United States. See, for example, the Federal Circuit's *NTP v. RIM* opinion, "We therefore hold that a process cannot be used 'within' the United States as required by section 271(a) unless each of the steps is performed within this country."<sup>15</sup>

Under *NTP*, there would be no §271(b) infringement of method claims either, for as the *NTP* Court made clear, "a finding of direct infringement by RIM's customers under section 271(a) of the method claims reciting an 'interface switch' 14 or an 'interface' 15 is precluded by the location of RIM's Relay in Canada. As a consequence, RIM cannot be liable for induced or contributory infringement of the asserted method claims, as a matter of law."<sup>16</sup>

*Akamai* did not overrule *NTP* either expressly or *sub silentio*, because *Akamai* was not directed to the offshore performance of claimed method steps. Nothing in *Akamai* suggests the Court expanded §271(b) infringement liability to inducers who promote the infringement of the U.S. method claims by encouraging individual steps to be performed outside of the United States. Or did it? Is *Akamai* broad enough to expand the extraterritorial reach of §271(b)? It seems doubtful, but the matter may not be settled.

Similarly unclear is whether post-*Akamai* multi-actor method claims be enforced under §271(f).

Section 271(f) -- passed in 1984 -- is an induced infringement section designed to target patented combinations made partially within the U.S. and partially outside the U.S. A method claim is a combination of process elements, and, therefore, Limelight's supply of instructions to its customers as how to tag an embedded object could be both an act of inducement under §271(b) as well as the supply of a patented component under §271(f). On its face, the language of §271(f) is not limited to a specific type of invention.

But the federal circuit has held *en banc* that §271(f) does not apply to method claims.<sup>17</sup> In *Cardiac Pacemakers*, the Court reasoned that it is impossible to meet the "supply" requirement of §271(f) when an intangible step is the component at issue. The court concluded that the plain language of the statute *precluded* the statutory class of processes from the patentable subject matter protected by § 271(f), citing *NTP*:

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<sup>15</sup> *NTP v. RIM*, 418 F.3d 1282, 1319 (Fed. Cir. 2005).

<sup>16</sup> *Id.* at 1318.

<sup>17</sup> *Cardiac Pacemakers, Inc. v. St. Jude Medical, Inc.*, 576 F.3d 1348 (Fed. Cir. 2009), overruling *Union Carbide v. Shell Oil Co.*, 425 F.3d 1366 (Fed. Cir. 2005).

'it is difficult to conceive how one might supply or cause to be supplied all or a substantial portion of the steps in a patented method in the sense contemplated by' 271(f).<sup>18</sup>

To be certain, the Supreme Court has not gone that far. In *Microsoft*,<sup>19</sup> the Supreme Court never addressed the question of whether method steps are tangible components of a claimed method for purposes of §271(f), and thus capable of being "supplied." The Court, in fact, made a point of noting that the opinion did *not* foreclose §271(f) protection of method patents, stating that "[i]f an intangible method or process, for instance, qualifies as a 'patented invention' under § 271(f) (a question as to which we express no opinion), the combinable components of that invention might be intangible as well. The invention before us, however, . . . is a tangible thing."<sup>20</sup>

Furthermore, the Court declined to rule on whether or not intangible things are always foreclosed from being a component, even if the patented invention is not a tangible, physical product.

If an infringer's process step is moved offshore, a post-*Akamai* multi-actor method claim might not be effectively enforced against infringers under §271(b) or §271(f).

### **What About System Claims?**

A patentee can sometimes claim an invention by using system claims as well as method claims. The technology at issue in the *NTP* case related to systems for integrating existing electronic mail systems ("wireline" systems) with radio frequency ("RF") wireless communication networks, to enable a mobile user to receive email over a wireless network. Both method and systems claims covered different aspects of the invention, and both types of claims were litigated.

On appeal, the federal circuit held that the system claims were infringed under §271(a) even though one of the system elements was located in Canada. The court reasoned that the infringing "use of a claimed system under section § 271(a) is the place at which the system as a whole is put into service, *i.e.*, the place where control of the system is exercised and beneficial use of the system obtained."<sup>21</sup> As a result, the jury properly found that the infringing use of "NTP's asserted system claims occurred within the United States."<sup>22</sup>

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<sup>18</sup> *Id.* at 1364 citing *NTP*, 418 F.3d at 1322.

<sup>19</sup> *Microsoft Corp. v. AT&T Corp.*, 550 U.S. 437 (2007).

<sup>20</sup> *Id.* at 452 n. 13.

<sup>21</sup> *NTP v. RIM*, 418 F.3d 1282, 1317 (Fed. Cir. 2005).

<sup>22</sup> *Id.*

Several years after *NTP*, the court addressed the divided infringement issue in the context of system claims where the accused infringer did *not* own or control all of the system elements. In *Centillion*,<sup>23</sup> the Federal Circuit held that an act of direct infringement under §271(a) of a multi-component system claim was properly based upon a single front end actor triggering operation of the system using only one component. The court reasoned that an entity "uses" a system under §271(a) if it "puts the system as a whole into service, *i.e.*, control[s] the system and obtain[s] benefit from it."<sup>24</sup>

Drafting system claims to avoid the uncertainties that shroud the *Akamai en banc* holding and the pending *Limelight* appeal is a must-consider strategy for applicants whose technologies are suited to system claims. System claims offer applicants an opportunity to enforce their patents against infringers whose components (method steps) are located outside of the United States, particularly where method claims may be ineffective.

### **What if Akamai is reversed?**

A Supreme Court reversal in *Limelight* may result in the confirmation of the single entity rule for both §271(a) and §271(b). Patent drafters will have to prepare claims that can be infringed by a single entity in order for those claims to be of commercial value. Section 271(a) currently requires a single entity as a direct infringer, and many post-*BMC* applicants are accustomed to drafting single-actor method claims as a matter of course.

An enforcement problem arises when a single-actor method claim can be avoided by an infringer who can easily have a claimed method step performed by second entity (the very problem considered by the *en banc Akamai* court). How do patent claim drafters guard against future infringers who can parse out a method step to avoid infringement?

In a recent paper, Professor Wegner opined that the "all elements" rule of the *en banc Pennwalt* case<sup>25</sup> should have denied the existence of a direct infringer in *Akamai*.<sup>26</sup> That is because -- whether applied to method or process claims -- the "all elements rule" requires that all claimed elements (or their equivalents) must be carried out by a direct infringer. The federal circuit has stated that "[i]nfringement of process inventions is subject to the 'all-elements rule'

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<sup>23</sup> *Centillion Data Sys, LLC v Qwest Commc'ns Int'l*, 631 F.3d 1279, 1285 (Fed Cir 2011).

<sup>24</sup> *Id.* at 1286.

<sup>25</sup> *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931 (Fed. Cir. 1987) (*en banc*).

<sup>26</sup> H. Wegner, *Akamai: Active Inducement To Infringe Sans Direct Infringement*, White paper, September 9, 2012.

whereby each of the claimed steps of a patented process must be performed in an infringing process."<sup>27</sup> The reason behind the rule is straightforward, as explained by Judge Rich:

[A] claim to a process comprising the step A followed by step B followed by step C defines, as a matter of law, only the A-B-C process and one cannot properly speak of any single step as being "claimed", for it is not; all that is claimed is the process consisting of the combination of all three steps. Such a claim, therefore, creates no patent right or monopoly in step A, no right to prevent others from using step A apart from the combination of steps A-B-C. Step A is not "patented."

Another way of stating the legal truism is that patent claims, being definitions which must be read as a whole, do not "claim" or cover or protect all that their words may disclose. Even though the claim to the A-B-C combination of steps contains a detailed description of step A, that does not give the patentee any patent right in step A and it is legally incorrect to say that step A is "patented".<sup>28</sup>

Nowhere did the *Akamai* court say it was overruling *Pennwalt* or *General Foods*, or otherwise dispensing with the all elements rule, and Wegner suggests that *Akamai* could not have done so based upon *Pennwalt's* firm grounding in Supreme Court precedent.<sup>29</sup> If Professor Wegner is correct, and the all elements rule is still in force, then a direct infringer is required to carry out each and every step of the claimed process, and *Akamai* must be incorrect.

Until the Supreme Court weighs in on the *en banc* decision, practitioners are faced with method claim drafting and enforcement quandaries that offer what is at best a choice between claim breadth and claim enforceability.

A conservative and sensible approach is to draft method claims that can be infringed by a single entity, akin to the practices of content or other internet service providers post-*BMC*. Single-actor method claims can be enforced under any provision of §271 and do not invoke

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<sup>27</sup> *Canton Bio Medical, Inc. v. Integrated Liner Technologies, Inc.*, 216 F.3d 1367, 1369-70 (Fed. Cir. 2000).

<sup>28</sup> *General Foods Corp. v. Studiengesellschaft Kohle mbH*, 972 F.2d 1272, 1274-75 (Fed. Cir. 1992).

<sup>29</sup> H. Wegner, *supra*, n. 17 at 12, *citing Prouty v. Draper*, 833 F.3d at 950-51, quoting *Brooks v. Fiske*, 56 U.S. (15 How.) 211, 219 (1853); *Vance v. Campbell*, 66 U.S. (1 Black) 427, 429 (1861); *Eames v. Godfrey*, 68 U.S. (1 Wall.) 78, 79 (1864); *Gould v. Rees*, 82 U.S. (15 Wall.) 187, 194 (1872); *Dunbar v. Myers*, 94 U.S. (4 Otto) 187, 202 (1876); *Water-Meter Co. v. Desper*, 101 U.S. (11 Otto) 332, 335-37 (1879)).

questions of extraterritoriality or control. In doing so, consider Professor Wegner's admonition against over claiming: omit method steps unnecessary to the most basic performance of the method, or which can easily be carried out by second and third entities. Claim method steps undertaken by a single entity both affirmatively *and* in response to steps taken by other third parties. Responsive steps can be claimed in a way that describes the method step(s) carried out by the third party.

Consider, as an example, the claims in dispute in *Akamai*. Claim 19 of the '703 patent recites:

19. A content delivery service, comprising:  
replicating a set of page objects across a wide area network of content servers managed by a domain other than a content provider domain;  
*for a given page normally served from the content provider domain, tagging the embedded objects of the page so that requests for the page objects resolve to the domain instead of the content provider domain;*  
responsive to a request for the given page received at the content provider domain, serving the given page from the content provider domain; and  
serving at least one embedded object of the given page from a given content server in the domain instead of from the content provider domain.

'703 patent Col. 19 ll. 6-20 (emphasis added).

At issue was the "tagging" step, because Limelight neither tagged the embedded objects itself, nor required its customers to do so. Limelight simply provided instructions to its customers *how* to do so, if they so chose. Much time, energy and money has been spent litigating the tagging step of Claim 19 of the '703 patent.

Yet claim 19 could easily have been rewritten as a single-actor method claim that would not require the performance of any step by a second actor in order to provide a predicate act of direct infringement. Consider the following:

19. A content delivery service, comprising:  
replicating a set of page objects across a wide area network of content servers managed by a domain other than a content provider domain;  
for a given page normally served from the content provider domain, obtaining information of [[tagging]] the embedded

objects of [[the]] an identified page so that requests for the page objects resolve to the domain instead of the content provider domain;

responsive to a request for the given page received at the content provider domain, serving the given page from the content provider domain; and

serving at least one embedded object of the given page from a given content server in the domain instead of from the content provider domain.

Such a claim could easily be asserted under §271 against a single infringer without the complications of the legal thicket surrounding the doctrines of joint and divided infringement. So long as a direct infringer would be required to carry out each of the steps in order for the method to function as claimed, the all elements rule would not bar enforcement of the claim.

### **Conclusion**

While it is not clear how the Supreme Court will rule in *Limelight*, many predict a reversal and an articulation of the predicate acts of direct infringement under §271(b) that is consistent with that of §271(a). Those drafting and enforcing patent claims should consider strategies unencumbered by the uncertainty of judicial process. The use of system claims, single-actor method claims and method claims that omit all but the most essential features of the inventive process remain commercially valuable both now and after the Court's ultimate decision *Limelight*. Claiming nonessential elements that can be carried out by second or third entities, or those that can be easily exported, may very well deprive a patent holder of the right to enforce an important method claim.