BRIDGING THE (LIABILITY) GAP: THE SHIFT TOWARD § 271(b) INDUCEMENT IN AKAMAI REPRESENTS A PARTIAL SOLUTION TO DIVIDED INFRINGEMENT

Abstract: In recent years, the U.S. Court of Appeals for the Federal Circuit made it increasingly difficult for patentees of method patents to hold any party liable for infringement in divided infringement cases. As such, the Federal Circuit failed to adequately protect method patentees, leaving a glaring liability loophole in patent infringement jurisprudence. In 2012, however, in Akamai Technologies, Inc. v. Limelight Networks, Inc., the en banc Federal Circuit marked a fundamental shift in its divided infringement jurisprudence, holding that claims practiced by multiple actors could be resolved through an application of inducement infringement. Under this new standard, parties may be held liable for induced infringement as long as they intentionally "cause, urge, encourage, or aid" others to perform each step of the method claim, regardless of how many entities carried out the claim. This Note argues that although the Akamai decision will serve as a crucial step toward closing the divided infringement liability gap, the court missed an opportunity to further close the gap. To fill in this gap, this Note contends that the Federal Circuit should revisit and expand its divided infringement standards to capture every type of arrangement among multiple actors, not just those that result in inducement. This approach would provide method patentees with a flexible scheme to assert their patent rights.

Introduction

The U.S. Court of Appeals for the Federal Circuit made it increasingly difficult in recent years for patentees of method patents to hold any party liable for patent infringement in divided infringement cases.¹ Unlike individual infringement, which occurs when a single actor in-

¹ See Akamai Techs., Inc. v. Limelight Networks, Inc. (Akamai II), 692 F.3d 1301, 1305–07 (Fed. Cir. 2012) (en banc) (per curium), petition for cert. filed, 81 U.S.L.W. 3395 (U.S. Dec. 28, 2012) (No. 12-786); McKesson Techs., Inc. v. Epic Sys. Corp., 98 U.S.P.Q.2d 1281, 1283–85 (Fed. Cir. 2011), rev'd sub nom. Akamai II, 692 F.3d 1301; Akamai Techs., Inc. v. Limelight Networks, Inc. (Akamai I), 629 F.3d 1311, 1320–22 (Fed. Cir. 2010), rev'd per curium, 692 F.3d 1301; Golden Hour Data Sys., Inc. v. emsCharts, Inc., 614 F.3d 1367, 1380–81 (Fed. Cir. 2010); Muniauction, Inc. v. Thomson Corp., 532 F.3d 1318, 1328–30 (Fed. Cir. 2008).

fringes each element of a patent, divided infringement occurs when the acts necessary to give rise to direct infringement are split among multiple actors.² Divided infringement occurrences are typically limited to method patents, which involve multiple steps of a process.³ Even though the patentee's rights are clearly violated by the combined conduct, the Federal Circuit struggled to delineate who, if anyone, is liable for infringement in these divided infringement scenarios.⁴ As a result, the Federal Circuit failed to adequately protect method patentees and left a glaring liability loophole in patent infringement jurisprudence.⁵

This liability gap originated from the 2007 case in *BMC Resources*, *Inc. v. Paymentech, L.P.*, in which the Federal Circuit held that liability for direct patent infringement under 35 U.S.C. § 271(a) required a single actor to perform each and every step in a method claim.⁶ The court's reasoning was based on a narrow interpretation of § 271(a).⁷

² Akamai II, 692 F.3d at 1305–06. Patent infringement is codified under 35 U.S.C. § 271. 35 U.S.C. § 271 (2006 & Supp. IV 2010). Under § 271(a), a single actor is liable for direct infringement when the party commits all of the elements of a patent claim. Akamai II, 692 F.3d at 1305; see § 271(a). Under § 271(b), a single actor is liable for induced infringement if that actor induces another actor to commit all the elements of a patent claim. Akamai II, 692 F.3d at 1305; see § 271(b). Single actor cases are straightforward and uncomplicated. See Akamai II, 692 F.3d at 1305–06.

³ Akamai II, 692 F.3d at 1305. This is because product patents are directly infringed by the party that installs the last component and thus "creates" the infringing product. Id. at 1305–06. Method patents, however, involve multiple steps of a claimed process—all of which have the potential to be performed by different entities at different stages of the process. Id. at 1306. Process claims involving computer network operations and business methods over the Internet are particularly susceptible to divided infringement—often requiring steps to be performed by both clients and the network server. Mark A. Lemley et al., Divided Infringement Claims, 33 AIPLA Q.J. 255, 256 (2005); Joshua P. Larsen, Note, Liability for Divided Performance of Process Claims After BMC Resources, Inc. v. Paymentech, L.P., 19 DePaul J. Art, Tech. & Intell. Prop. L. 41, 42 (2008).

⁴ See Akamai II, 692 F.3d at 1305-06; Golden Hour, 614 F.3d at 1320-22; Muniauction, 532 F.3d at 1328-30.

⁵ E.g., Damon Gupta, Virtually Uninfringeable: Valid Patents Lacking Protection Under the Single Entity Rule, 94 J. Pat. & Trademark Off. Soc'y 61, 62, 74 (2012); W. Keith Robinson, No "Direction" Home: An Alternative Approach to Joint Infringement, 62 Am. U. L. Rev. 59, 63–64, 67 (2012); Reza Dokhanchy, Note, Cooperative Infringement: I Get By (Infringement Laws) with A Little Help from My Friends, 26 Berkeley Tech. L.J. 135, 135–36, 150 (2011); Ken Hobday, Note, The Incredibly Ever-Shrinking Theory of Joint Infringement: Multi-Actor Method Claims, 38 Cap. U. L. Rev. 137, 140–41 (2009); Joanna Liebes, Note, Akamai: A Cure for Medical Process Patent's Prometheus Ailment?, 5 Hastings Sci. & Tech. L.J. 309, 334 (2013); see Akamai II, 692 F.3d at 1305–07; BMC Res., Inc. v. Paymentech, L.P., 498 F.3d 1373, 1378–82 (Fed. Cir. 2007).

⁶ 498 F.3d at 1378–79. Moreover, the Federal Circuit panel held that to be liable for induced infringement under § 271(b), there must first be a predicate finding that a single party has committed direct infringement. *Id.* at 1379–80.

⁷ See id. at 1380.

The court tried to fill the liability gap that would result in applying its strict "single entity" standard by imposing vicarious direct infringement liability on parties for the acts of another—but only in circumstances where those parties "control or direct" other parties' actions (the "control or direct" standard).⁸

In 2012, in Akamai Technologies, Inc. v. Limelight Networks, Inc. (Akamai II), an en banc Federal Circuit reversed a key portion of its holding in BMC.⁹ In a 6–5 opinion, the court marked a fundamental shift in its jurisprudence regarding divided infringement of method patents.¹⁰ The court reasoned that the Federal Circuit precedent had created a divided infringement liability gap that was unsound as a matter of statutory interpretation, the Circuit's own precedent, and patent policy generally.¹¹ Instead of reshaping the contours of § 271(a) vicarious direct infringement liability, however, the court held that claims carried out or practiced by multiple actors could be resolved through an application of inducement infringement under § 271(b).¹² To effectuate this shift, the court rejected BMC's holding that there must be a

⁸ Id. at 1379-82. This scenario is referred to as "joint infringement." Id. at 1380; Dokhanchy, supra note 5, at 143. The "control or direct" standard for vicarious liability in divided infringement scenarios has been difficult to satisfy, and as a result, courts have granted summary judgment to defendants when there has been no showing of direct infringement by a single party—either individually or vicariously. See McKesson, 98 U.S.P.Q.2d at 1283-85; Akamai I, 629 F.3d at 1320-22 (reasoning that the "control or direct" standard exists only when either an agency relationship exists or when one party is contractually obligated to the other to perform the steps of the claimed method); Golden Hour, 614 F.3d at 1380–81 (holding lack of control or direction for a joint enterprise arrangement); Muniauction, 532 F.3d at 1328-30 (requiring that a party exercise sufficient control or direction over the entire process "such that every step is attributable to the controlling party, i.e., the 'mastermind'" for the "control or direct" standard to be satisfied). Accordingly, method patentees have been confronted with large gaps in the protection of their patents when the various steps of their claims are completed by independent third parties. Gupta, supra note 5, at 74; Robinson, supra note 5, at 63-64; Dokhanchy, supra note 5, at 135-36; see Akamai II, 692 F.3d at 1306-07.

⁹ Akamai II, 692 F.3d at 1306.

¹⁰ *Id.* at 1319 (Newman, J., dissenting); *id.* at 1337, 1342 (Linn, J., dissenting); *see id.* at 1305–07 (majority opinion).

¹¹ Id. at 1305–06.

¹² *Id.* at 1306–09. The presumable result of the Federal Circuit leaving its § 271(a) direct infringement jurisprudence in place is that the *BMC* "control or direct" standard—and the cases that adopted and interpreted *BMC*—still marks the way in which a defendant can be held vicariously liable for the infringing actions of another under § 271(a) direct infringement in non-inducement scenarios. *See id.* at 1307–08 (reaffirming that a party to multi-actor infringement will not be liable for § 271(a) direct infringement without satisfaction of the "control or direct" standard); *infra* notes 140, 217–220 and accompanying text (detailing the Federal Circuit's attempt to close the liability gap with its § 271(b) inducement standard and noting the continued use of § 271(a) and the strict "control or direct" standard absent evidence of inducement).

predicate finding of direct infringement by a *single* entity in order to find a party liable for induced infringement under § 271(b).¹³ Thus, the court made it easier for there to be a finding of inducement liability.¹⁴

The Federal Circuit's holding in *Akamai II* attempted to close the glaring loophole in patent infringement that existed as a result of the Federal Circuit's strict construction of the "control or direct" standard for § 271(a) vicarious direct infringement.¹⁵ The court's reinterpretation of its inducement infringement standard to no longer require a predicate finding of direct infringement by a single entity will serve as a crucial step in closing the divided infringement liability gap, and will protect patentees in many divided infringement scenarios involving innocent actors who are unaware of their part in a larger method patent infringing scheme.¹⁶

The Akamai II decision, however, represents only an incomplete solution to the problem of divided infringement.¹⁷ The court's unaltered use of the stringent BMC "control or direct" standard for § 271(a) vicarious joint infringement will continue to fail to capture collaborative or joint enterprise arrangements among multiple actors that occur in non-inducement scenarios.¹⁸ Previous Federal Circuit case law shows that such collaborative or joint enterprise arrangements fail to meet the heightened "control or direct" standard.¹⁹ Yet the Akamai II court's policy concerns surrounding the divided infringement liability gap apply just as strongly to these collaborative or joint enterprise situations.²⁰ If

¹³ Akamai II, 692 F.3d at 1306.

¹⁴ See id. at 1308; Liebes, supra note 5, at 345–46. The result is that a party may be held liable for induced infringement under § 271(b) as long as the party "cause[ed], urge[ed], encourage[ed], or aid[ed]" others to perform the steps of a method claim, acted with the requisite intent, and all the steps of the claim were indeed completed. Akamai II, 692 F.3d at 1308 (quoting Arris Grp., Inc. v. British Telecomms. PLC, 639 F.3d 1368, 1379 n.13 (Fed. Cir. 2011)).

¹⁵ See Akamai II, 692 F.3d at 1308.

 $^{^{16}}$ See id. at 1307–08 & n.1; infra notes 198, 242–250 and accompanying text (arguing for courts to apply the majority's analysis to cases involving inducement).

¹⁷ See 692 F.3d at 1305–09 (relying on § 271(b) to remedy the liability gap, while leaving its strict § 271(a) joint infringement jurisprudence intact); infra notes 225–227 and accompanying text (arguing that the court missed an opportunity to reinterpret the parameters of § 271(a) direct infringement and the accompanying "control or direct" standard).

¹⁸ Akamai II, 692 F.3d at 1349–50 (Linn, J., dissenting); see infra notes 217–227 and accompanying text.

¹⁹ See Golden Hour, 614 F.3d at 1380-81; infra notes 105-109 and accompanying text.

²⁰ See Akamai II, 692 F.3d at 1306, 1309 (observing no reason to leave patentees without a remedy when their patents are clearly being infringed by multiple actors' combined conduct); Golden Hour, 614 F.3d at 1380–81 (holding no infringement liability for a joint enterprise arrangement that "formed a strategic partnership" and collaborated).

unchanged, the Federal Circuit's divided infringement approach after Akamai II will remedy some of the liability gap, but will nevertheless continue to let certain infringement scenarios escape liability.²¹

This Note contends that the Akamai II majority missed an opportunity to further close the liability gap for divided infringement.²² It argues that the Federal Circuit should revisit and expand its § 271(a) joint infringement standard—the BMC "control or direct" standard while also utilizing its new § 271(b) inducement jurisprudence in appropriate circumstances.²³ This "dual-avenue" approach would provide method patentees with a flexible scheme and protect them from defendants who escape liability by mere virtue of their divided performance.²⁴ Finally, this approach is consistent with the broader incentive structure of the patent system, the policy goals of the 1952 Patent Act ("Patent Act"), and patent infringement protection generally.²⁵

After providing a brief overview of the U.S. patent system and the Patent Act's codification of infringement, Part I examines the approach the Federal Circuit has used to deal with the difficulty of divided infringement of method claims.²⁶ Part II begins by discussing the Federal Circuit's majority opinion in Akamai II, focusing on how it attempted to utilize § 271(b) inducement infringement to close the divided infringement liability gap.²⁷ It then examines Judge Richard Linn's dissenting opinion in Akamai II, which urged for sole reliance on the BMC "control or direct" standard—albeit in a slightly broader from. 28 Part III proposes a "dual-avenue" approach for method patentees that would provide two critical ways for them to assert their patent rights.²⁹ Part III contends that this approach would afford method patentees robust patent protection and flexibility in bringing method infringement claims under either § 271(a) or (b), depending on the factual circumstances of the case.³⁰

²¹ See Akamai II, 692 F.3d at 1305–09 (declining to alter its § 271(a) jurisprudence); id. at 1349-50 (Linn, J., dissenting) (remarking upon the need to broaden the court's § 271(a) standard); infra notes 217–227 and accompanying text.

²² See infra notes 206–227 and accompanying text.

²³ See infra notes 228–252 and accompanying text.

²⁴ See infra notes 253–254 and accompanying text.

²⁵ See infra notes 255–262 and accompanying text.

²⁶ See infra notes 31-125 and accompanying text.

²⁷ See infra notes 126–171 and accompanying text.

²⁸ See infra notes 172–196 and accompanying text.

²⁹ See infra notes 197–252 and accompanying text.

³⁰ See infra notes 253–262 and accompanying text.

I. Patents, § 271 Infringement, and the Conundrum of Divided Infringement of Method Claims

This Part examines the approach the Federal Circuit took to address divided infringement of method patents prior to its decision in *Akamai II.*³¹ Section A briefly discusses the American patent system.³² Section B then provides an overview of patent infringement and identifies two types of infringement—direct and inducement—codified by the Patent Act.³³ Finally, Section C addresses the Federal Circuit's 2007 *BMC* decision and the resulting standard governing direct infringement of method claims carried out by multiple actors.³⁴ Section C culminates with an analysis of four follow-up cases to *BMC* that left major gaps in patentees' method claim protection.³⁵

A. Brief Overview of the U.S. Patent System

The American patent system is an exercise of congressional power—stemming from the U.S. Constitution—to "promote the Progress of Science and useful Arts, by securing for limited Times to . . . Inventors the exclusive Right to their respective . . . Discoveries." This exclusive right of inventors has been sanctioned by federal statute since 1790. The Patent and Trademark Office ("PTO") grants patents by determining whether an invention meets a certain set of statutory requirements. Since 1982, the U.S. Court of Appeals for the Federal Circuit has held exclusive appellate jurisdiction over patent cases and PTO decisions.

³¹ See infra notes 36-125 and accompanying text.

³² See infra notes 36–51 and accompanying text.

³³ See infra notes 52-70 and accompanying text.

³⁴ See infra notes 71–99 and accompanying text.

³⁵ See infra notes 100–125 and accompanying text.

³⁶ U.S. Const. art. I, § 8, cl. 8.

³⁷ Charles E. Miller, Some Views on the Law of Patent Infringement by Inducement, 53 J. Pat. & Trademark Off. Soc'y 86, 87 (1971).

³⁸ 35 U.S.C. § 2(a) (1) (2006) (granting issuance authority); *id.* § 101 (2006) (patentable subject matter); *id.* § 102 (2006 & Supp. V 2011) (novelty); *id.* § 103 (2006 & Supp. V 2011) (non-obviousness); Nathan G. Ingham, Note, *Anticipating New References: Predicting the Contours of the New "Otherwise Available to the Public" Category of Prior Art,* 53 B.C. L. Rev. 1533, 1536 (2012) (noting that the invention must fit a category of "patentable subject matter," and must be useful, novel, and non-obvious in light of prior art). The patent application must also satisfy the written description and enablement requirements. 35 U.S.C. § 112 (2006 & Supp. V 2011).

³⁹ 28 U.S.C. § 1295(a) (1) (2006 & Supp. V 2011) (case appeals); 35 U.S.C. § 141 (2006 & Supp. V 2011) (PTO appeals); Ingham, *supra* note 38, at 1537.

Patent law is essentially an incentive system—patents hold economic value by securing monopoly power over the invention. An owner of an issued patent is legally entitled to exclude all other persons from practicing—performing the various steps of—the invention in the United States during the life of the patent. More specifically, a patent grants the right to exclude others from making, using, offering for sale, selling, or importing the invention for a twenty-year period. Thus, a patent grants time-constrained monopoly power over an invention to the inventor, or their successors in title. Patents are a legislative exception to antitrust laws against monopolies and stem from the constitutional desire to promote innovation for the public good.

A patent's scope—that is, what the patent protects—is defined through its written "claims."⁴⁵ Each patent must include a specification, which contains a written description "pointing out and distinctly claiming" the subject matter of the invention. ⁴⁶ Moreover, the invention that the patent claims must itself be patentable. ⁴⁷ Patentable inventions include "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof."⁴⁸

Two distinct types of patents result from the statutory text: product patents and process, or method, patents.⁴⁹ A product patent is a patent on a distinct article—a "machine, manufacture, or [a] composition of matter."⁵⁰ Process, or method, patents, are patents that define a series of actions or steps leading to a tangible result.⁵¹

⁴⁰ Giles S. Rich, *Infringement Under Section 271 of the Patent Act of 1952*, 21 Geo. Wash. L. Rev. 521, 523–24 (1953). Judge Giles Rich refers to patent law as a necessarily powerful force to provide "[t]he incentive needed to make normally slothful, normally selfish human beings produce inventions, disclose them to the public, and supply the necessary capital to perfect them and get them on the market." *Id.* at 523.

 $^{^{41}}$ See 35 U.S.C. § 154(a)(1)–(2) (2006 & Supp. V 2011 & Supp. VI 2012); Miller, supra note 37, at 87.

 $^{^{42}}$ 35 U.S.C. § 154(a)(1)–(2). Patents, therefore, award a negative right. Hobday, *supra* note 5, at 139.

⁴³ Miller, *supra* note 37, at 87; Rich, *supra* note 40, at 523–24.

⁴⁴ Miller, *supra* note 37, at 87; Rich, *supra* note 40, at 524, 543.

⁴⁵ E.g., 1 R. Carl Moy, Moy's Walker on Patents § 4:1 (4th ed. 2012). Patent claims serve as the "metes and bounds" of a patent. *See* Miller, *supra* note 37, at 88.

^{46 35} U.S.C. § 112 (2006 & Supp. V 2011).

⁴⁷ 1 Moy, *supra* note 45, § 5:1; *see* 35 U.S.C. § 101 (2006).

^{48 35} U.S.C. § 101.

⁴⁹ See id.

⁵⁰ K.P. McElroy, *Product Patents*, 10 J. Indus. & Eng'g Chemistry 257, 257–58 (1918); see 35 U.S.C. § 101.

⁵¹ BLACK'S LAW DICTIONARY 1235 (9th ed. 2009). "Process," as used in § 101, is defined as "[a] process, art or *method*, and includes a new use of a known process, machine, manufacture, composition of matter, or material." 35 U.S.C. § 100(b) (2006) (emphasis added). Thus,

B. The Patent Act Codifies Patent Infringement

The incentive system built around patents is centered on protecting the exclusive rights granted to the owner.⁵² Patent infringement serves as the essential vehicle to preserve the value of a patentee's rights.⁵³ At common law, unauthorized acts amounting to patent infringement were characterized as trespasses—tortious acts effectively depriving the owner of exclusive control over the property right of the patent.⁵⁴ It was not until the Patent Act, however, that Congress statutorily defined patent infringement.⁵⁵ Section 271—subsections (a), (b), and (c)—codified common law patent infringement.⁵⁶

1. Direct Liability: § 271(a)

Liability for direct infringement, as defined by subsection (a), occurs when the defendant carries out, or performs, a patent claim.⁵⁷ Direct infringement is a strict liability tort, meaning the lack of knowledge or intent of the infringer is irrelevant.⁵⁸ In order to directly infringe a

one can use the terms "process patent" and "method patent" interchangeably. See id.; BLACK'S LAW DICTIONARY, supra, at 1235 (defining "method patent" as "[a] patent having method or process claims that define a series of actions" and noting that it is "[a]lso termed process patent"); id. (defining "process patent" as "[a] patent for a method" and cross-referencing the definition for "method patent"). This Note follows the lead of the en banc court in Akamai II and refers to this category of patents exclusively as method patents. See 692 F.3d at 1305.

⁵² See Rich, supra note 40, at 524. Judge Rich writes that the patent's monopoly rights are the only thing serving as the incentive. *Id.* The value of a patent without enforcement power is significantly diminished. *Id.*

⁵³ See id. at 524-25.

⁵⁴ Miller, *supra* note 37, at 87–88; *see* Dowagiac Mfg. Co. v. Minn. Moline Plow Co., 235 U.S. 641, 648 (1915) (finding that infringement was a tortious taking of the exclusive property rights conferred by the patent). Key in this analysis was the principle that a patent claim was not infringed unless all of the elements recited in the claim were practiced. Miller, *supra* note 37, at 88. This "all elements" rule was first announced in the 1842 Supreme Court decision *Prouty v. Ruggles. Id.* at 88–89; *see* Prouty v. Ruggles, 41 U.S. (16 Pet.) 336, 341 (1842).

⁵⁵ Rich, *supra* note 40, at 521–22; *see* Patent Act of 1952, Pub. L. No. 82-593, 66 Stat. 792, 811 (codified as amended at 35 U.S.C. § 271(a)–(c) (2006)). The most recent overhaul to patent law—the Leahy-Smith America Invents Act—neither altered the text of § 271, nor addressed divided infringement. *Akamai II*, 692 F.3d at 1343 (Linn, J., dissenting); Robinson, *supra* note 5, at 102 & n.337; *see* Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified as amended in scattered sections of 35 U.S.C.).

⁵⁶ Miller, *supra* note 37, at 94–95; *see* Patent Act § 271(a)–(c). Subsection (c) defines contributory infringement and is not within the scope of this Note. *See* Patent Act § 271(c).

⁵⁷ E.g., Akamai II, 692 F.3d at 1305; BMC, 498 F.3d at 1378; Miller, supra note 37, at 95; Rich, supra note 40, at 537; see 35 U.S.C. § 271(a).

 58 Åkamai II, 692 F.3d at 1307; BMC, 498 F.3d at 1381; In re Seagate Tech., LLC, 497 F.3d 1360, 1368 (Fed. Cir. 2007) (en banc).

patent, every element of the claim must be performed.⁵⁹ In the context of method patents, every claimed step must be performed in accordance with the limitations in the claim for that element.⁶⁰ Patentees prove the "all elements" rule for direct infringement by showing either that the defendant literally infringed every element of the claim, or by showing infringement through the doctrine of equivalents.⁶¹

2. Inducement Liability: § 271(b)

Inducement liability holds actors liable not for their own infringement, but for having actively caused another to infringe.⁶² Subsection (b) defines inducement liability for patent infringement.⁶³ Subsection (b) provides that "[w]hoever actively induces infringement of a patent shall be liable as an infringer."⁶⁴ Congress noted that the purpose of paragraph (b) was to "recite[] in broad terms that one who aids and abets an infringement is likewise an infringer."⁶⁵ As such, the Federal Circuit has held that induced infringement extends liability for causing, urging, advising, encouraging, or aiding the infringing conduct of another.⁶⁶

There are important limitations to the scope of induced infringement in subsection (b).⁶⁷ First, and quite crucially, inducement gives rise to liability if, and only if, the inducement leads to actual infringe-

⁵⁹ Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 40 (1997); *Akamai II*, 692 F.3d at 1307; ACCO Brands, Inc. v. Micro Sec. Devices, Inc., 346 F.3d 1075, 1080 (Fed. Cir. 2003).

 $^{^{60}}$ $A\acute{k}amai$ II, 692 F.3d at 1307; see Joy Techs., Inc. v. Flakt, Inc., 6 F.3d 770, 773 (Fed. Cir. 1993).

⁶¹ Warner-Jenkinson, 520 U.S. at 21; Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc., 424 F.3d 1293, 1310 (Fed. Cir. 2005). The doctrine of equivalents is a judicially created theory designed to prevent parties from avoiding liability for infringement by making trivial changes to circumvent the literal language of patent claims. Graver Tank & Mfg. Co. v. Linde Air Products Co., 339 U.S. 605, 608–09, 612 (1950); Black's Law Dictionary, supra note 51, at 553. The doctrine of equivalents is determined on an element-by-element basis. Warner-Jenkinson, 520 U.S. at 40. Infringement exists if the differing element performs substantially the same function in substantially the same way to achieve the same result. Graver Tank, 339 U.S. at 608.

⁶² Miller, *supra* note 37, at 95.

⁶³ Akamai II, 692 F.3d at 1307; Dynacore Holdings Corp. v. U.S. Philips Corp., 363 F.3d 1263, 1267 (Fed. Cir. 2004); Miller, *supra* note 37, at 97; Rich, *supra* note 40, at 537; *see* 35 U.S.C. § 271(b) (2006).

^{64 35} U.S.C. § 271(b); Akamai II, 692 F.3d at 1307.

⁶⁵ S. Rep. No. 82-1979, at 8 (1952), reprinted in 1952 U.S.C.C.A.N. 2394, 2402; H.R. Rep. No. 82-1923, at 9 (1952); P.J. Federico, Commentary on the New Patent Act, 75 J. Pat. & Trademark Off. Soc'y 161, 214 (1993).

⁶⁶ Akamai II, 692 F.3d at 1308; Arris, 639 F.3d at 1379 n.13.

⁶⁷ See infra notes 68–70 and accompanying text.

ment.⁶⁸ Second, unlike direct infringement, induced infringement requires specific intent to cause infringement.⁶⁹ Third, the alleged inducer must know that the induced acts constitute patent infringement.⁷⁰

C. The Difficulty of Divided Infringement of Multi-Actor Method Claims

The problem of divided infringement occurs when the acts necessary to give rise to direct infringement of a method patent are split among multiple actors.⁷¹ Parties that jointly practice a patented invention without a licensing agreement can arrange to share performance of the claimed method steps.⁷² In doing so, these parties avoid liability by taking advantage of the Federal Circuit's general rule: liability for direct infringement requires that a *single* party commit all the elements necessary to infringe the patent.⁷³ Moreover, many method patents now explicitly entail claim steps that must be performed by multiple entities.⁷⁴

As a result, the Federal Circuit created and utilized a "joint infringement" standard—a vicarious liability approach that held a single

⁶⁸ Deepsouth Packing Co. v. Laitram Corp., 406 U.S. 518, 526 (1972); Aro Mfg. Co. v. Convertible Top Replacement Co., 365 U.S. 336, 341 (1961); Mercoid Corp. v. Mid-Continent Inv. Co., 320 U.S. 661, 677 (1944) (Frankfurter, J., dissenting on other grounds); Akamai II, 692 F.3d at 1308. The Federal Circuit has noted simply that without infringement there can be no indirect infringement liability. Akamai II, 692 F.3d at 1308; see Dynacore, 363 F.3d at 1272 (requiring direct infringement in order for there to be inducement of infringement). Stated differently, attempted patent infringement does not exist—inducement liability cannot exist absent actual infringement. Akamai II, 692 F.3d at 1308; see infra notes 165–171 and accompanying text.

 $^{^{69}}$ Akamai II, 692 F.3d at 1308 & n.1; DSU Med. Corp. v. JMS Co., 471 F.3d 1293, 1306 (Fed. Cir. 2006) (en banc).

⁷⁰ Global-Tech Appliances, Inc. v. SEB S.A., 131 S. Ct. 2060, 2068 (2011); Akamai II, 692 F.3d at 1308.

⁷¹ Akamai II, 692 F.3d at 1305; see supra notes 3–5 and accompanying text (discussing the problem of divided infringement and how it is unique to method patents).

⁷² Akamai II, 692 F.3d at 1306.

⁷³ *Id.*; *BMC*, 498 F.3d at 1378–79; Lemley et al., *supra* note 3, at 257–58. The Federal Circuit in *BMC* arrived at this general rule through both its reading of Supreme Court precedent and its statutory interpretation of § 271(a). 498 F.3d at 1378–80.

⁷⁴ Lemley et al., *supra* note 3, at 256; Hobday, *supra* note 5, at 141; *see* Larsen, *supra* note 3, at 42. These types of method patents—a process requiring a sequence of actions to be carried out—grew with both the rise of electronic commerce and the corresponding increase in business method patents that followed the Federal Circuit's 1998 decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* Hobday, *supra* note 5, at 141 (noting that many software-related inventions are patented as method claims). The court in *State Street* held that business method patents were patentable subject matter. 149 F.3d 1368, 1375–77 (Fed. Cir. 1998); *see* 35 U.S.C. § 101 (2006). The Supreme Court affirmed the general patentability of business method patents in its 2010 decision in *Bilski v. Kappos*. 130 S. Ct. 3218, 3228–29 (2010).

defendant liable for direct infringement under § 271(a) if the patentee could show that the defendant had some relationship with other actors who completed steps of the process. This joint infringement construct was meant to fill the liability gap that can result when the steps of a method patent are split among multiple actors in divided infringement situations. Subsequent Federal Circuit cases, however, stiffened the joint infringement standard to apply only when an actor "control[s] or direct[s]" others. Those decisions left patentees increasingly vulnerable to divided infringement and resulted in the Federal Circuit's decision to rehear the 2010 case Akamai Technologies, Inc. v. Limelight Networks, Inc. (Akamai I) en banc. Return to the steps of the patentees increasingly vulnerable to divide the patentees increasingly vulnerable

1. On Demand's Joint and Several Liability Standard

Initially, a 2006 Federal Circuit decision seemingly approved of a broad joint and several liability standard to deal with divided infringement in *On Demand Machine Corp. v. Ingram Industries, Inc.*⁷⁹ In approv-

⁷⁵ Akamai II, 692 F.3d at 1307; BMC, 498 F.3d at 1378–80; see Dokhanchy, supra note 5, at 143; Larsen, supra note 3, at 52–53.

⁷⁶ See Akamai II, 692 F.3d at 1305–07; Larsen, supra note 3, at 52–53. Before the Federal Circuit's 2007 decision in BMC, lower courts applied one of two theories in finding joint infringement: (1) agency or (2) "some connection." Dokhanchy, supra note 5, at 144; Larsen, supra note 3, at 52–53; Sriranga Veeraraghavan, Comment, Joint Infringement of Patent Claims: Advice for Patentees, 23 Santa Clara Computer & High Tech. L.J. 211, 213 (2006). Importantly, a fundamental principle of an agency standard is the principal's right to control the actions of the agent. Restatement (Third) of Agency § 1.01 cmt. c (2006). The agency standard failed to capture many divided infringement scenarios where there was no single principal responsible for the other actors' actions sufficient to attach liability for direct infringement under § 271(a). See Larsen, supra note 3, at 52–53. As a consequence, a "some connection" standard emerged in district courts, which made a finding of joint infringement more likely than under the stricter agency standard. Veeraraghavan, supra, at 222; see Cordis Corp. v. Medtronic AVE, Inc., 194 F. Supp. 2d 323, 349–50 (D. Del. 2002), rev'd on other grounds, 339 F.3d 1352 (Fed. Cir. 2003) (applying the "some connection" standard).

 $^{^{77}}$ See McKesson, 98 U.S.P.Q.2d at 1283–85; Akamai I, 629 F.3d at 1320–22; Golden Hour, 614 F.3d at 1380–81; Muniauction, 532 F.3d at 1328–30; BMC, 498 F.3d at 1380–82.

⁷⁸ See McKesson, 98 U.S.P.Q.2d at 1285 (Bryson, J., concurring) (agreeing that the case was decided correctly in light of recent Federal Circuit precedent, but questioning the approach taken by the court in these cases); *id.* at 1291 (Newman, J., dissenting); Gupta, *supra* note 5, at 66–68, 74. This liability gap was only compounded by restricting § 271(b) induced infringement to instances where direct infringement was present. See Akamai II, 692 F.3d at 1306; Lemley et al., *supra* note 3, at 257–58; Dokhanchy, *supra* note 5, at 163–64.

⁷⁹ See 442 F.3d 1331, 1344–45 (Fed. Cir. 2006). The opinion was authored by Judge Pauline Newman, who authored dissents in prior Federal Circuit cases that called for a finding of joint liability in cases of divided infringement. See Akamai II, 692 F.3d at 1319–36 (Newman, J., dissenting); McKesson, 98 U.S.P.Q.2d at 1285–91 (Newman, J., dissenting); Golden Hour, 614 F.3d at 1381–83 (Newman, J., dissenting).

ing a district court's jury instructions as to joint infringement, the *On Demand* panel indicated its acceptance of a "participation and combined action" standard.⁸⁰ The jury instructions had directed that when multiple entities infringed a method patent by virtue of their "participation and combined action(s)," the entities all became joint infringers and jointly liable for such infringement.⁸¹

The "participation and combined action" joint and several liability standard looked similar to the expansive "some connection" standard previously utilized by some lower courts to find liability in situations of divided infringement.⁸² The key difference in *On Demand* was a joint allocation of liability among defendants—as opposed to holding one defendant vicariously liable for the actions of others.⁸³ Thus, the court in *On Demand* showed support for a divided infringement standard that would not require a finding of direct infringement by a single actor.⁸⁴

2. BMC and the "Control or Direct" Standard

In its 2007 BMC decision, the Federal Circuit changed direction and established a stringent standard for joint infringement of a single

It is not necessary for the acts that constitute infringement to be performed by one person or entity. When infringement results from the *participation and combined action(s)* of more than one person or entity, they are all joint infringers and *jointly liable* for patent infringement. Infringement of a patented process or method cannot be avoided by having another perform one step of the process or method.

Id. (emphasis added). Nevertheless, the defendant was found not to have infringed because the case dealt primarily with claim construction issues and was resolved on those grounds. Id. at 1345. Identical "participation and combined action" language can be found in a 1980 U.S. District Court for the Western District of Louisiana holding in Shields v. Halliburton Co. 493 F. Supp. 1376, 1389 (W.D. La. 1980). In Shields, the court held three companies liable for joint infringement using the rationale that their "participation and combined action" resulted in joint liability. Id. at 1389, 1391. The Shields court also stated that "infringement of a patented process or method cannot be avoided by having another perform one step of the process or method." Id. at 1389.

^{80 442} F.3d at 1344-45.

 $^{^{81}}$ Id. at 1344–45 ("We discern no flaw in this instruction as a statement of law."). The jury instructions read:

⁸² See Dokhanchy, supra note 5, at 149; supra note 76 (discussing the "some connection" standard used by some lower courts to establish § 271(a) joint infringement).

⁸³ Compare On Demand, 442 F.3d at 1344–45 (applying joint and several liability among defendants for their collective action), with Cordis Corp., 194 F. Supp. 2d at 349–50 (holding a single defendant vicariously liable for the actions of multiple actors as long as there was "some connection" among the parties). The agency standard also holds one defendant vicariously liable for the actions of others. Restatement (Third) of Agency § 7.03 (2006).

⁸⁴ See 442 F.3d at 1344-45.

claim by multiple parties.⁸⁵ In doing so, the Federal Circuit implicitly rejected following both the agency and "some connection" standards previously utilized by lower courts and explicitly rejected the joint and several liability standard seemingly approved in *On Demand*.⁸⁶ Instead, the court announced a new joint infringement standard for divided infringement of multi-actor method claims—the "control or direct" standard.⁸⁷ The Federal Circuit held that summary judgment was appropriate because no single entity performed all the steps of the method claim, nor did any one entity "control or direct" other parties to perform every element of the claims.⁸⁸

Initially, the court cited the "all elements" rule, which requires that each and every step of a claimed method actually be performed in order for the court to make a finding of direct infringement.⁸⁹ The court then held that not only must all the elements of a method claim be performed, but also that § 271(a) direct infringement requires a finding that a single actor performed each and every step of the method claim.⁹⁰ Further, the court held that inducement of infringement under § 271(b) required a predicate finding of direct infringement.⁹¹

Although acknowledging that a single entity requirement would allow a liability gap to result in the context of divided infringement of

⁸⁵ See 498 F.3d at 1378.

⁸⁶ See id. at 1378–82; supra notes 76, 79–84 and accompanying text (discussing these alternative standards). In distinguishing On Demand, the court noted that it was unlikely that the panel intended to make a major change in its jurisprudence in approving the On Demand jury instructions. BMC, 498 F.3d at 1380. Moreover, the court stated that resolution of the divided infringement standard was not directly necessary to the ultimate decision in the case. Id. (noting that the dicta in On Demand "did not change this court's precedent with regard to joint infringement").

⁸⁷ BMC, 498 F.3d at 1380–81. The standard certainly does, however, resemble the agency standard—the stricter of the lower courts' two standards. See id. at 1379 (noting that the law imposes vicarious liability on a party for actions of another that it can control); supra note 76 (describing the agency standard as requiring the control of a principal over an agent).

⁸⁸ BMC, 498 F.3d at 1382. The case dealt with two method patent claims for processing debit transactions without a personal identification number (PIN), through a PIN-less debit bill payment system featuring the combined action of several participants. *Id.* at 1375–76. The defendant, Paymentech, argued that it did not perform all of the steps of the patented method—either individually or through coordination with customers and financial institutions—and thus could not be liable for direct infringement under § 271(a). *Id.* at 1377. Briefly stated, Paymentech's PIN-less debit bill payment system involved separate activity by customers, store merchants, Paymentech, debit networks, and financial institutions. *Id.* at 1375–76.

⁸⁹ Id. at 1378.

⁹⁰ Id. at 1378-79.

⁹¹ Id. at 1380.

method claims, the court further held that the defendant must "control or direct" other entities' performance of each step of the patented process to be vicariously liable under § 271(a).⁹² The panel acknowledged that the new "control or direct" standard for divided infringement scenarios could, in some instances, allow parties to enter into arm's-length agreements to avoid infringement.⁹³ The court determined, nevertheless, that any concerns over a party avoiding infringement by dividing up method steps could be offset by proper claim drafting.⁹⁴

The court then acknowledged that a party could not avoid infringement simply by contracting out steps of a patented process to another entity. 95 It would be unfair, the court reasoned, for such a "mastermind" to escape liability by doing so. 96 The court, however, failed to fully articulate what types of conduct would satisfy "direction" or "control" of others. 97

What resulted was a higher standard for joint infringement—vicarious direct infringement under § 271(a)—than either the "some connection" or "participation and combined action" standards, and a limit to the reach of inducement infringement.⁹⁸ Liability for divided infringement would only result in situations where a single defendant was found to "control or direct" others.⁹⁹

3. Applying BMC: A Continued Failure to Find Liability

Four subsequent cases show the difficulty patentees had in satisfying the BMC "control or direct" standard. The result was an increasingly wider liability gap that defendants were able to slip through by

⁹² Id. at 1379, 1381-82.

 $^{^{93}}$ Id. at 1381. The panel was concerned about expanding direct infringement—a strict liability offense—in a way that might lead to joint liability. See id.

⁹⁴ BMC, 498 F.3d at 1381. The court noted that a method patentee could structure a claim to capture infringement by a single party. *Id.* (citing Lemley et al., *supra* note 3, at 272–75).

⁹⁵ Id. at 1381.

⁹⁶ Id.

⁹⁷ See id. at 1379–82. The court noted however, that the defendant provided no instruction or direction to others regarding the method claim, and noted that the record contained no evidence of any contractual relationship. *Id.* at 1381–82.

⁹⁸ See id. at 1378–82; Dokhanchy, supra note 5, at 150; Larsen, supra note 3, at 54–56.

⁹⁹ BMC, 498 F.3d at 1380-82.

¹⁰⁰ See McKesson, 98 U.S.P.Q.2d at 1283–85; Akamai I, 629 F.3d at 1320–22; Golden Hour, 614 F.3d at 1380–81; Muniauction, 532 F.3d at 1328–30.

dividing up the steps of a method claim among multiple independent entities. ¹⁰¹

In 2008, in *Muniauction, Inc. v. Thomson Corp.*, the Federal Circuit significantly decreased the likelihood that a patentee could sufficiently prove that a defendant "controlled or directed" other actors' completion of method claim steps to establish liability for direct infringement. ¹⁰² In doing so, *Muniauction* became the first case to cite and rely on the *BMC* "control or direct" standard and showed patentees that the standard would not be particularly easy to satisfy. ¹⁰³ The panel noted that in order for one party to "control or direct" the actions of another to be liable for direct infringement, that party must exercise enough control or direction over the entire process "such that every step is attributable to the controlling party, i.e., the 'mastermind.'" ¹⁰⁴

In 2010, a Federal Circuit panel in *Golden Hour Data Systems, Inc. v. emsCharts, Inc.* again found that the defendants had failed to satisfy the *BMC* "control or direct" standard—this time in a joint enterprise context. ¹⁰⁵ The co-defendant companies "formed a strategic partnership," enabled their two programs to work together, and collaborated to sell their software programs as a unit. ¹⁰⁶ The combined software collectively covered the method claims of the patentee. ¹⁰⁷

Despite the co-defendants' collaboration and strategic partnership—essentially a joint enterprise—the Federal Circuit panel held that there was insufficient evidence of either "control" or "direction" by the co-defendants that would sufficiently create liability for joint infringe-

¹⁰¹ See Akamai II, 692 F.3d at 1306; McKesson, 98 U.S.P.Q.2d at 1291 (Newman, J., dissenting); Gupta, supra note 5, at 66–67; Dokhanchy, supra note 5, at 154–59; Larsen, supra note 3, at 57–59; Liebes, supra note 5, at 335.

¹⁰² See 532 F.3d at 1328–30; Liebes, supra note 5, at 338 (referring to Muniauction as "elevating" the BMC decision). The method claims at issue in Muniauction were for an electronic system that allowed municipal bond issuers to initiate and monitor bond actions and enabled bidders to submit and monitor their bids. 532 F.3d at 1321–22. The claims entailed actions by both bond issuers and bidders over a single-server, central integrated system. Id. at 1322.

¹⁰³ See 532 F.3d at 1329–30; Robinson, supra note 5, at 80; Dokhanchy, supra note 5, at 154–55.

¹⁰⁴ Muniauction, 532 F.3d at at 1329. Citing *BMC*, the court held that the defendant was not vicariously liable for direct infringement for either the actions of the bidders or its own actions—even though it controlled access and provided instructions to bidders on how to use the system. *Id.* at 1330.

¹⁰⁵ 614 F.3d at 1380–81. The claims at issue dealt with methods for information management services in connection with emergency medical transport often performed by helicopter. *Id.* at 1369. The system integrated recordkeeping to track a patient. *Id.*

¹⁰⁶ Id. at 1371.

¹⁰⁷ Id. at 1371–72.

ment.¹⁰⁸ Golden Hour thus represented the continuing trend in the Federal Circuit's jurisprudence that made it increasingly harder for patentees to find protection for their method claims.¹⁰⁹

Akamai I, in 2010, and McKesson Technologies, Inc. v. Epic Systems Corp., in 2011, served as the final two cases in the string of Federal Circuit decisions that applied the BMC "control or direct" standard to joint infringement cases. ¹¹⁰ The resulting liability gap that defendants were able to slip through by dividing up the steps of a method claim among multiple independent entities would later lead to the Federal Circuit's decision to rehear Akamai I and McKesson en banc. ¹¹¹

In *Akamai I*, a Federal Circuit panel slightly expanded the "control or direct" standard, yet still found that the defendants' conduct failed to meet this standard. ¹¹² Initially, the court reasoned that *BMC*'s "control or direct" standard should be read in the context of agency law and that the principal's right to control the agent's actions is an essential element of agency. ¹¹³ Significantly, the panel held that joint infringement under the "control or direct" standard exists either when an agency relationship exists *or* when one party is contractually obligated to the other to perform steps of the claimed method. ¹¹⁴ The court then noted that the defendant had contracted with its customers and provided instructions and technical assistance to customers to enable them to perform certain steps of the method claim. ¹¹⁵ Nevertheless, the panel held that the cus-

 $^{^{108}}$ Id. at 1373. Without elaborating, the court agreed with the district court's finding and affirmed the defendants' judgment as a matter of law as to joint infringement. Id. at 1380–81.

¹⁰⁹ See id.; Gupta, supra note 5, at 66–67; Dokhanchy, supra note 5, at 154; Liebes, supra note 5, at 338.

 $^{^{110}}$ See McKesson, 98 U.S.P.Q.2d at 1283–85; Akamai I, 629 F.3d at 1318–22; infra notes 112–125 and accompanying text (discussing these cases).

¹¹¹ See Akamai II, 692 F.3d at 1305–06. The Federal Circuit reheard Akamai I and McKesson en banc, and released a per curium opinion in August 2012 in the consolidated case of Akamai II. Id. at 1301.

¹¹² Dokhanchy, *supra* note 5, at 154; *see Akamai I*, 629 F.3d at 1318–20; Gupta, *supra* note 5, at 65–66. The opinion was authored by Judge Richard Linn, who would go on to write the dissent in *Akamai II* that urged a return to "single entity" joint infringement jurisprudence to deal with divided infringement of method claims. *See Akamai II*, 692 F.3d at 1347–50 (Linn, J., dissenting); *infra* notes 172–196 and accompanying text.

¹¹³ Akamai I, 629 F.3d at 1320–21. The court further explained that "[c]ontrol is a concept that embraces a wide spectrum of meanings, but within any relationship of agency the principal initially states what the agent shall and shall not do, in specific or general terms." *Id.* at 1321 (quoting Restatement (Third) of Agency § 1.01 cmt. f (2006)).

¹¹⁴ Id. at 1320.

¹¹⁵ *Id.* at 1321. Akamai's patent covers a method for efficient delivery of web content. *Akamai II*, 692 F.3d at 1306; *Akamai I*, 699 F.3d at 1314–15. The method entails a system that allows a content provider to outsource the storage and delivery of discrete portions of its

tomers were not the defendant's agents, nor was the contractual agreement sufficient to satisfy joint infringement. The court reiterated that a contractual agreement would only be sufficient to establish joint infringement in the event it obligated the contracting parties to carry out each step of the method claim. Therefore, the defendant did not sufficiently control or direct the customers. The

In spite of the Akamai I panel's slight broadening of the standard to include contractual agreements, the panel once again showed the difficulty patentees faced in satisfying the BMC "control or direct" standard for joint infringement. The court acknowledged the difficulty of proving divided infringement of method claims, but again noted that the remedy for patentees was in properly crafting their method claims to capture infringement by a single entity. 120

Subsequently, in 2011, in *McKesson*, a Federal Circuit panel again held that the *BMC* "control or direct" standard could reach instances of joint infringement of method claims, but yet still found that the defendants' conduct failed to meet this standard.¹²¹ Relying closely on the

website content. Akamai I, 629 F.3d at 1315. Content elements of the provider are tagged and placed on a set of replicated servers by Akamai, which also modifies the provider's web page to instruct web browsers to retrieve that content from the Akamai servers. Akamai II, 692 F.3d at 1306. Limelight maintains a network of servers that, as in the patented method, allows content providers to efficiently deliver their material by outsourcing storage space on Limelight's servers. Id. Limelight contracts with these content providers to provide server space, but then instructs the content providers on how to modify their own web pages. Id. As a result, Limelight does not perform each and every step of Akamai's patented method. Id.; Akamai I, 629 F.3d at 1317. The fact that Limelight does not perform each step is illustrated by Limelight's standard customer contract, which states that the "[c]ustomer [i.e., content provider] shall be responsible for identifying via the then current [Limelight] process all [URLs] of the Customer Content to enable such Customer Content to be delivered by [Limelight]." Akamai I, 629 F.3d at 1317 (alterations in original).

¹¹⁶ Akamai I, 629 F.3d at 1320–21.

¹¹⁷ *Id.* The court noted that the form contract did not in any way *obligate* Limelight's customers to perform any of the method steps, but merely explained that the customer would need to perform certain steps to utilize Limelight's services. *Id.* at 1321. The agreement provided customers only with the tools to allow them to exercise their independent discretion and control. *Id.*

118 Id. at 1322.

¹¹⁹ See id. at 1322, 1331; see also supra notes 100–109 and accompanying text (detailing the Federal Circuit panel decisions in *Muniauction* and *Golden Hour*, in which the court held that the defendants' actions failed to satisfy the "control or direct" standard).

¹²⁰ Akamai I, 629 F.3d at 1321–22; see supra note 94 and accompanying text. For already-issued method patents covering method claims, the court noted that patentees could seek a patent reissue to remedy the claim language. Akamai I, 629 F.3d at 1322; see 35 U.S.C. § 251 (2006 & Supp. V 2011) (reissue of defective patents).

¹²¹ McKesson, 98 U.S.P.Q.2d at 1283–85. The opinion was written, again, by Judge Linn, and Judge Newman wrote a dissenting opinion. *Id.* at 1281; *id.* at 1285 (Newman, J., dissenting). McKesson owns a patent that covers a method of electronic communication be-

Akamai I panel decision, the court reasoned that the defendants did not "control or direct" the patients. 122 There was no agency relationship among the entities, nor were the end-users contractually obligated to perform any claimed method steps. 123 Moreover, the court reiterated that inducement of infringement can arise only when a single party directly infringes the method claim. 124 McKesson thus became the fourth Federal Circuit panel decision post-BMC to impose the "control or direct" standard for joint infringement and leave patentees without a remedy for others' divided infringement of their multi-actor method claims. 125

II. Akamai II: The Federal Circuit's En Banc Decision Leaves Joint Infringement Jurisprudence Intact and Turns to § 271(b) Induced Infringement for an Answer to Divided Infringement

On April 20, 2011, a per curium order of the U.S. Court of Appeals for the Federal Circuit vacated the panel decision in the 2010 case *Akamai Technologies, Inc. v Limelight Networks, Inc.* (*Akamai I*).¹²⁶ The order requested that the parties file new briefs addressing the issue of "separate entities each perform[ing] separate steps of a method claim," identifying under what circumstances that claim would "be *directly* infringed," and addressing to what extent each of the parties would be liable.¹²⁷

Additionally, on May 26, 2011, a per curium order of the Federal Circuit vacated the 2011 panel decision in *McKesson Technologies, Inc. v. Epic Systems Corp.*, which closely followed the reasoning of *Akamai I* in

tween healthcare providers and their patients through the use of personalized web pages. Akamai II, 692 F.3d at 1306; McKesson, 98 U.S.P.Q.2d at 1281–82. The method facilitates direct communication between doctors and patients. McKesson, 98 U.S.P.Q.2d at 1282. Epic Systems is a software company that licenses its own software to healthcare organizations that enables providers to communicate electronically with patients through personalized web pages. Akamai II, 692 F.3d at 1306; McKesson, 98 U.S.P.Q.2d at 1282. Epic Systems, however, does not actually perform any of the steps of the patented method. Akamai II, 692 F.3d at 1306; McKesson, 98 U.S.P.Q.2d at 1282. Rather, Epic Systems licenses the software to healthcare providers, who are then able to offer the feature to patients. McKesson, 98 U.S.P.Q.2d at 1282. Patients can initiate a communication to the provider by logging on to the provider's web page, at which point the remaining steps of the method are performed by the provider. Akamai II, 692 F.3d at 1306; McKesson, 98 U.S.P.Q.2d at 1282.

¹²² McKesson, 98 U.S.P.Q.2d at 1283-84; see Akamai I, 629 F.3d at 1320-21.

¹²³ McKesson, 98 U.S.P.Q.2d at 1284.

¹²⁴ Id. at 1283.

¹²⁵ See id. at 1283–85; Akamai I, 629 F.3d at 1320–22; Golden Hour, 614 F.3d at 1380–81; Muniauction, 532 F.3d at 1328–30.

¹²⁶ Akamai Techs., Inc. v. Limelight Networks, Inc., 419 F. App'x 989 (Fed. Cir. 2011).

¹²⁷ *Id.* (emphasis added).

granting summary judgment for the defendant on the issue of joint infringement.¹²⁸ The order requested that the parties address a slightly different scenario where "separate entities each perform separate steps of a method claim," and the corresponding "circumstances, if any, [under which] either entity or third party [would] be liable for *inducing* infringement or for *contributory* infringement."¹²⁹

Subsequently, in 2012, in a 6–5 per curium opinion in the consolidated case of *Akamai Technologies*, *Inc. v Limelight Networks, Inc.* (*Akamai II*), the Federal Circuit marked a fundamental shift in its jurisprudence of divided infringement of method patents. ¹³⁰ The majority of the court relied on 35 U.S.C. § 271(b) induced infringement to fill the gap in liability that had resulted from the stringent "control or direct" standard for joint infringement articulated by the Federal Circuit in the 2007 case *BMC Resources*, *Inc. v. Paymentech*, *L.P.*¹³¹

Section A of this Part looks at the majority opinion's utilization of § 271(b) to close the divided infringement liability gap. ¹³² Section B examines the dissent of Judge Linn, which called for a return to the *BMC* "single entity" rule—whereby a single party must be found to infringe every element of the method patent, either individually or vicariously through the "control or direct" standard in order to be found liable for § 271(a) direct infringement. ¹³³ Section B then discusses the dissent's willingness to expand the "control or direct" standard to encompass collaborative or joint enterprise scenarios. ¹³⁴

A. The Majority Opinion: Utilizing § 271(b) Inducement as the Vehicle to Capture Divided Infringement and Close the Liability Gap

The per curium majority opinion started by noting the liability gap that had resulted in Federal Circuit divided infringement jurisprudence. ¹³⁵ Up until that point, parties that jointly practiced a patented

 $^{^{128}}$ McKesson Techs., Inc. v. Epic Sys. Corp., 463 F. App'x 906, 907 (Fed. Cir. 2011); see su-pra notes 112–125 and accompanying text (discussing the similarities between these cases).

¹²⁹ McKesson, 463 F. App'x at 907 (emphasis added).

¹³⁰ 692 F.3d 1301, 1319 (Fed. Cir. 2012) (en banc) (Newman, J., dissenting) (per curium), *petition for cert. filed*, 81 U.S.L.W. 3395 (U.S. Dec. 28, 2012) (No. 12-786); *id.* at 1337, 1342 (Linn, J., dissenting); *see id.* at 1305–07 (majority opinion).

¹³¹ Akamai II, 692 F.3d at 1305–07; see supra notes 85–125 and accompanying text (analyzing *BMC* and subsequent cases that applied a stringent "control or direct" test).

¹³² See infra notes 135–171 and accompanying text.

¹³³ See infra notes 172–180 and accompanying text.

¹³⁴ See infra notes 181–191 and accompanying text.

¹³⁵ Akamai II, 692 F.3d at 1305–06; see supra notes 71–125 and accompanying text. The per curium majority consisted of Chief Judge Randall R. Rader, and Judges William C.

method could arrange to share performance of claimed steps among them and avoid infringement liability. ¹³⁶ Federal Circuit precedent for vicarious direct infringement under § 271(a) meant that no liability would result as long as one party did not "control or direct" others. ¹³⁷

Moreover, *BMC* had interpreted § 271(b) inducement to require a predicate finding of direct infringement.¹³⁸ Because direct infringement had not been extended to cases where multiple independent parties performed the steps of a method claim, and induced infringement under § 271(b) required an initial finding of direct infringement, patentees of multi-actor method claims often found themselves without a remedy.¹³⁹

Instead of reshaping or expanding the contours of direct infringement, the majority turned to inducement liability under § 271 (b) to capture scenarios of divided infringement. This key change in the court's jurisprudence was accomplished by overturning a portion of the *BMC* decision which had held that in order for a party to be liable for induced infringement under § 271 (b), some other single entity must be liable for direct infringement under § 271 (a). 141

The majority noted that it was undoubted that inducement infringement can only arise if the inducement leads to actual infringement. This basic principle, however, was incorrectly extended in *BMC* to require that a single entity—either individually or vicariously—commit direct infringement as a predicate finding to support a claim for in-

Bryson, Alan D. Lourie, Kimberly A. Moore, Jimmie V. Reyna, and Evan J. Wallach. *Akamai II*, 692 F.3d at 1305.

¹³⁶ Akamai II, 692 F.3d at 1306.

 $^{^{137}}$ Id. at 1307; BMC Res., Inc. v. Paymentech, L.P., 498 F.3d 1373, 1381–82 (Fed. Cir. 2007); see supra notes 85–125 and accompanying text.

¹³⁸ Akamai II, 692 F.3d at 1306, 1308; BMC, 498 F.3d at 1379–80.

¹³⁹ See Akamai II, 692 F.3d at 1305-08.

¹⁴⁰ *Id.* at 1306–07. The majority noted its reasoning for leaving direct infringement jurisprudence intact. *Id.* at 1307. Direct infringement is a strict liability offense, and the majority was concerned about expanding direct infringement in any way that might extend liability to innocent actors who did not themselves commit all the acts constituting infringement and who were unaware that others were acting in a way that would render their collective conduct as infringement. *Id.* On the other hand, inducement infringement is not a strict liability tort; it requires that the inducer act with knowledge that the induced acts constitute infringement. *Id.* at 1308. Using induced infringement to reach joint infringement would, thus, not present the risk of extending liability to unaware, innocent persons. *See id.*

¹⁴¹ See id. at 1306, 1308-09; BMC, 498 F.3d at 1379-80.

¹⁴² Akamai II, 692 F.3d at 1308. The court noted that the reason for that rule was simply that there is no such thing as attempted patent infringement, so without infringement of every element of the method claim, there can be no inducement liability for infringement. *Id.*

duced infringement.¹⁴³ The majority reasoned that requiring proof that there *has been* direct infringement—in the sense that every element of the method patent was committed—is not the same as requiring proof that a single party would be *liable* as a direct infringer, as the court in *BMC* had held.¹⁴⁴ Therefore, the court held that § 271(b) induced infringement could be established without a predicate finding of liability for a single § 271(a) direct infringer.¹⁴⁵

As a result, parties may be held liable for induced infringement under § 271(b) so long as they "cause[ed], urge[ed], encourage[ed], or aid[ed]" others to perform the steps of a method claim. ¹⁴⁶ It should not matter, the court determined, how many entities contributed to the infringement as long as the method claim was indeed fully infringed. ¹⁴⁷ As long as the various parties involved perform each and every step of the method claim, liability can be attributed to an inducing entity. ¹⁴⁸

The majority's change in § 271(b) inducement infringement relied heavily on policy grounds. ¹⁴⁹ The majority identified no sound policy purpose in immunizing an inducer from liability for indirect infringement simply because the parties structured their conduct to ensure that no single entity had committed all of the acts necessary to give rise to direct infringement—either individually, or vicariously through the *BMC* "control or direct" standard. ¹⁵⁰ Parties who knowingly induce others to engage in acts that collectively infringe a patented method have the same detrimental impact on the patentee's rights as parties who induce infringement through a single direct infringer. ¹⁵¹

¹⁴³ Id.; see Liebes, supra, note 5, at 342.

¹⁴⁴ Akamai II, 692 F.3d at 1308-09.

¹⁴⁵ Id. at 1306, 1308-09.

¹⁴⁶ Id. at 1308 (quoting Arris Grp., Inc. v. British Telecomms. PLC, 639 F.3d 1368, 1379 n.13 (Fed. Cir. 2011)). Additionally, the inducer must have acted with the requisite intent to induce others to infringe, and it must be shown that all the steps of the claim were indeed completed. Id.; see infra notes 248–252 and accompanying text (noting the limitations on the scope of § 271(b) inducement infringement as a result of these other requirements).

¹⁴⁷ Akamai II, 692 F.3d at 1309.

⁴⁸ *Id*.

¹⁴⁹ See id.; Robinson, supra note 5, at 97; Liebes, supra note 5 at 343.

¹⁵⁰ Akamai II, 692 F.3d at 1309.

¹⁵¹ *Id.* As the majority stated, it would indeed be a "bizarre result" to hold someone liable who induced a single entity to perform all the steps of a method claim, but to deny liability for someone who induced multiple parties to perform the collective steps (as was the case in *McKesson*), or someone who went even further by actually performing some of the steps before inducing another (as was the case in *Akamai*). *Id.* at 1305, 1309.

Additionally, the majority's reasoning relied on an interpretation of the text of § 271. ¹⁵² Section 271(a) simply states that whoever performs the specified statutory acts "infringes the patent." Furthermore, § 271(b) states that whoever "induces infringement" of a patent "shall be liable as an infringer." The majority pointed out, however, that nothing in the statutory text indicates that "infringement" in § 271(b) is limited to infringement by a single entity. ¹⁵⁵ Instead, infringement for inducement refers "most naturally" to the acts necessary to infringe a patent, regardless of the number of entities who perform the collective acts. ¹⁵⁶

1. Citing the Patent Act's Legislative History

The majority relied on the legislative history of the Patent Act as strong support for its conclusion that induced infringement can occur regardless of how many entities perform the acts necessary to constitute infringement. ¹⁵⁷ Initially, the court pointed to a 1952 House Report that indicated that new subsection (b) of § 271 "recites in broad terms that one who aids and abets an infringement is likewise an infringer." ¹⁵⁸

Moreover, the majority used the hearing testimony of Giles Rich, a principal drafter of the statute who would go on to become a renowned Federal Circuit judge. ¹⁵⁹ In commenting on a proposed version of what would become § 271(b), Judge Rich made statements that the majority reasoned clearly showed that he saw no anomaly in finding liability for indirect infringement when there was "obvious infringement of the

¹⁵² *Id.* at 1309; *see* Liebes, *supra* note 5, at 340–41.

^{153 35} U.S.C. § 271(a) (2006); Akamai II, 692 F.3d at 1309.

¹⁵⁴ 35 U.S.C. § 271(b); Akamai II, 692 F.3d at 1309.

¹⁵⁵ Akamai II, 692 F.3d at 1309; see 35 U.S.C. § 271(b).

¹⁵⁶ Akamai II, 692 F.3d at 1309. The majority further noted that a main principle of statutory interpretation involves asking what policy Congress was attempting to promote. *Id.* at 1318. In conducting this analysis, the majority found no persuasive evidence to suggest that Congress intended to create a system where parties could avoid infringement liability solely by dividing the steps of a method claim among them. *Id.* The promotion of the *BMC* "single entity" rule would create a regime where parties could do just such a thing without producing any recognizable countervailing benefits. *Id.*

¹⁵⁷ *Id.* at 1309–11.

¹⁵⁸ Id. at 1309 (citing H.R. Rep. No. 82-1923, at 9 (1952)). The majority also pointed to P.J. Federico's *Commentary on the New Patent Act*, noting that it has provided the Federal Circuit with invaluable insight into the intentions of the drafters of the Patent Act. Id. at 1310 & n.2; see Federico, supra note 65, at 214.

¹⁵⁹ Akamai II, 692 F.3d at 1310-11.

patent," even though there was "no direct infringer" of the patent. ¹⁶⁰ The court determined that his description, in which he expressly indicated that the "obvious infringement" should be remediable, "perfectly" fit the factual scenarios of both *Akamai I* and *McKesson*. ¹⁶¹

2. Fitting in the Case Precedent

The majority was forced to answer the charge made by Judge Linn's dissenting opinion that the majority opinion disregarded prior decisions of both the Federal Circuit and the Supreme Court. ¹⁶² Judge Linn, in dissent, contended that those authorities compelled a conclusion that liability for induced infringement of a method claim depended on showing that a single induced entity would be liable for direct infringement of the claim. ¹⁶³ Whereas *BMC* relied on that proposition, the majority found *BMC* to be an overextension of past precedent. ¹⁶⁴

As the majority had already mentioned, past precedent established that inducement infringement required a finding of direct infringement. ¹⁶⁵ The key distinction for the court, however, was that the past cases that had laid down that fundamental principle were not cases involving divided infringement of method claims. ¹⁶⁶ Many of the prior cases were product claim scenarios—where divided infringement issues were avoided due to the fact that the last entity to complete the product was the direct infringer. ¹⁶⁷ Further, other earlier cases were instances

¹⁶⁰ Id. at 1311.

¹⁶¹ *Id.* Judge Rich described a hypothetical "combination" method claim for radio communication that would require steps with both the transmitter and receiver—which were typically owned by different people. *Id.* at 1310. Similarly, the method claims in *Akamai I* and *McKesson* enabled steps to be taken by multiple actors. *See id.* at 1306.

 $^{^{162}}$ Id. at 1315; id. at 1337, 1347–48 (Linn, J., dissenting); see infra notes 172–180 and accompanying text (discussing this dissenting opinion).

¹⁶³ Akamai II, 692 F.3d at 1337–38 (Linn, J., dissenting) (citing Deepsouth Packing Co. v. Laitram Corp., 406 U.S. 518, 526 (1972); Aro Mfg. Co. v. Convertible Top Replacement Co., 365 U.S. 336, 341 (1961); Joy Techs., Inc. v. Flakt, Inc., 6 F.3d 770, 774 (Fed. Cir. 1993)); see Akamai II, 692 F.3d at 1315 (majority opinion).

¹⁶⁴ Akamai II, 692 F.3d at 1315; see Liebes, supra note 5, at 342–43; supra notes 141–145 and accompanying text.

¹⁶⁵ Akamai II, 692 F.3d at 1308, 1315; see Deepsouth Packing, 406 U.S. at 526; Am, 365 U.S. at 341; Dynacore Holdings Corp. v. U.S. Philips Corp., 363 F.3d 1263, 1272 (Fed. Cir. 2004).

¹⁶⁶ Akamai II, 692 F.3d at 1317; see Deepsouth Packing, 406 U.S. at 526; Aro, 365 U.S. at 341; Dynacore, 363 F.3d at 1272.

 $^{^{167}}$ Akamai II, 692 F.3d at 1315–17; see Aro, 365 U.S. at 341; Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc., 424 F.3d 1293, 1312 (Fed. Cir. 2005).

where all of the elements of the claim were not carried out; thus, there was no actual infringement by any entity. 168

In that sense, previous cases all stood for the same principle that the majority relied on and found uncontroverted—namely that there must be proof of infringement in order for there to be a finding of inducement infringement. Whereas prior precedent stood for the broad proposition that inducement liability relies on proof of actual infringement, those earlier cases never stated that the infringement needed to be committed by a single entity. As the majority noted, those prior cases simply stood for the proposition that the crucial factor for inducement was a finding of actual infringement, regardless of how many entities contributed to completing the various steps of the claim. 171

B. Judge Linn's Dissent: Return to the "Single Entity" Rule of BMC, but Expand the Contours of the "Control or Direct" Standard

Judge Linn, joined by three fellow judges, wrote a strong dissenting opinion that accused the majority of assuming the role of policymaker by effectively rewriting § 271(b).¹⁷² The dissent reiterated its reading of longstanding precedent, both in the Supreme Court and in the Federal Circuit, that inducement infringement was based on a finding of direct infringement.¹⁷³ Judge Linn urged for a return to the "single entity" rule announced in *BMC*, which held that liability for direct infringement under § 271(a) requires a single actor to perform each and every step in a method claim.¹⁷⁴ Furthermore, the dissent asserted that joint infringement problems could be resolved by imposing vicarious direct infringement liability on parties for the acts of another, but only in circumstances where they "control or direct" the other party's actions.¹⁷⁵

¹⁶⁸ Akamai II, 692 F.3d at 1315–17; *see Dynacore*, 363 F.3d at 127. As such, the prior cases were of no help in determining what happened when multiple entities performed the various steps of a method claim, other than in laying down the fundamental principle that there could be no inducement liability without actual infringement. *See Akamai II*, 692 F.3d at 1315–17.

¹⁶⁹ See Akamai II, 692 F.3d at 1315-16.

¹⁷⁰ Id. at 1317.

¹⁷¹ Id. at 1315-17.

¹⁷² *Id.* at 1337 (Linn, J., dissenting). Judges Timothy B. Dyk, Kathleen M. O'Malley, and Sharon Prost joined in this dissent. *Id.*

¹⁷³ *Id.* at 1337–38 (Linn, J., dissenting).

¹⁷⁴ Id. at 1337–38, 1347–48; see BMC, 498 F.3d at 1378–79.

 $^{^{175}}$ Akamai II, 692 F.3d at 1337–38, 1350 (Linn, J., dissenting); see BMC, 498 F.3d at 1379–82.

Judge Linn's dissent disagreed with the majority's reinterpretation of precedent that disavowed the finding of an act of § 271(a) direct infringement as a prerequisite to finding inducement infringement under § 271(b). The dissent reasoned that interpreting § 271(b) in light of subsection (a) was a straightforward exercise. The Judge Linn's reading, § 271(a) defines infringement, with § 271(b) establishing inducement infringement for entities who "induce" infringement as it is defined in subsection (a). Separating subsection (b)'s definition of infringement from the context of subsection (a) was unsupported by the text itself, and was rooted in the majority's conception of what Congress ought to do with the statutory text, rather than what it had done. Under Linn contended that such a broadening of the doctrine of inducement—such that no predicate act of direct infringement is required—was an inappropriate "sweeping change" to national patent policy. Section 1800.

¹⁷⁶ Akamai II, 692 F.3d at 1337–38 (Linn, J., dissenting); see id. at 1306, 1308–09 (majority opinion); supra notes 162–171 and accompanying text (discussing the majority's reading of precedent).

¹⁷⁷ Akamai II, 692 F.3d at 1339 (Linn, J., dissenting).

¹⁷⁸ *Id.* The dissent's reading of § 271 came from both House and Senate reports during the statute's adoption process in 1952, which indicated that subsection (a) was "a declaration of what constitutes infringement in the . . . statute." *Id.*; *see* S. Rep. No 82-1979, at 8 (1952), *reprinted in* 1952 U.S.C.C.A.N. 2394, 2402; H.R. Rep. No. 82-1923, at 9 (1952).

¹⁷⁹ Akamai II, 692 F.3d at 1337, 1339 (Linn, J., dissenting). In the dissent's opinion, the majority essentially rewrote § 271(b) to read "[w]hoever actively induces infringement of [or induces two or more separate parties to take actions that, had they been performed by one person, would infringe] a patent shall be liable as an infringer." Id. at 1339; see 35 U.S.C. § 271(b) (2006).

¹⁸⁰ Akamai II, 692 F.3d at 1337, 1342 (Linn, J., dissenting). But see supra notes 162–171 and accompanying text (explaining how the majority still required every element of the claim to be infringed, such that there is actual infringement, but eliminates the restriction announced in BMC that a single entity must be responsible for such infringement). Judge Linn also relied on the fact that Congress did not address divided infringement in the 2011 Leahy-Smith America Invents Act. Akamai II, 692 F.3d at 1343 (Linn, J., dissenting); see Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (codified as amended in scattered sections of 35 U.S.C.); see also Robinson, supra note 5, at 102–03 (commenting that Congress, in passing the Leahy-Smith America Invents Act, missed an opportunity to clarify divided infringement). Judge Linn reasoned that Congress was aware of the BMC "single entity" rule and could have altered the infringement landscape. Akamai II, 692 F.3d at 1343 (Linn, J., dissenting). Because Congress chose not to act, Judge Linn concluded that it must not have taken issue with the Federal Circuit's interpretation of § 271(a) and (b). Id.

1. Expanding the *BMC* "Control or Direct" Standard for Vicarious Direct Infringement in Joint Infringement Cases

Interestingly, Judge Linn's dissent indicated a willingness to expand the types of multi-actor conduct that would satisfy vicarious direct infringement under § 271(a). ¹⁸¹ As illustrated by the cases that followed the Federal Circuit's *BMC* ruling, patentees had considerable difficulties in satisfying the *BMC* "control or direct" standard. ¹⁸² An increasingly wider liability gap ensued, which defendants were able to slide through by splitting up method claim steps among independent actors. ¹⁸³ *Akamai I* and *McKesson* had been the two latest examples, leading the Federal Circuit to rehear both cases en banc. ¹⁸⁴

Judge Linn's dissent claimed that the *BMC* "control or direct" standard was sufficiently broad to cover joint enterprises. ¹⁸⁵ This holding would mean that interactive or joint collaboration scenarios—such as in the Federal Circuit's 2010 case *Golden Hour Data Systems, Inc. v. emsCharts, Inc.*, in which two independent entities collaborated to sell their products together as a unit to escape infringement liability—would now be remediable under the joint infringement standard for divided infringement of multi-actor method claims. ¹⁸⁶ The dissent even went so far as to recommend that the en banc panel expressly overrule the Federal Circuit panel's decision in *Golden Hour*, which found insufficient evidence of "direction" or "control" in the defendants' collaborative and strategic partnership, allowing them to escape liability. ¹⁸⁷

¹⁸¹ See Akamai II, 692 F.3d at 1349 (Linn, J., dissenting).

¹⁸² See McKesson, 98 U.S.P.Q.2d at 1283–85; Akamai I, 629 F.3d at 1320–22; Golden Hour Data Sys., Inc. v. emsCharts, Inc., 614 F.3d 1367, 1380–81 (Fed. Cir. 2010); Muniauction, Inc. v. Thomson Corp., 532 F.3d 1318, 1328–30 (Fed. Cir. 2008); supra notes 100–125 and accompanying text (discussing these cases in depth).

¹⁸³ See Akamai II, 692 F.3d at 1306; McKesson, 98 U.S.P.Q.2d at 1291 (Newman, J., dissenting); Gupta, supra note 5, at 66–67; Dokhanchy, supra note 5, at 154–59; Larsen, supra note 3, at 57–59; Liebes, supra note 5, at 335.

 $^{^{184}}$ See Akamai II, 692 F.3d at 1305–06; supra notes 110–125 and accompanying text (discussing these cases).

¹⁸⁵ Akamai II, 692 F.3d at 1349–50 (Linn, J., dissenting). The dissent reasoned that a joint enterprise would exist for purposes of imposing vicarious liability when there was, among other things: an express or implied agreement among the members of the group; a common purpose to be carried out by the group; and an equal right of control. *Id.* (citing RESTATEMENT (SECOND) TORTS § 491 cmt. c (1965)).

¹⁸⁶ Id. at 1349; see Golden Hour, 614 F.3d at 1380-81.

¹⁸⁷ Akamai II, 692 F.3d at 1349 (Linn, J., dissenting); see supra notes 105–109 and accompanying text (analyzing the Golden Hour decision). Judge Linn's dissent would find the existence of direct infringement under § 271(a) only when one party performed each and every claim limitation, or when one entity is vicariously liable for the acts of others completing the steps of a method claim—which could occur when that party either directed or

Although the dissent indicated interest in expanding the scenarios that would satisfy the "control or direct" standard for vicarious direct infringement under § 271(a), it noted that such a change in the joint infringement standard could not be addressed because of the limited scope of the majority's holding. The majority had left the Federal Circuit's doctrine of direct infringement—including vicarious direct infringement in joint infringement scenarios—intact, and chose not to revisit any principles of § 271(a) in its ruling. Instead, the majority's ruling hinged exclusively on a reinterpretation of § 271(b). In the en banc court did not expand the stringent "control or direct" standard to capture joint enterprises acting together to collectively infringe.

2. Leave the Akamai I and McKesson Rulings Intact

Additionally, although Judge Linn's dissent showed a willingness to expand the joint infringement standard for § 271(a) direct infringement, he noted that the *Akamai I* and *McKesson* patentees would actually still remain without a remedy under an expanded joint infringement standard. ¹⁹² Neither of the cases' factual scenarios fell within the dissent's broader "control or direct" standard for joint infringement. ¹⁹³ Moreover, Judge Linn's reading of § 271(b) inducement relied on a predicate finding of another entity's § 271(a) direct infringement. ¹⁹⁴ Therefore, divided infringement scenarios, in which certain parties were induced to commit elements of the claim, were still irremediable as long as no single entity "controlled" or "directed" the induced entity's actions. ¹⁹⁵ Judge Linn reiterated that in method claim scenarios, it

controlled another in a principal-agent relationship or similar contractual relationship, *or* participated in a joint enterprise to practice every element of the claim. *Akamai II*, 692 F.3d at 1350 (Linn, J., dissenting).

¹⁸⁸ Akamai II, 692 F.3d at 1349 (Linn, J., dissenting); see id. at 1307 (majority opinion).

¹⁸⁹ *Id.* at 1307; *id.* at 1349 (Linn, J., dissenting).

¹⁹⁰ *Id.* at 1306–09 (majority opinion); *id.* at 1349 (Linn, J., dissenting).

¹⁹¹ See id. at 1307 (majority opinion).

¹⁹² *Id.* at 1350–51 (Linn, J., dissenting).

¹⁹³ *Id.* at 1349; *see id.* at 1306–07 (majority opinion) (discussing the facts of these cases); *supra* notes 185–187 and accompanying text (detailing Judge Linn's expansion of the "control or direct" standard to include joint enterprises). Both cases involved "innocent" entities who were presumably unaware of their participation. *See Akamai II*, 692 F.3d at 1306–08 & n.1.

¹⁹⁴ Akamai II, 692 F.3d at 1350 (Linn, J., dissenting).

¹⁹⁵ See id.

was the responsibility of patentees to rectify concerns over divided infringement through proper claim drafting. 196

III. A RECOMMENDATION FOR A FLEXIBLE APPROACH TO REMEDY THE LIABILITY GAP FOR DIVIDED INFRINGEMENT

The 2012 U.S. Court of Appeals for the Federal Circuit's en banc decision in *Akamai Technologies, Inc. v Limelight Networks, Inc.* (*Akamai II*) announced a shift in 35 U.S.C. § 271(b) inducement infringement jurisprudence in an attempt to fill the method patent liability gap left by the stringent "control or direct" standard for § 271(a) joint infringement. ¹⁹⁷ The *Akamai II* reinterpretation of inducement infringement is a crucial step in the right direction, and will serve to protect patentees in many divided infringement scenarios involving innocent actors who are unaware of their part in a larger method patent infringing scheme. ¹⁹⁸ By leaving § 271(a) joint infringement jurisprudence static, however, the *Akamai II* decision represents only an incomplete solution to the problem of divided infringement, and will continue to let certain infringement scenarios escape liability. ¹⁹⁹

¹⁹⁷ 692 F.3d 1301, 1305–09 (Fed. Cir. 2012) (en banc) (per curium), *petition for cert. filed*, 81 U.S.L.W. 3395 (U.S. Dec. 28, 2012) (No. 12-786); *see supra* notes 135–171 and accompanying text (discussing the majority opinion).

¹⁹⁸ See Ākamai II, 692 F.3d at 1307–08 & n.1; see supra notes 140–147 and accompanying text (discussing the changes made to § 271(b) inducement by Akamai II). Innocent actors carrying out a part of a method claim are not held liable under § 271(b); rather, it is the inducing entity who is held liable. Akamai II, 692 F.3d at 1308 & n.1.

¹⁹⁹ See Akamai II, 692 F.3d at 1349–50 (Linn, J., dissenting) (remarking that the majority's decision to leave § 271(a) intact necessarily fails to correct the result in Golden Hour);

¹⁹⁶ Id. at 1349-50. In this regard, Judge Linn noted that patentees could usually structure their claims to capture infringement by a single party. Id. at 1349. As such, because of patentees' ability to craft claims to ameliorate divided infringement, patentees were the "least cost avoider of the problem of unenforceable patents due to joint infringement." Id. at 1350. Judge Newman also wrote a dissenting opinion, asserting that neither the majority opinion nor Judge Linn's dissent resolved the issue of divided infringement. Id. at 1319–36 (Newman, J., dissenting). Judge Newman's opinion urged for a joint infringement regime where multiple entities are held liable for § 271(a) direct infringement. Id. at 1326, 1336. Such infringement would occur when all of the claimed steps were performed; it would not matter if they were performed: by one or more entities; by direction or control; jointly; or in collaboration or interaction. Id. at 1326. Under this standard, upon a finding of direct infringement, liability would be apportioned to all infringers. Id. at 1331, 1336. Furthermore, § 271(b) induced infringement would remain restricted to cases where a predicate finding of direct infringement was found. Id. at 1328. Judge Newman stated that such a joint infringement construct was implicitly approved in 2006 in On Demand Machine Corp. v. Ingram Industries, Inc., a Federal Circuit panel case in which she wrote the opinion. Id. at 1325; see On Demand, 442 F.3d 1331, 1344-45 (Fed. Cir. 2006); supra notes 79-84 and accompanying text.

This Part contends that the per curium majority missed an opportunity to further close the liability gap for divided infringement, as collaborative and joint enterprise scenarios do not meet either the new inducement standard, or the "control or direct" standard for joint infringement liability announced in the 2007 Federal Circuit case *BMC Resources, Inc. v. Paymentech, L.P.*²⁰⁰

Accordingly, this Part proposes that the Federal Circuit should revisit and expand its § 271(a) joint infringement standard—the *BMC* "control or direct" standard—while also utilizing its new § 271(b) jurisprudence in appropriate inducement scenarios.²⁰¹ This "dual-avenue" approach will provide method patentees with a flexible scheme to robustly protect themselves from defendants that may otherwise escape liability by dividing their performance of the patent.²⁰² Furthermore, this flexible scheme matches the broader policy goals behind the Patent Act and patent infringement protection generally.²⁰³

Section A of this Part details how the *Akamai II* opinion missed an opportunity to further close the liability gap for divided infringement. 204 Section B then argues for a "dual-avenue" approach that will provide method patentees with a flexible scheme to protect themselves from infringing activity. 205

A. Induced Infringement Will Still Fail to Capture Collaborative Divided Infringement

The Federal Circuit's per curium majority in *Akamai II* took a major step in attempting to close the liability gap that has resulted for method patents where the various claim steps are divided among actors. ²⁰⁶ By declining to reexamine the scope of § 271(a) joint infringement, however, the majority failed to fully close the liability gap for divided infringement of method claims, leaving an incomplete solution to the problem. ²⁰⁷

see also id. at 1305–09 (majority opinion) (declining to alter the Federal Circuit's § 271(a) jurisprudence).

²⁰⁰ See infra notes 206–227 and accompanying text.

²⁰¹ See infra notes 228–252 and accompanying text.

²⁰² See infra notes 253–254 and accompanying text.

²⁰³ See infra notes 255–262 and accompanying text.

²⁰⁴ See infra notes 206–227 and accompanying text.

²⁰⁵ See infra notes 228–262 and accompanying text.

²⁰⁶ See Akamai II, 692 F.3d at 1305–09; H. Wayne Porter, Federal Circuit Partially Revises Divided Infringement Law, Feb. Law., Dec. 2012, at 10, 11.

²⁰⁷ See infra notes 217–227 and accompanying text.

Initially, the per curium majority reasoned that no basis existed to immunize an inducer from liability for infringement simply because the parties structured their conduct to ensure that no single defendant committed all the necessary acts to give rise to § 271(a) direct liability—either individually or vicariously. This is because a method patent collectively practiced by others has the same harmful effect on patentees as if it were committed by one actor: it infringes on the legally entitled right of the patentee to exclude all others from engaging in the patented process during the duration of the patent. ²⁰⁹

Furthermore, the majority observed that previous inducement instances had failed to be remedied through the *BMC* "control or direct" standard for vicarious direct infringement.²¹⁰ The Federal Circuit had continually denied holding defendants liable for satisfaction of the "control or direct" standard, culminating in the 2010 case *Akamai Technologies, Inc. v. Limelight Networks, Inc.* (*Akamai I*) and the 2011 case *McKesson Technologies, Inc. v. Epic Systems Corp.*²¹¹ Moreover, prior to *Akamai II*, § 271(b) inducement could only arise in the presence of § 271(a) direct infringement.²¹² Method patents in inducement circumstances that failed to rise to the level of "control" or "direction" were effectively unenforceable.²¹³

After Akamai II, a patentee can hold a defendant accountable for induced patent infringement under § 271(b) without needing to turn to § 271(a) joint infringement.²¹⁴ The induced actor(s) need not be an agent of the inducer or have acted under the inducer's direction or

²⁰⁸ Akamai II, 692 F.3d at 1309.

 $^{^{209}}$ See id.; supra notes 40–43 and accompanying text (discussing the rights secured by patentees).

²¹⁰ See Akamai II, 692 F.3d at 1305–07; McKesson Techs., Inc. v. Epic Sys. Corp., 98 U.S.P.Q.2d 1281, 1283–85 (Fed. Cir. 2011), rev'd sub nom. Akamai II, 692 F.3d 1301; Akamai I, 629 F.3d 1311, 1320–22 (Fed. Cir. 2010), rev'd per curium, 692 F.3d 1301; supra notes 100–101, 135–139 and accompanying text (discussing the result of BMC interpreting § 271(b) inducement to require a predicate finding of direct infringement).

²¹¹ See, e.g., McKesson, 98 U.S.P.Q.2d at 1283–85; Akamai I, 629 F.3d at 1320–22; Golden Hour Data Sys., Inc. v. emsCharts, Inc., 614 F.3d 1367, 1380–81 (Fed. Cir. 2010); Muniauction, Inc. v. Thomson Corp., 532 F.3d 1318, 1328–30 (Fed. Cir. 2008); BMC Res., Inc. v. Paymentech, L.P., 498 F.3d 1373, 1378–82 (Fed. Cir. 2007); supra notes 100–125 and accompanying text (discussing these cases in depth).

²¹² Akamai II, 692 F.3d at 1306, 1308; see BMC, 498 F.3d at 1379–80. If no single entity satisfied the BMC "control or direct" standard, § 271(b) relief was likewise unavailable. See Akamai II, 692 F.3d at 1306, 1308; Porter, supra note 206, at 10.

²¹³ See Akamai II, 692 F.3d at 1306 (noting that recent precedent interpreted § 271(b) to mean that unless the accused infringer directed or controlled the actions of the party or parties performing the claimed steps, the patentee had no remedy).

²¹⁴ See id. at 1305–09; Porter, supra note 206, at 10–11.

control, which was difficult to prove in the cases following *BMC*.²¹⁵ Instead, it is enough that the inducer merely "cause[ed], urge[d], encourage[d], or aid[ed]" the infringing conduct, acted with the sufficient intent to induce the infringement, and that all the elements of the method claim were in fact carried out.²¹⁶

Although the majority helped shrink the liability gap for these divided infringement scenarios, it missed an opportunity to go even further in closing this gap, a step the majority reasoned was unnecessary. The reason lies in the majority's decision to leave the Federal Circuit's § 271(a) jurisprudence intact. Because of this decision, the strict BMC "control or direct" standard continues to operate in divided infringement circumstances that do not implicate inducement. As such, absent an inducement scenario, a patentee must demonstrate that a defendant "controlled or directed" the other actors completing the method steps in order to find that defendant liable for § 271(a) joint infringement—a much more difficult standard to meet.

²¹⁵ Akamai II, 692 F.3d at 1308; see McKesson, 98 U.S.P.Q.2d at 1283–85; Akamai I, 629 F.3d at 1320–22; Golden Hour, 614 F.3d at 1380–81; Muniauction, 532 F.3d at 1328–30; supra notes 100–125 and accompanying text.

²¹⁶ Akamai II, 692 F.3d at 1308 (quoting Arris Grp., Inc. v. British Telecomms. PLC, 639 F.3d 1368, 1379 n.13 (Fed. Cir. 2011)). Again, it is important to revisit the majority's reasoning in distinguishing prior cases that held that inducement infringement requires a finding of direct infringement. See supra notes 162–171 and accompanying text. Many prior cases predated today's technologies that are more susceptible to divided infringement possibilities. See Hayden W. Gregory, Proving Infringement in Divided Performance Process Claims: Something's Gotta Give, LANDSLIDE, Nov./Dec. 2012, at 1, 1; Dokhanchy, supra note 5, at 168. As a result, the proper application of those cases to divided method claims is that inducement infringement requires a showing of actual infringement—that is, evidence of every element of the method claim being carried out, irrespective of the number of actors involved in doing so. See Akamai II, 692 F.3d at 1308–09; supra notes 165–171 and accompanying text (discussing the Federal Circuit's analysis of precedent).

²¹⁷ See Akamai II, 692 F.3d at 1305–09 (choosing to leave the standard for § 271(a) joint infringement intact); Gregory, *supra* note 216, at 54 (commenting on the court's decision to leave § 271(a) unchanged); Porter, *supra* note 206, at 11 (predicting a need for future decisions to address the scope of § 271(a) direct infringement).

 $^{^{218}}$ See Akamai II, 692 F.3d at 1349 (Linn, J., dissenting) (urging for an expansion of the § 271(a) joint infringement standard to encompass joint enterprise scenarios); see also id. at 1307 (majority opinion) (declining to alter its § 271(a) jurisprudence).

²¹⁹ See id. at 1305–08 (majority opinion); Gregory, supra note 216, at 2–3 (noting that the majority "specifically disclaimed" that its decision would have any effect on § 271(a) direct infringement). One scholar disagrees, having interpreted Akamai II to eliminate the "control or direct" test and replacing it with an "inducement-only" rule. See Robinson, supra note 5, at 97, 99.

²²⁰ See Akamai II, 692 F.3d at 1307–08 (holding that a party that does not control or direct others' infringing acts—shown by an agency relationship or some equivalent—will not be liable for § 271(a) direct infringement even if the parties have arranged to "divide" their acts of infringing conduct specifically to escape liability).

As noted in Judge Linn's dissent, the unaltered continuance of the *BMC* "control or direct" standard in non-inducement scenarios fails to capture collaborative or joint enterprise arrangements among multiple actors. ²²¹ This was evident in the 2010 Federal Circuit decision in *Golden Hour Data Systems, Inc. v. emsCharts, Inc.*, where two entities created a strategic partnership that enabled their software to work together and be sold as a unit. ²²² The *Golden Hour* panel determined that, in this scenario, there was an absence of control or direction. ²²³ In doing so, the panel allowed an egregiously infringing collaborative enterprise to escape liability. ²²⁴

By forgoing resolution of the parameters of § 271(a) vicarious direct infringement, the en banc Federal Circuit in *Akamai II* missed an opportunity to reinterpret the *BMC* "control or direct" standard. ²²⁵ As such, the Federal Circuit's jurisprudence on divided infringement of method claims now accounts for inducement scenarios and the few factual circumstances that would satisfy the stringent "control or direct" standard, but it leaves intact the liability gap for collaborative joint enterprise scenarios. ²²⁶ In that sense, the *Akamai II* decision can only be called an incomplete solution to the problem of divided infringement. ²²⁷

B. Close the Liability Gap Further: A "Dual-Avenue" Approach

In order to ensure that patentees receive robust protection for their method claims, the Federal Circuit should revisit its $\S 271(a)$ joint infringement jurisprudence and expand the reach of the *BMC* "control or

²²¹ *Id.* at 1349 (Linn, J., dissenting); *see id.* at 1321 (Newman, J., dissenting); Dokhanchy, *supra* note 5, at 135, 155–56.

²²² Akamai II, 692 F.3d at 1349 (Linn, J., dissenting); see Golden Hour, 614 F.3d at 1371, 1380–81.

²²³ 614 F.3d at 1380–81; see Akamai II, 692 F.3d at 1349 (Linn, J., dissenting).

²²⁴ See Akamai II, 692 F.3d at 1349 (Linn, J., dissenting); Golden Hour, 614 F.3d at 1380.

²²⁵ See Akamai II, 692 F.3d at 1321 (Newman, J., dissenting) (criticizing the majority for declining its responsibilities to address the en banc issue); *id.* at 1338 (Linn, J., dissenting) (same); Gregory, *supra* note 216, at 54 (expressing disappointment that the majority chose not to address the difficult questions regarding direct infringement in divided infringement scenarios); Porter, *supra* note 206, at 11 (expressing expectation that future decisions will be forced to revisit § 271(a) direct infringement involving multiple actors).

²²⁶ See Akamai II, 692 F.3d at 1305–09 (expanding inducement but declining to alter the narrow § 271(a) standard); id. at 1321 (Newman, J., dissenting) (commenting on the majority's failure to address scenarios in which liability would not be found due to the court's § 271(a) analysis); id. at 1349 (Linn, J., dissenting) (commenting on the majority's failure to find liability in cases of collaboration, such as in Golden Hour); Dokhanchy, supra note 5, at 135 (observing the gap left by § 271(a) for collaborative scenarios).

²²⁷ Porter, *supra* note 206, at 11; *see Akamai II*, 692 F.3d at 1305–09.

direct" standard.²²⁸ Such a decision should be coupled with the implementation of the *Akamai II* court's holding on § 271(b) infringement for inducement scenarios.²²⁹ The result would provide patentees with a flexible "dual-avenue" scheme to protect their method patents—either through § 271(a) or (b), depending on the factual scenario—from defendants that escape liability by dividing their performance of a patent.²³⁰

1. Expand § 271(a) Joint Infringement to Encompass Collaborative Scenarios

Moving forward, the Federal Circuit should follow Judge Linn's recommendation to expand the court's § 271(a) joint infringement jurisprudence to include joint enterprise, or collaborative, scenarios. ²³¹ The factual circumstances of strategic partnerships lack any evidence of inducement of innocent actors, and therefore, only § 271(a) joint infringement can protect patentees from these arrangements. ²³² Applying a more expansive "control or direct" standard for § 271(a) joint infringement would help courts close the liability gap noted by the *Akamai II* majority in divided infringement scenarios. ²³³

²²⁸ See Akamai II, 692 F.3d at 1349 (Linn, J., dissenting); Gupta, supra note 5, at 69–74; Dokhanchy, supra note 5, at 159–63.

²²⁹ See Akamai II, 692 F.3d at 1306-09.

²³⁰ See id.; id. at 1349–50 (Linn, J., dissenting). One scholar has offered a different analytical approach that applies different analyses for joint infringement liability depending on the type of method claim involved. Robinson, *supra* note 5, at 109–10, 121–22. Another scholar argues that the *Akamai II* decision leads to inconsistent statutory interpretation, and that instead, the Federal Circuit should lower the § 271(a) direct infringement standard to one of two easier-to-satisfy relationship standards. Michael Liu Su, Note, *A Rock and a Hard Place: Choosing Between § 271(a) and (b) for Divided Infringement in* Akamai, 28 Berkeley Tech. L.J 609, 625, 639–40 (2013). This Note does not delve into the details of either author's scheme, but recommends referring to both pieces for alternative approaches in dealing with divided infringement in the aftermath of *Akamai II*.

²³¹ See Akamai II, 692 F.3d at 1349–50 (Linn, J., dissenting); Gupta, supra note 5, at 74; Dokhanchy, supra note 5, at 159–63. Judge Linn's Akamai II dissent laid out the justification for expanding § 271(a) joint infringement to include collaborative infringement scenarios. Akamai II, 692 F.3d at 1349 (Linn, J., dissenting). Judge Linn, however, rejected the majority's reinterpretation of § 271(b) inducement infringement, and would therefore use only § 271(a) joint infringement as the path to remedy divided infringement of method claims. Id. at 1349–50. Such reasoning appears to be the basis for his willingness to expand the § 271(a) joint infringement standard. See id. Therefore, Judge Linn would not likely approve of this Note's proposal for a flexible "dual-avenue" scheme. See id.; infra notes 232–262 and accompanying text (discussing this proposed approach).

²³² See Akamai II, 692 F.3d at 1349 (Linn, J., dissenting).

²³³ See id. at 1305–09 (majority opinion); id. at 1349–50 (Linn, J., dissenting).

The Federal Circuit's joint infringement case law is rooted in traditional vicarious liability principles.²³⁴ These roots were reflected in the Federal Circuit's establishment of the "control or direct" standard in *BMC*, which held defendants vicariously liable under § 271(a) for the acts of others in completing the steps of a method claim.²³⁵ By the time the court ruled on the issues in *Akamai II*, the "control or direct" standard was only met either with evidence of an agency relationship *or* when one party was contractually obligated to the other to perform steps of the claimed method.²³⁶

The "control or direct" standard for § 271(a) joint infringement should be redefined and expanded to include joint enterprises. ²³⁷ Vicarious liability principles should reach joint enterprises acting together to infringe a patent—even in the absence of formal contractual agreements or a principal-agent relationship. ²³⁸ As Judge Linn noted, joint enterprises exist for the purposes of imposing vicarious liability when there is: (1) an agreement among group members, either express or implied; (2) a common purpose; (3) a communal interest in that purpose among the group; and (4) an equal right to a voice in the direction of the enterprise, which gives an equal right of control. ²³⁹

Accordingly, in these joint enterprise or collaborative scenarios, the "control or direct" standard would be met because of the parties' equal right of *mutual control* and *common purpose*.²⁴⁰ Such an expansion in § 271(a) joint infringement jurisprudence would remedy the loophole that allows parties to arrange and divide their acts of infringing conduct specifically for the purpose of avoiding infringement liability.²⁴¹

²³⁴ Id. at 1348; see BMC, 498 F.3d at 1379.

²³⁵ Akamai II, 692 F.3d at 1348–50 (Linn, J., dissenting); see BMC, 498 F.3d at 1380–81.

²³⁶ See Akamai II, 692 F.3d at 1307; Akamai I, 629 F.3d at 1318–20. As such, other forms of cooperation, collaboration, or conspiracy were available to potential infringers and essentially immunized them from joint infringement liability. Gregory, *supra* note 216, at 2; see Golden Hour, 614 F.3d at 1380–81 (failing to find control or direction sufficient to trigger liability in a collaborative, joint enterprise arrangement).

²³⁷ See Akamai II, 692 F.3d at 1349 (Linn, J., dissenting).

²³⁸ Id. at 1349-50.

²³⁹ *Id.* at 1349 (citing Restatement (Second) of Torts § 491 cmt. c (1965)). Expanding § 271(a) joint infringement in this limited way would still ensure that innocent actors are not found guilty of patent infringement. *See id.* at 1307 (majority opinion); *id.* at 1348–49 (Linn, J., dissenting); Su, *supra* note 230, at 640–41.

²⁴⁰ Akamai II, 692 F.3d at 1349 (Linn, J., dissenting).

²⁴¹ See id. at 1349–50; see also id. at 1307 (majority opinion) (declining to alter the Federal Circuit's approach to § 271(a) liability). Judge Linn expressed a desire for the en banc court to explicitly overrule the holding in *Golden Hour*, the 2010 Federal Circuit decision finding the "control or direct" standard unmet in spite of the defendants' strategic partnership. *Id.* at 1349 (Linn, J., dissenting).

2. Apply § 271(b) to Scenarios Involving Innocent Induced Actors

In addition to expanding the circumstances that would satisfy § 271(a) joint infringement, courts should apply the *Akamai II* majority's analysis to cases involving inducement.²⁴² Utilizing § 271(b) inducement would protect innocent actors who are unaware of the existence of a method patent or their involvement in contributing to the infringement of a patent.²⁴³ At the same time, this approach to § 271(b) inducement would enable courts to attach liability to defendants that induce others to commit patent infringement.²⁴⁴

Inducing entities were previously able to escape liability by virtue of their lack of "control or direction" over the induced.²⁴⁵ Nevertheless, inducers do not deserve protection from liability merely because they utilized a glaring loophole in the Federal Circuit's divided infringement jurisprudence.²⁴⁶ The *Akamai II* majority correctly closed this liability gap as it pertains to inducement scenarios by attaching liability to actors who cause, urge, encourage, or aid others to infringe the steps of a method patent.²⁴⁷

The scope and reach of this new avenue of recovery for patentees is necessarily limited through the additional requirements of

²⁴² See id. at 1307–09 (majority opinion); supra notes 135–156, 214–216 and accompanying text (discussing the majority decision). In the wake of Akamai II, three Federal Circuit decisions have already vacated and remanded lower court decisions to reconsider inducement liability under the Federal Circuit's new § 271(b) standard. See Aristocrat Techs. Austl. PTY Ltd. v. Int'l Game Tech., Inc., 709 F.3d 1348, 1362–64 (Fed. Cir. 2013); Move, Inc. v. Real Estate Alliance Ltd., 709 F.3d 1117, 1123 (Fed. Cir. 2013); Travel Sentry, Inc. v. Tropp, 497 F. App'x 958, 966–67 (Fed. Cir. 2012).

²⁴³ Akamai II, 692 F.3d at 1308 & n.1.

²⁴⁴ See id. at 1307–09; supra notes 140–148 and accompanying text (discussing the Federal Circuit's altered inducement jurisprudence).

²⁴⁵ See Akamai II, 692 F.3d at 1305–09; McKesson, 98 U.S.P.Q.2d at 1283–85; Akamai I, 629 F.3d at 1320–22; Muniauction, 532 F.3d at 1328–30; see also supra notes 85–125 and accompanying text (discussing these cases in depth).

 $^{^{246}}$ See Akamai II, 692 F.3d at 1305–06, 1309; supra notes 149–151, 208 and accompanying text (discussing the policy rationale of the Akamai II majority opinion).

²⁴⁷ See Akamai II, 692 F.3d at 1308. Assuming the other requirements of § 271(b) are met, the court's decision in Akamai II would mean that cases mirroring the facts of Muniauction would come out differently if brought today. See Akamai II, 692 F.3d at 1305–09; Muniauction, 532 F.3d at 1328–30. Presumably, providing access to an online system and instructions for its use—as occurred in Muniauction—would now satisfy the new standard for inducement, since such conduct arguably qualifies as either causing or aiding another actor to complete the steps of a method claim. See Akamai II, 692 F.3d at 1308; Muniauction, 532 F.3d at 1328-30. In fact, the court explained that on remand, the plaintiffs in Akamai I and McKesson would have the opportunity to recover for the infringement of their method patents. See Akamai II, 692 F.3d at 1318–19 (detailing what plaintiffs would have to show on remand to recover under § 271(b)).

§ 271(b).²⁴⁸ Unlike under § 271(a), the alleged inducer must be shown to have acted with specific intent to induce and knowledge that the induced acts constitute patent infringement.²⁴⁹ The specific intent requirement ensures that an innocent party cannot accidently induce infringement and be held liable for it.²⁵⁰ Furthermore, the *Akamai II* majority noted that the patentee must still show that the method claim was actually infringed—that is, that all the steps of the claim were performed.²⁵¹ Without such a requirement, the patentee has not suffered a compensable harm.²⁵²

This "dual-avenue" approach to remedy infringement of divided method claims provides patentees with a flexible scheme—an ability to recover under \S 271(a) or (b) depending on the factual scenario of the infringement.²⁵³ Such a scheme would go a long way in closing the liability gap left in the wake of the *BMC* "control or direct" standard.²⁵⁴

3. Policy Reasons in Favor of Applying Expansive Protection for Divided Infringement

The incentive system justifying patents is based on protecting the exclusive rights granted to the owner—a weakening of which will in-

²⁴⁸ See Akamai II, 692 F.3d at 1308; infra notes 249-252 and accompanying text.

²⁴⁹ Global-Tech Appliances, Inc. v. SEB S.A., 131 S. Ct. 2060, 2068 (2011); Akamai II, 692 F.3d at 1308; DSU Med. Corp. v. JMS Co., 471 F.3d 1293, 1306 (Fed. Cir. 2006) (en banc); see Daniel Harris Brean, Asserting Patents to Combat Infringement Via 3D Printing: It's No "Use," 23 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 771, 793–94 (2013) (arguing that the knowledge requirement included as part of proving § 271(b) "active inducement" will be met only in the "most egregious" cases); Liebes, supra note 5, at 346 (noting that inducement infringement's intent requirement may pose an "additional barricade" for patentees confronting divided infringement); see also Mark A. Lemley, Inducing Patent Infringement, 39 U.C. Davis L. Rev. 225, 241–44 (2005) (proposing a sliding scale for inducement that balances greater involvement in the acts constituting infringement against the culpable mental state of the inducer).

²⁵⁰ See Akamai II, 692 F.3d at 1308.

²⁵¹ *Id.* at 1308–09; *see supra* notes 165–171 and accompanying text (discussing the *Akamai II* court's analysis of precedent to simply require proof that every step of a method claim had been carried out, such that there was actual infringement).

²⁵² See Akamai II, 692 F.3d at 1308; id. at 1349 (Linn, J., dissenting).

²⁵³ See id. at 1305–09 (majority opinion); id. at 1349–50 (Linn, J., dissenting); Brean, supra note 249, at 787 (noting that § 271's new flexible statutory scheme post-Akamai II will provide patentees with the ability to choose how they wish to most advantageously enforce their rights); Porter, supra note 206, at 11. One commentator predicts a migration of patentee suits from § 271(a) direct infringement actions to § 271(b) inducement actions. Gregory, supra note 216, at 54. Such a migration may occur, but an overreliance on § 271(b) by patentees is unlikely based on the other limitations built into § 271(b). See Akamai II, 692 F.3d at 1308; Brean, supra note 249, at 793–94; supra notes 248–252 and accompanying text (discussing those limitations).

²⁵⁴ See Akamai II, 692 F.3d at 1305–09; id. at 1349–50 (Linn, J., dissenting).

variably weaken the broader patent system. ²⁵⁵ Refusing to find liability for infringement solely because no single entity performed a method claim both evades the principles of patent infringement codified in 1952 and serves no policy purpose, thereby weakening the very system relied upon to incentivize innovation. ²⁵⁶ Moreover, many high-tech industries—including entities in the biotechnical and software industries—necessarily rely on method claims to protect their innovations. ²⁵⁷ It is essential to provide robust protection of such method patents and ensure that entities can derive value from their inventions, thus encouraging further investment in research and design. ²⁵⁸

Prior to the *Akamai II* decision, Federal Circuit precedent had utterly failed to protect patentees' rights in circumstances involving method claims performed by multiple actors.²⁵⁹ This Note's proposed "dual-avenue" approach to divided infringement of method claims expands on the *Akamai II* decision to enable patentees to act with flexibility in proving infringement.²⁶⁰ Under this approach, patentees could be confident that multiple avenues exist to prove a right to recovery when their valid method claims have been infringed.²⁶¹ Such a judicial framework would ensure the robust enforcement of method patentees' rights,

²⁵⁵ See Rich, supra note 40, at 524. Patent infringement serves as the essential vehicle to uphold the value of a patentee's rights. See id. at 524–25.

²⁵⁶ See Akamai II, 692 F.3d at 1309, 1315; McKesson, 98 U.S.P.Q.2d at 1285–86 (Newman, J., dissenting) (arguing that when the court holds that a patent cannot be enforced on any theory of infringement, it impermissibly eliminates the patent incentive for inventing interactive methods); Rich, supra note 40, at 524–25; Su, supra note 230, at 624–25, 636. Recall that the Patent Act established "in broad terms that one who aids and abets an infringement is likewise an infringer." Akamai II, 692 F.3d at 1309 (citing H.R. REP. No. 82-1923, at 9 (1952)).

²⁵⁷ Robinson, *supra* note 5, at 62–63, 101 (referring to "Information Age" innovations that often result in joint infringement of method claims); Liebes, *supra* note 5, at 310, 312, 348 (noting that the patent system has provided essential protection for many technological industries, particularly entities that rely on medical diagnostic process claims); Su, *su-pra* note 230, at 626 (noting that high-tech industries often employ innovative methods containing steps to be taken by multiple actors); *see* Larsen, *supra* note 5, at 42.

²⁵⁸ See Akamai II, 692 F.3d at 1306, 1309; Rich, supra note 40, at 523–24; Liebes, supra note 5, at 312 (arguing that investment in the biotechnology industry would decrease without the security of the patent system); Su, supra note 230, at 641 ("Without reliable enforcement of patent rights, society is bound to lose out on the benefits of certain inventions.").

²⁵⁹ See Akamai II, 692 F.3d at 1305–07; McKesson, 98 U.S.P.Q.2d at 1283–85; Akamai I, 629 F.3d at 1320–22; Golden Hour, 614 F.3d at 1380–81; Muniauction, 532 F.3d at 1328–30; Su, su-pra note 230, at 621, 626.

²⁶⁰ See Akamai II, 692 F.3d at 1306–09; id. at 1349 (Linn, J., dissenting); supra notes 228–254 and accompanying text (outlining this Note's proposed approach).

²⁶¹ See Brean, supra note 249, at 787; Porter, supra note 206, at 11; supra notes 228–254 and accompanying text.

fully close the liability gap for divided infringement, and accordingly, safeguard the incentive-based principles behind the patent system.²⁶²

Conclusion

Prior to the Federal Circuit's 2012 en banc decision in *Akamai II*, patentees' method claims were often without a remedy if they were infringed by actors who divide up the steps of the claim. The reason rested with the "single entity" rule announced in the Federal Circuit's 2007 *BMC* decision. The "single entity" rule held that in order to recover for divided infringement of a method claim under § 271(a), it must be shown that one defendant was responsible—either individually, or vicariously through satisfaction of the "control or direct" standard—for completion of all the steps of the claim. A liability gap resulted in circumstances where multiple actors completed steps of the claim, but failed to come within the bounds of the *BMC* "control or direct" standard.

The per curium majority in *Akamai II* left the Federal Circuit's § 271(a) jurisprudence intact, and instead turned to § 271(b) inducement infringement to close the liability gap. As a result, parties may be held liable for induced infringement if they cause, urge, encourage, or aid others to perform the steps of a method claim, and act with the specific intent to do so. The court's reinterpretation of inducement infringement served as a critical step in closing the divided infringement liability gap, but the majority missed an opportunity to further close the gap by failing to redefine the contours of § 271(a) direct infringement.

This Note posits that the Federal Circuit should expand the § 271(a) "control or direct" standard while also utilizing its new § 271(b) jurisprudence in appropriate factual circumstances. Such a "dual-avenue" approach would provide method patentees with flexibility to assert their rights and would protect them from defendants that escape liability by dividing up the performance of the patent. A statutory framework modeled on this Note's approach would ensure the robust en-

²⁶² See Akamai II, 692 F.3d at 1306–09; id. at 1348–50 (Linn, J., dissenting); McKesson, 98 U.S.P.Q.2d at 1285–86 (Newman, J., dissenting); supra notes 52–53, 228–261 and accompanying text. Further support for this Note's proposed flexible judicial framework can be found by referencing recent Supreme Court precedent involving patent cases. See Gregory, supra note 216, at 1 (noting flexibility and adaptability as the hallmarks in Supreme Court intellectual property jurisprudence dealing with "Information Age" inventions); Robinson, supra note 5, at 104–05 (detailing the Supreme Court's rejection of rigid, restrictive Federal Circuit tests in favor of more open-ended and flexible standards).

forcement of method patentees' rights, fully close the liability gap for divided infringement without ensnaring innocent actors, and, consequently, protect the incentive-based principles underlying the patent system.

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