

**The U.S. Court of Appeals for the Federal Circuit's Recent Expanded View of Liability for Induced Infringement under Section 271(b)**

Analysis of Recent Decision of the U.S. Court of Appeals for the Federal Circuit in Akamai Techs., Inc. v. Limelight Networks, Inc. and McKesson Techs., Inc. v. Epic Systems Corp. and the Remaining Issues and Implications for the Patent Law Community and Industries

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## I. Introduction

Patent infringement arises when all of the limitations of a patent claim are met. In old days, typically patented inventions were employed or performed by a single entity in discrete, unitary settings. Such discrete, unitary infringement settings have been changed over time as mobile and web-based high technologies have been developed, allowing a high degree of interactivity among different entities (e.g., service providers, consumers, doctors, and patients). In the modern high tech era, situations often arise where multiple entities are involved in carrying out the limitations of a patent claim, *i.e.*, “joint infringement” or “divided infringement.”

The doctrine of joint and divided infringement under 35 U.S.C. §§ 271(a) and (b) is not statutory but rather has been developed over time in courts. Traditionally, direct infringement under § 271(a) has been interpreted to require a single party to perform or use each and every step or element of a patent claim. The Federal Circuit has expanded this over time to certain situations in which more than one entity is involved in performing or using each and every step or element of a patent claim. In fact, the law of divided infringement or joint infringement is still developing and currently in a state of flux.

Under what is known as the “single entity” doctrine, divided infringement is a complete defense against direct infringement under § 271(a).<sup>1</sup> Divided infringement was also a complete defense to induced infringement under § 271(b) until the Federal Circuit in Akamai Techs., Inc. v. Limelight Networks, Inc. and McKesson Techs., Inc. v. Epic Systems Corp.

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<sup>1</sup> See Warner-Jenkinson Corp. v. Hilton Davis Corp., 520 U.S. 17 (1997); BMC Resources, Inc. v. Paymentech, L.P., 498 F.3d 1373 (Fed. Cir. 2007); Muniauction, Inc. v. Thomson Corp., 532 F.3d 1318 (Fed. Cir. 2008).

(“Akamai/Mckesson”) refused the divided infringement defense and allowed patentees to advance claims against divided infringers based on an inducement theory.<sup>2</sup>

In Akamai/McKesson, the court ruled *per curium*, six to five, that liability for induced infringement as defined by §271(b) does not require proof of the existence of direct infringement under §271(a) and that, thus, it does not require a single, direct infringer.<sup>3</sup> Here in this report are discussed the Federal Circuit’s *en banc* decision in Akamai/McKesson and its remaining unanswered issues and implications to the patent law community and industries.

## **II. Pre-Akamai/McKesson Standard for Induced Infringement under § 271(b)**

Patent infringement falls in two fundamental categories, direct infringement (codified in 35 U.S.C. § 271(a)) and indirect, vicarious infringement (codified in 35 U.S.C. § 271(b) for inducing direct infringement and 35 U.S.C. § 271(c) for contributing to direct infringement). Prior to Akamai/McKesson, for induced infringement under § 271(b), the Federal Circuit had required both (1) an intent (knowingly inducing acts that constitute infringement of a patent with knowledge of the patent) and (2) actual direct infringement of the patent as defined by § 271(a). Direct infringement under § 271(a) in turn traditionally requires proof that a single party, either personally or vicariously, commits all the acts necessary to infringe the patent. Thus, under the standard prior to Akamai/McKesson, divided infringement where the claim elements were performed by multiple independent entities was a complete defense against not only direct infringement but also indirect infringement.

### **A. Induced Infringement under § 271(b) Required a Specific *Mens Rea* and Direct Infringement under § 271(a)**

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<sup>2</sup> 692 F.3d 1301 (Fed. Cir. 2012) (*En Banc*).

<sup>3</sup> Id.

35 U.S.C. § 271(b) of the Patent Act defines induced infringement, stating that “whoever actively induces infringement of a patent shall be liable as an infringer.”<sup>4</sup> The Supreme Court interpreted “induce” broadly to mean “[t]o lead on; to influence; to prevail on; to move by persuasion or influence.”<sup>5</sup> Under the broad term of “induce,” one who promotes and encourages direct infringement is liable for induced infringement.<sup>6</sup>

In finding liability for induced infringement, although not explicit in § 271(b), courts read the section in light of § 271(c) and have found that it has an intent element--the knowledge of a patent at issue and a specific intent to induce acts that constitute infringement of the patent.<sup>7</sup>

Section 271(c) which defines contributory infringement states that:

[w]hoever offers to sell or sells within the United States, ... a component of a patented machine, manufacture, combination or composition ... constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.<sup>8</sup>

With respect to the level of intent, however, it had not been clear whether the level of intent is the same under both § 271(b) and § 271(c). Recently, the Supreme Court found that the intent prong of contributory and induced infringement under §§ 271(b) and (c) should be the same.<sup>9</sup>

Similarly, although not explicit in §§ 271(b) and (c), courts also have read § 271(a) to §§ 271(b) and (c), and found that they have a direct infringement element. Under such reading of § 271(a) into §§ 271(b) and (c), all forms of indirect infringement liability require establishment of direct infringement as defined by § 271(a) which states that:

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<sup>4</sup> 35 U.S.C.A. § 271(a) (West 2012).

<sup>5</sup> Global-Tech Appliances, Inc. v. SEB S.A., 131 S. Ct. 2060, 2065 (2011).

<sup>6</sup> Id.

<sup>7</sup> Metabolite Labs., Inc. v. Lab. Corp. of America, Inc., 370 F.3d 1354, 1365 (Fed. Cir. 2004) (recognizing that while not expressly stated in the statute, proof of intent is still required to induce infringement).

<sup>8</sup> 35 U.S.C.A. § 271(c).

<sup>9</sup> See Global-Tech, 131 S. Ct. at 2068.

[e]xcept as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.<sup>10</sup>

Historically, both induced infringement under § 271(b) and contributory infringement under § 271(c) have their root at common law that referred to both forms of indirect infringement simply as “contributory infringement.”<sup>11</sup> The common law “contributory infringement” was in turn rooted at the common law of joint tortfeasance.<sup>12</sup> Under the common law of joint tortfeasance, “one who intentionally caused, or aided and abetted, the commission of a tort by another was jointly and severally liable with the primary tortfeasor.”<sup>13</sup>

Stemming from the common law requirement of a “primary tortfeasor” for liability of contributory tortfeasor, courts had repeatedly established that there could be no indirect infringement without direct infringement.<sup>14</sup> As the Federal Circuit stated in Akamai/McKesson, a rationale for this requirement is that “[t]here is no such thing as attempted patent infringement, so if there is no [direct] infringement, there can be no indirect liability for infringement.”<sup>15</sup>

Expanding this further, the Federal Circuit, prior to Akamai/McKesson, interpreted § 271(b) in light of § 271(a) and required direct infringement under § 271(a) as a prerequisite for active inducement under § 271(b).<sup>16</sup> For example, the court in BMC Resources, Inc. v.

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<sup>10</sup> 35 U.S.C.A. § 271(a).

<sup>11</sup> See Donald S. Chisum, Chisum on Patents: A Treatise on the Law of Patentability, Validity and Infringement 17.02, at 17-3 & n.1 (2011) (overviewing types of infringement in relation to U.S. code provisions).

<sup>12</sup> Id.

<sup>13</sup> Hewlett-Packard Co. v. Bausch & Lomb, Inc., 909 F.2d 1464, 1469 (Fed. Cir. 1990).

<sup>14</sup> Aro Mfg. Co. v. Convertible Top Replacement Co., 365 U.S. 336, 341 (1961) (holding that the defendant who, without a license, made and sold replacement fabrics to fit cars using the patented top structures was not liable for contributory infringement on the ground that the car owner’s fabric replacement was permissible “repair” and not infringing “reconstruction,” so that there was no direct infringement by the car owner to which the defendant could contribute); Deepsouth Packing Co. v. Laitram Corp., 406 U.S. 518, 526 (1972) (confirming the view held in Aro Mfg. that there can be no contributory infringement without the fact or intention of a direct infringement).

<sup>15</sup> Akamai, 692 F. 3d. at 1308.

<sup>16</sup> BMC Resources, Inc. v. Paymentech, L.P., 498 F.3d 1373, 1379-1380 (Fed. Cir. 2007) (overruled by Akamai, 692 F.3d at 1308-09).

Paymentech, L.P. held that, to succeed in an action for indirect infringement, a patentee must first show that direct infringement under § 271(a) has occurred.<sup>17</sup>

### **B. The “Single Entity” Rule for Direct Infringement Liability under § 271(a)**

Through the process of applying § 271(a), courts established judicially created, so called, “single entity” rule that provides that direct infringement requires one entity performs each and every element of a patent claim.<sup>18</sup> Under the single entity rule, “whoever” of § 271(a) refers to only a single, individual entity for the purposes of direct infringement. Thus, for process or method claims, infringement occurs when one single party performs all of the steps of the process or method.<sup>19</sup>

A rationale for the single entity rule can be found in that the direct infringement is a strict liability offense unlike indirect infringement that requires a specific *mens rea*.<sup>20</sup> As being a strict liability, a showing of intent or knowledge of the patent is not required for direct infringement, and, thus, it may occur unintentionally and inadvertently.<sup>21</sup> In particular, the court in BMC explained that because of this strict liability nature of direct infringement, “it is limited to those who practice each and every element of the claimed invention.”<sup>22</sup>

### **C. The “Direction or Control” Test for Joint Infringement Liability under § 271(a)**

Despite that the single entity rule seemingly requires the identification of a single infringer for direct infringement, courts have recognized some form of joint infringement liability under 271§ (a) when more than one entity working “in concert” to bring about patent

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<sup>17</sup> Id.

<sup>18</sup> See Aro Mfg., 365 U.S. at 340; Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc., 424 F.3d 1293, 1311 (Fed. Cir. 2005).

<sup>19</sup> BMC, 498 F.3d at 1379.

<sup>20</sup> Global-Tech, 131 S.Ct. at 2068.

<sup>21</sup> See Id.

<sup>22</sup> 498 F.3d at 1381.

infringement.<sup>23</sup> Liability for joint infringement is not statutory but rather has been developed over time in the Federal Circuit.<sup>24</sup> In BMC, the Federal Circuit, however, declined to extend the doctrine of joint infringement beyond situations where one party who was involved in the infringement “controlled or directed” the second party’s activities or where direct infringement occurred and the second party’s involvement consisted of inducing or contributing to the infringement.<sup>25</sup> In particular, the BMC court found that “arms-length” agreements between parties were not enough to meet the “direction or control” test.<sup>26</sup> In its opinion, the court acknowledged that this created a loophole where parties could enter into arms-length agreements to avoid infringement.<sup>27</sup> However, the court indicated that “this concern does not outweigh concerns over expanding the rules governing direct infringement” and instead suggested that such concerns could be “offset by proper claim drafting” capturing infringement by a single entity.<sup>28</sup>

The “direction or control” test discussed in BMC was reiterated in Muniauction and Golden Hour.<sup>29</sup> In particular, the Federal Circuit in Muniauction emphasized that “where the actions of multiple parties combine to perform every step of a claimed method, the claim is directly infringed only if one party exercises ‘direction or control’ over the entire process.”<sup>30</sup> The Muniauction court further specified that the “direction or control” must be “such that every step is attributable to the controlling party” or the “mastermind,” differentiating it from mere

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<sup>23</sup> See Heaton-Peninsular Button-Fastener Co. v. Eureka Specialty Co., 77 F. 288, 297 (6th Cir. 1896).

<sup>24</sup> See BMC, 498 F.3d at 1379-80; Muniauction, 532 F.3d 1318, 1329-30 (Fed. Cir. 2008), Golden Hour Data Sys., Inc. v. Emscharts, 613 F.3d 1367, 1380 (Fed. Cir. 2010) and Akamai/McKesson.

<sup>25</sup> BMC, 498 F.3d at 1380-1381.

<sup>26</sup> Id. at 1381.

<sup>27</sup> Id.

<sup>28</sup> Id.

<sup>29</sup> Muniauction, 532 F.3d at 1329-30; Golden Hour, 613 F.3d at 1380.

<sup>30</sup> 532 F.3d at 1329-30.



arms-length relationship.<sup>31</sup> The court further explained that the “direction or control” test would be satisfied where traditional vicarious liability could be imposed on the accused direct infringer for the acts committed by the secondary party.<sup>32</sup> Under this standard, the court found that evidence that the defendant controlled access to the system and instructed bidders on its use was insufficient to incur liability for direct infringement.<sup>33</sup>

In applying the Federal Circuit’s “direction or control” test, district courts often found that evidence of mere guidance or instruction is generally insufficient and a contractual obligation or other agency relationship that gives rise to vicarious liability must exist to warrant a finding of joint infringement.<sup>34</sup> In relation to this strict and high bar for the joint infringement, Judge Newman’s dissent in Golden Hour is noted, which states that a “strategic partnership to sell the infringing system as a unit, is not immune from infringement simply because the participating entities have a separate corporate status.”<sup>35</sup>

### **III. New Standard for Induced Infringement under § 271(b) – Akamai/McKesson**

After Muniauction, the Federal Circuit had to deal with additional joint infringement issues in Akamai and McKesson where more than one party performed the claimed steps of patented methods. In both cases, the Federal Circuit held that the “direction or control” test must be read in the context of traditional agency law and that the action of one party could not be attributed to the accused infringer in the absence of an agency relationship or contractual obligation.<sup>36</sup> Judge Newman strongly expressed her dissent in McKesson as did she in Golden

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<sup>31</sup> Id.

<sup>32</sup> Id.

<sup>33</sup> Id.

<sup>34</sup> See Global Patent Holdings, LLC v. Panthers BHRC LLC, 586 F. Supp. 2d 1331, 1335 (S.D. Fla. 2008); Emtel, Inc. v. Lipidlabs, Inc., 583 F. Supp. 2d 811, 834 (S.D. Tex. 2008).

<sup>35</sup> 614 F.3d at 1383.

<sup>36</sup> Akamai Techs., Inc. v. Limelight Networks, Inc., 629 F.3d 1311, 1314 (Fed. Cir. 2010); McKesson Techs., Inc. v. Epic Systems Corp., 2011 U.S. App. LEXIS 7531, \*3 (Fed. Cir. 2011).

Hour. The Federal Circuit granted an *en banc* rehearing in both cases. The questions presented for the *en banc* rehearing were: (1) “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?”; (2) “if separate entities each perform separate steps of a method claim, under what circumstances, if any, would either entity or any third party be liable for inducing infringement or for contributory infringement?; and (3) “does the nature of the relationship between the relevant actors—e.g., service provider/user; doctor/patient—affect the question of direct or indirect infringement liability?”.<sup>37</sup>

As discussed fully below, however, the court’s *en banc* decision was specific to active inducement only under § 271(b) instead of the “single entity” rule of direct infringement under § 271(a). The court rejected its prior holding in BMC that liability for active inducement of infringement under § 271(b) required an act of direct infringement under § 271(a).<sup>38</sup> Specifically the court held that there could be active inducement of infringement if one party, with knowledge of the patent and with the requisite intent, induced a second party to perform certain steps of the patented method.<sup>39</sup> A detailed analysis of Akamai and McKesson cases and *en banc* rehearing of the cases by the Federal Circuit is discussed below.

#### **A. The Federal Circuit’s Decision in Akamai**

In 2006, Akamai Technologies, Inc. and the Massachusetts Institute of Technology (collectively “Akamai”) sued Limelight Networks, Inc. (“Limelight”) in the United States District Court for the District of Massachusetts for infringing Akamai’s patent, U.S. Patent No. 6,108,703 (“the ‘703 patent”). The district court granted judgment as a matter of law,

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<sup>37</sup> Akamai Techs., Inc. v. Limelight Networks, Inc., No. 2009-1372, slip. op. at 2 (April 20, 2011); McKesson Techs., Inc. v. Epic Systems Corp., No. 2010-1291, slip. op. at 2 (May 26, 2011).

<sup>38</sup> Akamai, 692 F.3d at 1306.

<sup>39</sup> Id.

overturning a jury verdict of infringement by Limelight on claims 19-21 and 34 of the ‘703 patent. Akamai appealed to the Federal Circuit.

Akamai’s claimed system is a web-site based service consisted of several computer systems for delivering “the base document of a website from a content provider’s computer while individual embedded objects of the website are stored on an object-by-object basis on a Content Delivery Network (“CDN”).”<sup>40</sup> The content provider computer stores the base document while the CDN stores individual embedded objects of the website.<sup>41</sup> The process of “modifying an embedded object’s URL to link to an object on the CDN is referred to as “tagging.”<sup>42</sup> Two independent claims 19 and 34 of the ‘703 patent require a “tagging” step. Claim 19 is reproduced below as an exemplary Akamai’s CDN claim:

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.

Limelight’s accused CDN service did not itself perform the “tagging” step of either claim 19 or 34.<sup>43</sup> Instead, Limelight provided the information necessary to its customers (content providers) so that they could perform the tagging step themselves.<sup>44</sup> Since Limelight did not perform every

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<sup>40</sup> Akamai, 629 F.3d at 1305.

<sup>41</sup> Id.

<sup>42</sup> Id. at 1316.

<sup>43</sup> Id. at 1317.

<sup>44</sup> Id.

step of the claims, Akamai relied on the joint infringement theory.<sup>45</sup> In particular, Akamai asserted that Limelight had necessary “direction or control” as defined in BMC because Limelight contractually required content providers to perform the tagging.<sup>46</sup>

In response to Akamai’s argument, the Federal Circuit extended the “direction or control” standard discussed in BMC and Muniauction to require that the parties have (1) an agency relationship or (2) a contractual obligation.<sup>47</sup> The court found that the presented facts were insufficient to find that Limelight’s customers (content providers) were contractually obligated to Limelight; the contract between the Limelight and its customers simply explained what the customers must do to take advantage of Limelight’s services.<sup>48</sup> Accordingly, the court affirmed the district court’s finding of non-infringement.<sup>49</sup>

## **B. The Federal Circuit’s Decision in McKesson**

Like in Akami, the claims of McKesson Tech., Inc. (“McKesson”) at issue were also internet-based methods.<sup>50</sup> Specifically, the patent at issue, U.S. Patent No. 6,757,898 (“the ‘898 patent”), relates to methods of communication between healthcare providers and patients in personalized web pages for doctors and patients.<sup>51</sup> Claim 1 of the ‘898 patent is representative of the claims asserted against Epic Sys. Corp. (“Epic”):

1. A method of automatically and electronically communicating between at least one health-care provider and a plurality of users serviced by the health-care provider, said method comprising the steps of:
  - initiating a communication by one of the plurality of users to the provider for information...;

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<sup>45</sup> Id. at 1318.

<sup>46</sup> Id.

<sup>47</sup> Id. at 1320.

<sup>48</sup> Id.

<sup>49</sup> Id. at 1318.

<sup>50</sup> McKesson, 2011 U.S. App. LEXIS 7531, at \*2.

<sup>51</sup> Id.

enabling communication by transporting the communication through a provider/patient interface...;  
electronically comparing content of the communication...;  
returning the response to the communication automatically...;  
said provider/patient interface providing a fully automated mechanism for generating a personalized page or area within the providers' website for each user serviced by the provider; and  
said patient-provider interface service center for dynamically assembling and delivering customer content to said user.

Epic developed MyChart software that allows healthcare provider to associate medical records with a patient's personalized web page.<sup>52</sup> Epic did not use MyChart software.<sup>53</sup> Rather, it licensed it to healthcare providers who then provided it to their patients.<sup>54</sup> Patients then must log on to the healthcare providers' MyChart web page to use the MyChart software, thereby "initiating a communication" to the provider.<sup>55</sup>

As in Akamai, McKesson and Epic did not dispute that Epic's MyChart software did not perform each and every step of the method.<sup>56</sup> In particular, Epic argued that Epic's customers (healthcare providers) neither performed the "initiating a communication" step nor exercised "direction or control" over the party that performed the "initiating a communication" step.<sup>57</sup> The district court agreed with Epic and granted Epic's motion for summary judgment.<sup>58</sup>

McKesson appealed the decision to the Federal Circuit, alleging induced infringement.<sup>59</sup> In particular, McKesson argued that a doctor-patient relationship was sufficient to satisfy the "direction or control" test.<sup>60</sup> In response to McKesson, the Federal Circuit applied the "direction or control" test under Akamai and found that a doctor-patient relationship was not an agency

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<sup>52</sup> Id. at \*3-\*5.

<sup>53</sup> Id.

<sup>54</sup> Id.

<sup>55</sup> Id.

<sup>56</sup> Id. at \*6.

<sup>57</sup> Id.

<sup>58</sup> Id. at \*4.

<sup>59</sup> Id.

<sup>60</sup> Id. at \*6.

relationship or a contractual obligation because “users acted principally for their own benefit and under their own control.”<sup>61</sup> The Federal Circuit ruled that, absence of an agency relationship or contractual obligation, the actions of MyChart users could not be attributed to Epic’s customers (healthcare providers) and that McKesson failed to demonstrate direct infringement by a single party and accordingly the alleged induced infringement.<sup>62</sup>

Judge Newman dissented, arguing that the agency or contractual obligation test set forth in Akamai conflicted with the precedent.<sup>63</sup> Further, Judge Newman stated that the court eliminated the patent incentive for interactive methods and their underlying technologies by upholding that “neither collaboration nor joint action nor facilitation nor authorization nor invitation can overcome the immutable barrier to infringement when all of the participating entities are not under the ‘control or direction’ of a mastermind infringer.”<sup>64</sup>

### C. The *En Banc* Decision of the Federal Circuit in Akamai/McKesson

The Federal Circuit later granted *en banc* review of the decisions in Akamai and McKesson and issued its opinion on August 31, 2012 for the combined Akamai and McKesson cases (Akamai/Mckesson). The court characterized the issue as “the question whether a defendant may be held liable for induced infringement if the defendant has performed some of the steps of a claimed method and has induced other parties to commit the remaining steps (as in the Akamai case), or if the defendant has induced others to collectively perform all the steps of the claimed method, but no single party has performed all of the steps itself (as in the Mckesson case).”<sup>65</sup> The *en banc* opinion, however, failed to address the “single entity” rule of direct

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<sup>61</sup> Id. at \*8.

<sup>62</sup> Id. at \*11.

<sup>63</sup> Id. at \*33.

<sup>64</sup> Id. at \*17.

<sup>65</sup> Akamai, 692 F.3d at 1305.

infringement. The court specifically chose not to change the current standard for joint infringement under § 271(a) and instead rendered its opinion on “inducement only” rule. In a 6-5 *en banc* decision, the court held that there could be active inducement of infringement on at least method claims where all the steps of the method claims were not performed by a single entity.<sup>66</sup> Judge Newman filed a dissent. Judge Linn also filed a separate dissent to which the other three dissenting judges joined. Both dissents harshly criticized the majority for making new policy and being a product of spontaneous judicial creation.<sup>67</sup>

### **1. The “Single Entity” Rule for Direct Infringement under § 271(a) Is Intact**

The Federal Circuit, sitting *en banc*, chose not to change the current standard for joint infringement under § 271(a).<sup>68</sup> The majority acknowledged that doctrinal problems arise “when the acts necessary to give rise to liability for direct infringement are shared between two or more actors.”<sup>69</sup> However, the court specifically stated that “we have no occasion at this time to revisit any of those principles regarding the law of divided infringement as it applies to liability for direct infringement under 35 U.S.C. § 271(a).”<sup>70</sup> As such, the joint infringement inquiry as it applies to direct infringement liability under § 271(a) seems to continue to focus on the relationship between the jointly accused infringers. Courts will likely keep applying the “direction or control” standard of BMC and Muniauction and require parties to have: (1) an agency relationship or (2) a contractual obligation, for a finding of joint, direct infringement under § 271(a).

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<sup>66</sup> Id.

<sup>67</sup> Id. at 1320, 1337.

<sup>68</sup> Id. at 1307.

<sup>69</sup> Id. at 1305.

<sup>70</sup> Id.

## 2. Divorcing § 271(b) from § 271(a): Actual Direct Infringement Is Still Required, But Not the Single Party Liability, for Induced Infringement of Method Claims

The Federal Circuit focused its decision specifically on the induced infringement under § 271(b). The court found the requirement of proof of direct infringement for active inducement “well settled” under its prior precedent, stating that “if there is no infringement, there can be no indirect liability for infringement.”<sup>71</sup>

However, the majority of the court overruled its prior decision in BMC that required that a single entity perform all the steps of a claimed method for there to be inducement of infringement.<sup>72</sup> The majority found that the BMC’s holding of the single entity doctrine combined two distinct requirements into the active inducement standard: (1) requirement of direct infringement for active inducement, and (2) requirement of a single entity committing the direct infringement.<sup>73</sup> In rejecting the latter while agreeing with the former, the majority specifically made distinction between *liability* for direct infringement under § 271(a) and the *act* of direct infringement supporting a claim of inducement under § 271(b):

[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>74</sup>

This distinction in effect is to eliminate the “single entity” rule or the “direction or control” test of BMC and Muniauction for inducement liability under § 271(b). With such elimination, while direct infringement under § 271(a) requires “the accused infringer ... perform all of the steps of the claimed method, either personally or through another acting under his direction or control,” the act of direct infringement supporting induced infringement under § 271(b) may require only that all the claimed steps are performed by any number of actors. The majority explained that an

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<sup>71</sup> Id. at 1308.

<sup>72</sup> 498 F.3d at 1379.

<sup>73</sup> Akamai 692 F.3d at 1308-09.

<sup>74</sup> Id. at 1309 (emphasis original).



inducer had the same impact on the patentee whether he induced one party or multiple parties to infringe.<sup>75</sup> Further, the majority held that, for joint infringement, only the inducer is liable, but not the direct infringers because the “single entity” rule still holds for direct infringement (although the patent rights are “plainly being violated” by the actor’s joint conduct).<sup>76</sup>

In support of its “inducement only” rule, the majority relied on the plain meaning of the statute, the legislative history of Patent Act of 1952, and tort and criminal law. First, the majority found that nothing in the text of § 217(b) (which states “[w]hoever actively induces infringement of a patent shall be liable as an infringer”) indicates that the term “infringement” in § 271(b) is limited to “infringement” by a single entity.<sup>77</sup> The majority asserted that “[s]ection 271(a) does not define the term ‘infringement’ and that ‘it simply sets forth a type of conduct that qualifies as infringing.’”<sup>78</sup> Further relying on independence of §§ 271(e)(2), (f), (g) from § 271(a), the majority rather determined that the term “infringement” in § 271(b) “appears to refer most naturally to the acts necessary to infringe a patent, not to whether those acts are performed by one entity or several.”<sup>79</sup>

In defining the term “infringement” § 271(b) independent from § 271(a), the majority also looked to the legislative history of the Patent Act of 1952 and concluded that Congress did not contemplate a “single entity” requirement for § 271(b).<sup>80</sup> As discussed above in Section II, prior to the 1952 Act, common law referred to both inducement infringement and contributory infringement as “contributory infringement.”<sup>81</sup> The 1952 Act broke the two concepts and

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<sup>75</sup> Id.

<sup>76</sup> Id. at 1306.

<sup>77</sup> Id. at 1309.

<sup>78</sup> Id. at 1314.

<sup>79</sup> Id. at 1309, 1314.

<sup>80</sup> Id. at 1309-1310.

<sup>81</sup> Id. at 1309.

codified in two separate sections, §§ 271(a) and (b).<sup>82</sup> In particular, the majority resorted to the House Report on the 1952 Act, stating that § 271(b) “recites in broad terms that one who aids and abets an infringement is likewise an infringer.”<sup>83</sup> Further it relied on the testimony of Gile Rich, one of the principal drafters of the statute, before the House hearing that “the revised provisions on infringement were intended to reach cases of divided infringement, even when no single entity would be liable for direct infringement.”<sup>84</sup>

The majority also resorted to other areas of the law for additional support, stating that “[a] principal’s liability for acts committed not only through an agent but also by an innocent intermediary who was not induced by the principal is not an idiosyncrasy of patent law.”<sup>85</sup> For example, the aiding and abetting provision of 18 U.S.C. § 2(a) in the Federal criminal code states that “[w]hoever commits an offense against the United States or aids, abets, counsels, commands, induces or procures its commission is punishable as a principal.”<sup>86</sup> Similar to § 271(b) in language, 18 U.S.C. § 2(b) states that “[w]hoever willfully causes an act to be done which if directly performed by him or another would be an offense against the United States, is punishable as a principal.”<sup>87</sup> The majority noted that 18 U.S.C. § 2(b) has been construed to permit the conviction of an accessory who induces or causes a criminal offense even when the principal is found not liable.<sup>88</sup>

Similarly, the majority noted that “[t]ort law also recognizes the doctrine of liability for inducing innocent actors to commit tortious acts.”<sup>89</sup> For example, The Second Restatement of Torts 877(a) (1979) provides that “a person is liable for tortious conduct if he ‘orders or induces

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<sup>82</sup> Id.

<sup>83</sup> Id.

<sup>84</sup> Id. at 1310.

<sup>85</sup> Id. at 1311.

<sup>86</sup> Id.

<sup>87</sup> Id.

<sup>88</sup> Id.

<sup>89</sup> Id. at 1312.

the conduct, if he knows or should know of circumstances that would make the conduct tortious if it were his own.”<sup>90</sup> Induced infringement historically has its root at the common law principles of joint tortfeasance.<sup>91</sup>

The Federal Circuit remanded the Akamai and McKesson cases to the district court for further proceedings in light of the decision of Akamai/McKesson.<sup>92</sup> Akamai and McKesson now may prevail, under the new “inducement only” rule, if they can show that: (1) the defendants knew of the patent(s) at issue, (2) the defendants induced the performance of the steps of the method claimed in the patent(s) or performed all but one of the steps of the method claimed in the patent(s), and (3) those steps were actually performed.<sup>93</sup>

#### **D. Judge Linn’s Dissent (Judges Dyk, Prost, and O’Malley Joining)**

In contrast, Judge Linn, joined by Judges Dyk, Prost and O’Malley, argued that the “single entity” rule should apply to § 271(b) as well as § 271(a) since the definition of “infringement” as defined under § 271(a) applies to both direct infringement under § 271(a) and induced infringement under § 271(b).<sup>94</sup> Relying on the Supreme Court’s statement in Aro Mfg. that “it is settled that if there is no direct infringement of a patent there can be no contributory infringement,” Judge Linn rejected the majority’s “divorcing liability under § 271(a) from liability under § 271(b).”<sup>95</sup> Judge Linn further explained that proper claim drafting could usually be used to avoid the issue of joint infringement and capture infringement by a single party.<sup>96</sup>

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<sup>90</sup> Id.

<sup>91</sup> Id.

<sup>92</sup> Id. at 1318-19.

<sup>93</sup> Id.

<sup>94</sup> Id. at 1337.

<sup>95</sup> Id. at 1338-40.

<sup>96</sup> Id. at 1349-50.

In his view, the plain language of the statute and the Supreme Court’s holdings in Aro Mfg. is in line with the prior decisions of the court in BMC and Muniauction.<sup>97</sup> He specifically argued that the idea of defining infringement separately in the context of §§ 271(a) and (b) was simply unsupported by the text itself.<sup>98</sup> He further argued that inaction by Congress in the Leahy-Smith America Invents Act, Pub. L. No. 112-29 (2011), while it was aware of BMC and Muniauction, indicated that Congress did not intend to abrogate the “single entity” rule.<sup>99</sup>

Further, Judge Linn criticized the majority acting as a policy maker, asserting that the court’s redefining the term “infringement” differently under §§ 271(a) and (b) was not permissible and that, in doing so, the court assumed a role reserved for Congress.<sup>100</sup> He noted that a rule based solely on the relationship between relevant actors created a legal loophole and that the loophole was to be filled by Congress: “The majority opinion is rooted in its conception of what Congress ought to have done rather than what it did.”<sup>101</sup>

#### **E. Judge Newman’s Dissent**

Judge Newman filed a separate dissent, stating that the majority’s “inducement only” rule was a dramatic change in the law of infringement.<sup>102</sup> She further stated that the new rule “simply imposes disruption, uncertainty, and disincentive upon the innovation communities.”<sup>103</sup>

In particular, Judge Newman rejected both the “inducement only” rule by the majority and the “single entity” rule by Judge Linn.<sup>104</sup> In her view, “neither the single-entity rule nor the majority’s newly minted inducement-only rule is in accordance with the infringement statute or

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<sup>97</sup> Id. at 1337.

<sup>98</sup> Id. at 1338-39.

<sup>99</sup> Id. at 1343.

<sup>100</sup> Id. at 1337-38.

<sup>101</sup> Id. at 1337.

<sup>102</sup> Id. at 1319.

<sup>103</sup> Id.

<sup>104</sup> Id. at 1319.

with any reasonable infringement policy.”<sup>105</sup> Instead of those rules, she argued that infringement may occur when all of the claimed steps are performed without regard to how many parties are involved or their relationship.<sup>106</sup> She also criticized Judge Linn’s argument that ingenious claim drafting can avoid single entity problems, asserting that “the presence or absence of infringement should not depend on cleverness or luck to satisfy a malleable single-entity rule.”<sup>107</sup>

#### **IV. Implications of Akamai/Mckesson’s New “Inducement Only” Rule for Liability under § 271(b) to the Patent Law Community and Industries**

According to Akamai/McKesson, it is possible to induce infringement even if no single entity performs all of the steps of the patented method or process, so long as all of the steps are eventually performed and a party has induced others to perform those steps. Akamai/McKesson brings certain clarity to the issue of divided infringement, but there are still remaining issues unanswered by the Akamai/McKesson court. Also, the new “inducement only” rule for liability under § 271(b) may exert significant implications to the patent law community and industries.

##### **A. Akamai/Mckesson Provides Heightened Protection to Patentees of Method or Process Claims, but Increases Vulnerability of Companies to Infringement Liability**

The majority decision of Akamai/McKesson is undoubtedly favorable for patentees of method or process claims, irrespective of technology fields, because it may impose inducement liability to a party who traditionally could raise a divided infringement defense. This case obviously adds value to method or process claims. As discussed above, under the new standard of Akamai/McKesson, inducement liability does not require that there be a single induced party that performs all of the claimed steps, or that the induced party be under the direction or control of the inducer. Although the patentee still needs to overcome the intent prong, the majority

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<sup>105</sup> Id. at 1321.

<sup>106</sup> Id. at 1323.

<sup>107</sup> Id. at 1325.

decision certainly makes it easier for method or process patent holders in the interactive computer services, medical diagnostics or personalized medicine areas to enforce their method or process patents.

While the repercussion of the Akamai/McKesson decision can be found in any technology fields, it appears to have significant implications particularly in the interactive computer service area. For example, a patent holder (like Akamai or McKesson) of cloud services (referring to computing services provided from a remote location, such as providing its service to a large web retailer who then uses the service to create an online shopping portal) could benefit greatly from the majority ruling. This is particularly so as the degree of interactions among different level of providers and the ultimate users gets more complex and intertwined and thus drafting claims from only one party's perspective gets extremely difficult if not impossible.

Akamai/McKesson also appears to have significant implications in the medical diagnostics or personalized medicine area. For example, diagnostic claims in life science or biotech industries can now enjoy more value. The decision provides some breathing room for diagnostic or personalized medicine claims which may need to have more than a diagnostic step to pass muster of the recent heightened standard of patentable subject matter under § 101 in Mayo Collaborative Servs. v. Prometheus Labs. Inc.<sup>108</sup>

For example, according to the Mayo's standard, a single step of diagnosis (such as “diagnose the presence of disease X by detecting biomarker Y in a patient's blood) without an additional step of, for example, analyzing or detecting biomarker Y may not pass the muster of § 101 in Mayo. Specifically, under the Supreme Court's reasoning in Mayo, the correlation between disease X and biomarker Y that is present and naturally-occurring in patient's blood

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<sup>108</sup> 132 S. Ct. 1289 (2012).

may well be viewed as a law of nature. The diagnosing step and the detection or analyzing step are generally performed by different entities. The patent applicant may rely on an agency relationship or a contractual obligation between the different entities, but as discussed above, establishing such agency relationship or contractual obligation is a high bar to prove. Thus, under the pre-Akamai/Mckesson standard, a patent applicant would confront a dilemma between the “single entity” rule and the new heightened standard under § 101 that may require more than a diagnostic step. Now under the new Akamai/McKesson standard, a claim capturing multiple entities can enjoy patent protection enforceable at least against induced infringement under § 271(b) although still not against direct infringement under § 271(a).

On the flip side, however, the Akamai/McKesson decision may increase the likelihood that companies could find themselves a party to a lawsuit as an actor who performs less than all of a patented method or process. For example, a biotech company who labels new drug Z or a diagnostic kit with personalized medicine instructions (e.g., “test for detection of biomarker Y and, if present, treat disease X with drug Z”) could potentially be liable for inducing infringement even absent of an agency relationship with the physician or the clinical laboratory. Prior to the decision, the fact that there is no single party who infringes every step of the patented method or process provides companies a powerful defense of divided infringement. As discussed above, the “single entity” rule is a relatively high bar that requires a certain agency relationship or contractual obligation in joint infringement, and cannot be satisfied by a general arms-length agreement. That is no longer the case. Liability for induced infringement may now come in without such single party if all of the steps of the patented method or process are performed and the company is viewed as an inducer (either a participating or nonparticipating

inducer) of the performance. Arms-length agreements no longer provide protection against inducement liability.

Thus, it is recommended for companies to understand how their product or service is used in a commercial or networked setting in addition to considering the function of the product or service itself. For example, companies need to understand not only how their products or services function but also: how their products or services interact with others, including both upstream and downstream connected parties; and who are the customers of the products or services; and what the potential use scenarios are.

Importantly, it is noted that inducement liability still requires knowledge of the patent at issue. Thus, a party cannot be liable for inducement before learning of the patent. However, a specific intent prong can be met by “willful blindness,” as ruled by the Supreme Court in Global-Tech. Considering the advanced internet-based technology and increased free public access to patent publications and to search engines, it might get difficult to simply argue no knowledge of the patent particularly in the field of the company’s products or services. Accordingly, higher degree of due diligence may be required than before.

## **B. Patent Claim Drafting and Prosecution**

The “inducement only” rule of Akamai/McKesson may provide claim drafters a viable avenue for protecting previously unpatentable methods or processes. Prior to the Akamai/McKesson decision, careful and creative patent claim drafting to recite only steps or actions performed by a single party were extremely important for method and process claims. Defendants often asserted divided infringement as a defense in cases in which they did not perform all steps of a method claim. While careful and creative patent claim drafting is still



important to preserve direct infringement under § 271(a), the Akamai/McKesson decision certainly reduces the need for a particular variety of claim-drafting creativity.

Although Judge Linn asserted that divided infringement can be avoided by creative claim drafting, drafting a claim reciting only steps (typically one step) performed by a single party may jeopardize claim clarity, or sometimes it is even impossible to do so. Claims often are to be drafted awkwardly to contain multiple clauses (instead of specific steps) describing, for example, a second party's device or actions. For example, instead of reciting the multiple steps of "transmitting a signal from A to B; receiving the signal by B; and processing the signal by C to perform Q," claims are to be drafted to recite a single step with multiple clauses, such as "receiving a signal by B, the signal being transmitted from A to B, and the received signal by B being processed by C to perform Q," or "transmitting a signal from A to B, the signal being configured to be received by B and to be processed by C to perform Q," or "processing a signal by C to perform Q, the signal being configured to be transmitted from A to B and to be received by B." Such multiple clauses sometimes impair claim clarity. Further, they may be treated as non-limiting claim elements for being functional limitations, which in turn may bring in prior art issue because they are not limiting.

In certain inventions where the novel and non-obvious core of the invention is a combination of multiple steps rather than each individual step, it is even impossible to draft a claim to keep only a single party. For example, in a cloud computing technology, high degree of interactions among multiple parties are typically involved and often such interactions among multiple parties are the core of the invention.

Similarly, as discussed above, drafting a claim to recite only single step to keep only a single party got harder in the biotechnology and personal medicine areas in order not to be

discarded as being unpatentable under the Supreme Court’s heightened patentability standard in Mayo.

The Akamai/Mckesson decision relieves such claim drafting difficulty in certain area. Claims may now be drafted to cover scenarios in which multiple parties perform the claimed steps. Even though direct infringement of such claims is still not possible without the “direction or control” by the accused infringer, they now can be enforced under an inducement theory. The enforceability of such claims enables patent applicants to provide an additional layer of protection of their invention even when claims directed to a single party can be relatively drafted.

### **C. Remaining Issues Unanswered by the Akamai/Mckesson Court**

Akamai/McKesson brings certain clarity to the issue of divided or joint infringement where different entities perform different steps of a patent method or process. However, it leaves certain issues still unanswered and opens up certain additional issues, as discussed below.

#### **1. Is the “Inducement Only” Rule Applicable to Only Method or Process Claims?**

It seems that the Akamai/McKesson’s ‘inducement only’ rule is limited to method or process claims only. Although it is not absolutely clear about whether it could also be applicable, for example, to system claims, the court specifically stated that “[t]he problem of divided infringement in induced infringement cases typically arises only with respect to method patents.”<sup>109</sup>

This might be in line with the Federal Circuit’s recent bifurcated approach in NTP, Inc. v. Research in Motion, Ltd.<sup>110</sup> The court in NTP treated different claim types (e.g., system claims and method claims) differently even though the plain language of § 271(a) does not create

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<sup>109</sup> Id. at 1305.

<sup>110</sup> 418 F.3d, 1282 (Fed. Cir. 2005).

different forms or requirements for infringement based on the type of claims. In NTP, the patent claims at issue were directed to methods and systems for sending and receiving e-mail over a network, and the issue before the court was whether the using a patented invention is an infringement if a component or step of the patented invention is located or performed abroad.<sup>111</sup> The NTP court held that the defendant was liable even though part of its accused infringing system was located in Canada, reasoning that the “use” of a patented system under § 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).<sup>112</sup> However, for the method claims, the court viewed that the “use” of a patented method or process cannot be made ‘within the United States’ as required by section § 271(a) unless each of the steps is performed within this country.<sup>113</sup>

However, it is noted that the analysis of the Federal Circuit in Akamai/McKesson in coming up with the “inducement only” rule is also equally applicable to other types of claims. In addition, the Federal Circuit’s initial discussion makes the rule appear to be one of general applicability to all types of inventions. It remains to be seen how the Federal Circuit will apply its “inducement only” rule with respect to divided infringement issues of claims other than methods or processes.

## **2. Joint Infringement under § 271(a) and Remedy Calculations for Inducement Infringement under § 271(b) Only with No Liable Direct Infringer**

The Akamai/McKesson decision is limited to induced infringement under § 271(b) only. The original question of divided infringement presented to the Federal Circuit remains

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<sup>111</sup> Id. at 1290.

<sup>112</sup> Id. at 1317.

<sup>113</sup> Id. at 1317-18.

unanswered because the court explicitly avoided any determinations as to whether the separate entities might somehow be liable collectively for direct patent infringement under § 271(a).

Another remaining issue is about the calculation of damages for induced infringement only under § 271(b) while there is no liable direct infringer. 35 U.S.C. § 284 only permits damages to compensate for the infringement, but the Akamai/Mckesson court did not address about how compensation is measured for induced infringement only especially when one or more innocent parties performed some steps of the claimed method. It is also unclear, as Judge Newman expressed in her dissent, whether the inducer would be subject to double or treble damages since the inducer is liable when he breaches the duty not to induce.

### **3. Has Akamai/Mckesson Eliminated the Territorial Restrictions of Induced Infringement under § 271(b)?**

The Akamai/McKesson court interpreted “infringement” under § 271(b) independent from “infringement” defined under § 271(a). Specifically, the majority of the court provided a new definition of “infringement” for induced infringement under § 271(b), not dependent from § 271(a).

Separation of § 271(b) from § 271(a) may open questions as to the territorial restriction traditionally that has been imposed to induced infringement. Unlike §§ 271(a) and (c), § 271(b) does not contain territorial limits. Rather, similar to the “single entity” rule, the territorial restriction for induced infringement under § 271(b) has its root to direct infringement under § 271(a) which was a prerequisite for induced infringement under § 271(b).<sup>114</sup> Accordingly, under the traditional territorial restrictions, all of the infringing acts even for liability under § 271(b)

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<sup>114</sup> See Timothy R. Holbrook, Emory University School of Law Legal Studies Research Paper Series, Research Paper No. 12-227: The Potential Extraterritorial Consequences of Akamai, <http://ssrn.com/abstract=2154277>.

must take place “within” the United States or the patented invention must be imported “into the United States.”<sup>115</sup>

It is not clear whether the Akamai/McKesson court intended to remove the territorial constraints from induced infringement under § 271(b) when it treated § 271(b) independent from § 271(a). Patent rights are territorial rights, and generally have no extraterritorial effect.<sup>116</sup> Given the presumption against extraterritoriality, complete removal of the territorial constraints is very unlikely. However, certain extent of extraterritorial effect can be reasonably envisioned, considering the Federal Circuit’s recent, although limited, extraterritorial reach for certain patent infringement. For example, the Federal Circuit extended its reach to beyond the United States for a system patent under the “control-and-beneficial use” doctrine in NTP. Also, in Merial Ltd. v. Cipla Ltd., the Federal Circuit extended the scope of affirmative acts under § 271(b) to capture certain activities occurred outside of the United States.<sup>117</sup>

## **V. Conclusion**

The Federal Circuit’s Akamai/McKesson decision arguably loosens the standard for induced infringement. It provides some clarity to the issue of “divided infringement” and fills a loophole where different entities perform different steps of a patented process or method, but also leaves many unanswered questions as to the boundaries of § 271(b) and its interaction with § 271(a). It remains to be seen, however, whether the Supreme Court would review once the parties request review by the Supreme Court, considering the far reaching consequences of the decision and the lack of agreement by a substantial majority of the Federal Circuit judges.

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<sup>115</sup> See NTP, 418 F.3d at 1318 (holding that a process cannot be used “within” the United States as required by § 271(a) unless each of the steps is performed within this country).

<sup>116</sup> See Microsoft Corp. v. At&T Corp., 550 U.S. 437, 442 (2007) (holding that § 271(f) of the Patent Act does not extend to cover foreign duplication of software).

<sup>117</sup> 681 F.3d 1283, 1302 (Fed. Cir. 2012) (confirming that § 271(b) can regulate affirmative acts that occurred outside of the United States, but actively induced an act of direct infringement occurred within the United States).