
**THE CHANGING LANDSCAPE OF JOINT, DIVIDED AND
INDIRECT INFRINGEMENT – THE STATE OF THE LAW AND
HOW TO ADDRESS IT**

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I. Introduction

Patents are often written in a manner such that one part of a process is required to be performed by one person or entity and another part of the process is required to be performed by another person or entity. The infringement of these claims is sometimes referred to as “joint” or “divided” infringement. These divided claims have presented significant issues for litigants and courts to deal with in patent cases and have serious repercussions for how claims should be drafted. In particular, a number of cases were decided by the Federal Circuit between 2007 and 2011. These cases set forth various rules for assessing infringement of divided claims. The rules are complex and treat claims quite differently depending on how they were drafted, including treating “method” claims differently than “system” claims. Furthermore, some judges of the Federal Circuit have recently questioned whether the cases were correctly decided and whether they are inconsistent. Accordingly, the Federal Circuit quite recently decided to review two of those cases *en banc* – *Akamai Techs., Inc. v. Limelight Networks, Inc.*,¹ and *McKesson Techs., Inc.*

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¹ 419 F. App’x 989 (Fed. Cir. 2011).

*v. Epic Systems Corp.*² These cases may change or clarify some of the rules regarding joint infringement. In the meantime, practitioners must continue to consider and adapt to the rapidly changing landscape of this area of the law.

Many cases with divided claims also include allegations of indirect infringement, which is a separate doctrine, and recent cases have also changed the standards for providing indirect infringement. Consequently, this article examines the law as it is today and discusses the implications of the case law for issues regarding opinions of counsel, litigation, contract counseling and claim drafting, all with the understanding that we must practice in a world of uncertainty in this area of law.

II. A Practical Example

The complexities of divided infringement can perhaps best be addressed and understood by using a practical example. Consider a patent that includes a four-step process that occurs using a networked computer. The first 3 steps are performed by the company that sells the product and software to the user. The fourth step is performed by the user on his computer. This is essentially a simplified, abstract description of the invention described in *Centillion Data Sys., LLC v. Quest Comms. Int'l, Inc.*,³ which was a system for collecting, processing, and delivering information from a service provider, such as a telephone company, to a customer.⁴ On the “back-end,” the company stores records (step 1), generates reports from those records (step 2), and transfers those reports and records to a user (step 3).⁵ On the “front-end,” the user performs additional processing of the reports and records sent to him (step 4), presumably using software on his home computer.⁶

² No. 2010-1291, 2011 WL 2173401 (Fed. Cir. May 26, 2011).

³ 631 F.3d 1279 (Fed. Cir. 2011).

⁴ *See id.* at 1281 (describing function of Centillion’s ‘270 patent).

⁵ *See id.* (describing the system for processing information).

⁶ *See id.* (clarifying the methods by which the transaction records are processed).

First, assume that the patent claim is written such that the invention is a “method” with these four steps. Is there infringement if an accused product is used this way? As the law stands today, the answer is no, assuming the user is just a customer of the company that sells the software and performs the back end steps.⁷ Because one person does not perform each and every step, there is no direct infringement.⁸

Second, assume that the patent claim is written such that the invention is a “system” with these four steps. Is there infringement if an accused product is used this way? This changes the result.⁹ As the law stands today, there is infringement by the user in this situation.¹⁰ There is no direct infringement by the company, however, unless the user has an agency relationship with the company or other contractual obligation to perform the steps.¹¹ There may be indirect infringement, as discussed below.¹²

Third, assume that the patent claim is again written as “method,” but now it only includes the first three steps, not the fourth. In this case, there is infringement by a company that performs these back end steps, because there is no divided infringement, i.e., no third-party steps are used in the practice of the claim.¹³

Fourth, assume again that the claim is a “method” claim with all four steps. Now, however, assume that the person per-

⁷ See *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 629 F.3d 1311, 1318-19 (Fed. Cir. 2010) (stating the law regarding the liability of customers in infringement cases).

⁸ See *id.* at 1320 (holding no direct infringement without at least one party acting as an agent).

⁹ See *Centillion Data Sys.*, 631 F.3d at 1283-84 (clarifying what constitutes “use” in an infringement case).

¹⁰ See *id.* (expanding upon the definition of “use”).

¹¹ See *id.* at 1287 (reasoning a company can be vicariously liable for infringement when one party controls or directs the actions of another).

¹² See *id.* (articulating Centillion’s reliance on indirect infringement claim is misplaced).

¹³ See *id.* (contrasting the author’s example from Centillion where third-party steps were present).

forming the fourth step—the front-end step—is not just a customer of the company that performs the back-end steps, but instead is an agent of the company or is contractually obligated to perform the step. As the law currently stands today, in this case, there is no infringement by the user, but there is infringement by the company on the basis of vicarious liability.¹⁴

In the second example above, in which the only infringer is an end user, rather than the company that makes the software and operates the back end of the system, a patent holder may want to pursue litigation against the company, rather than individual customers. To do this, however, the patent holder must rely on theories of indirect infringement, which have two branches: induced infringement and contributory infringement.¹⁵ To proceed under these theories, however, the patent holder needs to show intent, which raises new potential obstacles for the patent holder.¹⁶ For example, what if the defendant company did not know of the patent? What if the defendant company did not think it was actually infringing the patent? What if the defendant received an opinion of counsel stating that it did not infringe? These issues will be discussed below.

As noted above, the case law is in flux regarding joint infringement, with the Federal Circuit poised to potentially alter the rules on joint infringement when it reaches its decisions in the *McKesson* and *Akamai* cases.¹⁷ To practice in this changing landscape requires an understanding of what the Court has been doing in the past and present.

¹⁴ See *Akamai Techs.*, 629 F.3d at 1319 (discussing when a company can be found liable for the acts of its customers).

¹⁵ See *id.* at 1318-20 (explaining ways company contributed to infringement); *Kyocera Wireless Corp. v. Int'l Trade Com'n*, 545 F.3d 1340, 1353-54 (Fed. Cir. 2009) (describing what is required for an alleged infringer to be found liable for induced infringement).

¹⁶ See *Minn. Mining & Mfg. Co. v. Chemque, Inc.*, 303 F.3d 1294, 1304-05 (Fed. Cir. 2002) (stating induced infringement requires knowledge and specific intent of the alleged infringer).

¹⁷ See *McKesson Techs.*, 2011 WL 2173401, at *1 (granting a rehearing en banc); *Akamai Techs.*, 419 F. App'x at 989 (allowing the case to proceed *en banc* with an appellate hearing).

III. Case Law on Joint Infringement

A. History of the Cases on Joint Infringement

The doctrine of “joint infringement” or “divided infringement” is rooted in 35 U.S.C. § 271(a), the language of which has been interpreted to require that direct infringement of a patent occurs only where a single party performs or uses each and every step or element of a claimed method or product.¹⁸ This requirement is also supported by the patent statute as a whole, which—through provisions pertaining to indirect infringement—also provides liability for situations where a party participates in or encourages patent infringement but does not directly infringe.¹⁹ Indirect infringement still requires a finding that some party amongst the accused actors be a direct infringer, however.²⁰

The statutory sections governing direct and indirect infringement appear straightforward and simple in their application.²¹ Infringement can become a highly complex determination, however, depending on the types of claims being asserted and the business relationships of one or more accused infringers.²² The interplay between the statutory provisions dealing with direct and indirect infringement and their application to the

¹⁸ See 35 U.S.C. § 271(a) (2006) (providing “[W]hoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States . . . infringes the patent.”). See also *Warner-Jenkinson Co. v. Hilton Davis Corp.*, 520 U.S. 17, 29 (1997) (determining it is essential to examine each part of a patent claim as opposed to applying the doctrine of equivalents to the whole invention).

¹⁹ See 35 U.S.C. §§ 271(b), (c) (defining what constitutes an infringer and contributory infringer).

²⁰ See *BMC Resources, Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1379 (Fed. Cir. 2007) (citing *Dynacore Holdings Corp. v. U.S. Philips Corp.*, 363 F.3d 1263, 1272 (Fed. Cir. 2004)) (resolving the issue of whether the defendants are liable for direct or indirect infringement and explaining that indirect infringement only occurs where there is direct infringement).

²¹ See 35 U.S.C. § 271 (outlining the definition of infringement, actions which constitute infringement and remedies for infringement).

²² See *McKesson Techs.*, 2011 WL 2173401, at *1 (questioning the situations required and the relationships of the business entities necessary to elicit a finding of infringement in a method claim); *Akamai Techs.*, 629 F.3d at 1319-21 (holding there must be a contractual or agency relationship between the parties for a finding of joint infringement in a method claim).

complexities of modern business can create unique challenges for the patent practitioner.²³

The Federal Circuit has frequently considered issues of so-called “divided infringement” in recent years.²⁴ As will be discussed below, those cases set forth rules surrounding the infringement of method and system claims where acts of multiple parties are involved.²⁵ There have been disagreements about the correctness of those decisions, however, and whether they are consistent.²⁶ Consequently, the court recently signaled its intent to clarify the law of divided infringement by calling for *en banc* review of its decisions in *Akamai Techs., Inc. v. Limelight Networks, Inc.*, and *McKesson Techs., Inc. v. Epic Sys. Corp.*²⁷ Below we discuss the series of cases that led to the decisions to review these two cases *en banc* and the state of the law today, acknowledging that the *Akamai* and *McKesson* cases may result in further changes or clarifications to the law.²⁸

²³ See *Akamai Techs.*, 629 F.3d at 1321-22 (demonstrating the infringement issues arising from market competition, independent contractors, and delegating duties).

²⁴ See e.g., *McKesson Techs.*, 2011 WL 2173401 at *1 (allowing rehearing to decide the necessary relationship for contributory infringement); *Akamai Techs.*, 629 F.3d at 1321-22 (necessitating agency relationship or contractual obligation between Limelight and the customer for direct infringement); *Fromson v. Advance Offset Plate, Inc.*, 720 F.2d 1565, 1568 (Fed. Cir. 1983) (allowing theory that Advance could be liable for contributory infringement based on the customers’ expected use).

²⁵ See *McKesson Techs.*, 2011 WL 2173401 at *1 (granting a rehearing to decide the necessary multi-party relationships for contributory infringement); *Akamai Techs.*, 629 F.3d at 1321-22 (outlining the agency relationship requirements to find infringement); *Fromson v. Advance Offset Plate, Inc.*, 720 F.2d 1565, 1568 (Fed. Cir. 1983) (finding contributory infringement grounds for liability based on the agency theory).

²⁶ See *McKesson Techs.*, 2011 WL 2173401, at *1 (questioning conditions necessary to warrant either direct or contributory infringement in method claim).

²⁷ See *Akamai Techs.*, 419 F. App’x. at 989 (granting rehearing *en banc* to focus on the question of direct versus indirect infringement); *McKesson Techs.*, 2011 WL 2173401, at *1 (allowing rehearing *en banc* and asking the parties to argue the circumstances for contributory infringement liability).

²⁸ See *infra* Part A (providing case law that leads to the questions being addressed in the *Akamai* and *McKesson* cases).

One of the Federal Circuit's earlier cases addressing "divided infringement," *Fromson v. Advance Offset Plate, Inc.*,²⁹ involved systems and methods related to photographic printing plates for use in the art of lithography—all of which required the treatment of the plates with certain chemicals.³⁰ The defendants included a company that manufactured "wipe-on" plates, as well as certain customers who applied the chemical coating after purchasing the plates.³¹

The court simply held that "because [the manufacturer's] customers, not [the manufacturer], applied the . . . coating, [the manufacturer] cannot be liable for direct infringement . . . but could be liable for contributory infringement"³² and remanded to the lower court for a determination of contributory infringement of the claims requiring the conduct of multiple actors.³³ The court did not distinguish the asserted method claims from the system claims, and it did not address any allegation of vicarious liability by the manufacturer for the actions of its customers.³⁴

Before turning to other more recent Federal Circuit decisions, we note that there were some other cases concerning divided infringement from other courts.³⁵ Prior to *Fromson* and the creation of the Federal Circuit, there was a Ninth Circuit case in which the court did not specifically address divided infringe-

²⁹ 720 F.2d at 1565.

³⁰ *See id.* at 1566 (discussing the manufacturing process allegedly infringed upon). The *Fromson* decision included no analysis, and the Federal Circuit will consider whether this divided infringement statement was correct and if so, under which circumstances, in the *en banc* review of *McKesson*. *See McKesson Techs.*, 2011 WL 2173401, at *1.

³¹ *See Fromson*, 720 F.2d at 1567-68 (exposing a manufacturer could be directly liable for pre-coated plates).

³² *See id.* at 1568.

³³ *See id.* at 1571 (remanding for further consideration consistent with the opinion).

³⁴ *See id.* at 1567 (assuming the claims against the customer defendants are the same as those asserted against Advance).

³⁵ *See, e.g., Crowell v. Baker Oil Tools*, 143 F.2d 1003, 1004 (9th Cir. 1944) (allowing the infringing parties' intent to be sufficient on the claim for declaratory judgment); *Tremond Co. v. Shering Corp.*, 122 F.2d 702, 705 (3d Cir. 1941) (stipulating no "actual controversy" without the claim that the patent is being infringed).

ment, but found that there was an “actual controversy” such that a suit could go forward where the alleged infringer had arranged for a “friendly company” to stockpile piping necessary to manufacture the allegedly infringing product.³⁶ The Ninth Circuit stated that, “[i]t is obvious that one may infringe a patent if he employ[s] an agent for that purpose or ha[s] the offending articles manufactured for him by an independent contractor.”³⁷ There are also a number of decisions from lower courts, both before and after *Fromson*, but prior to the more recent Federal Circuit decisions that are discussed below, that addressed divided infringement in more detail.³⁸ These cases recognized that, in some circumstances, a party could be liable for direct infringement where another party performed some of the steps.³⁹ Some found direct infringement based loosely on an agency theory, as expressed in *Crowell*, without conducting a rigorous analysis of whether the party was an actual “agent.”⁴⁰ Other cases found liability if there was “some connection” between the parties, but these cases do not define how strong that “connection” must be.⁴¹

³⁶ See *Crowell*, 143 F.2d at 1004 (reversing the judgment of the lower court and allowing the appellant to advance their claim).

³⁷ See *id.* (explaining an infringer need not be the manufacturer, but may infringe by employing another to manufacture, or assist in manufacturing the patented product).

³⁸ See *Mobil Oil Corp. v. W.R. Grace & Co.*, 367 F. Supp. 207, 253 (D. Conn. 1973) (considering alternatives to direct infringement where different parties complete different steps of patented method); *Marley Mouldings Ltd. v. Mikron Indus., Inc.*, No. 02 C 2866, 2003 WL 1989640, at *2-3 (N.D. Ill. Apr. 30, 2003) (outlining the elements of divided infringement through applying precedent from prior infringement cases).

³⁹ See *Mobil Oil*, 367 F. Supp. at 253 (explaining infringement can occur even when all steps of patented method are not completed by defendant directly); *Metal Film Co. v. Metlon Corp.*, 316 F. Supp. 96, 110-11 (S.D.N.Y. 1970) (holding plaintiff entitled to damages for infringement by defendant even where defendant completed only one of several steps).

⁴⁰ See *Mobil Oil*, 367 F. Supp. at 253 (indicating the last step in the manufacturing process performed by the end-user was still infringement by the manufacturer); see also *Metal Film*, 316 F. Supp. at 110 n.12 (finding the defendant was liable even though the outside suppliers performed the first step of the process (citing *Crowell*, 143 F.2d at 1004)).

⁴¹ See *Faroudja Labs., Inc. v. Dwin Elecs., Inc.*, No. 97-20010 SW., 1999 WL 111788, at *5-7 (N.D. Cal. Feb. 24, 1999) (demonstrating connection insufficient between the defendant and the customers where three of the four steps were per-

The holdings in these cases have largely been superseded by later Federal Circuit cases, as will be seen below, but the reasoning from these cases may be discussed again during the *en banc* review process in *Akamai* and *McKesson*.⁴²

More recent Federal Circuit cases have highlighted the obstacles presented to patentees attempting to prove infringement where the actions of multiple parties combine to carry out the alleged infringement.⁴³ In *Cross Medical Prods., Inc. v. Medtronic Sofamor Danek, Inc.*,⁴⁴ the claim involved an apparatus that included a lower bone interface that was “operatively joined” to (in contact with) a bone segment.⁴⁵

The accused medical devices did not include this element—the bone segment and bone interface were connected by surgeons performing operations using the defendant’s prod-

formed by the customers.); *see also* *E.I. Dupont de Nemours & Co. v. Monsanto Co.*, 903 F. Supp. 680, 735 (D. Del. 1995) (finding the customer who completed a majority of the process was liable although the retailer who sold the items necessary for infringement was not); *Marley Mouldings*, 2003 WL 1989640, at *2-3 (applying “some connection” standard to deny summary judgment for non-infringement because the defendant controlled the party performing the first steps of the process); *Hill v. Amazon, Inc.*, No. Civ.A.2:02-CV-186, 2006 WL 151911, at *2 (E.D. Tex. Jan. 19, 2006) (denying motion for summary judgment for non-infringement without an agency relationship where the vendor directed its customers to perform some steps of the method); *Cordis Corp. v. Medtronic Ave, Inc.*, 194 F. Supp. 2d 323, 349-50 (D. Del. 2002) (finding “some connection” standard was satisfied between the medical device company that produced stents and the physicians that used the stents).

⁴² *See On Demand Machine Corp. v. Ingram Indus., Inc.* 442 F.3d 1331, 1344-45 (Fed. Cir. 2006) (holding infringement from actions of multiple parties results in joint liability); *Cross Medical Prods., Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1312 (Fed. Cir. 2005) (doubting the plaintiff can prove contributory negligence when the defendant is not a direct infringer).

⁴³ *See On Demand*, 442 F.3d at 1345 (declining to find joint infringement where the methods were different among the parties involved and the claimed infringement predated the current invention); *Cross Medical Prods., Inc.*, 424 F.3d at 1310-12 (outlining the arguments presented to determine if the manufacturer or end-users of the invention are directly infringing).

⁴⁴ 424 F.3d 1293 (Fed. Cir. 2005).

⁴⁵ *See id.* at 1299, 1305-06 (reviewing the facts pertaining to the patented product and its method of use).

ucts.⁴⁶ The patentee argued that the situation was analogous to cases in which courts had found that a party directly infringes a method claim when a step of the claim is performed at the direction of, but not by, that party.⁴⁷ The court rejected this argument, noting that “if anyone makes the claimed apparatus, it is the surgeons, who are . . . not agents of [the defendant].”⁴⁸ The court went on to emphasize that “a rule that governs infringement of a method claim may not always govern infringement of an apparatus claim,”⁴⁹ which requires that “the device must meet all of the structural limitations” of the claim.⁵⁰ The court thus refused to find the defendant a direct infringer.⁵¹ The court remanded for a determination as to whether surgeons directly infringed by making the claimed apparatus and whether the defendant could be indirectly liable.⁵²

Just six months after *Cross Medical*, the Federal Circuit was again presented with an appeal relating to issues of joint infringement in *On Demand Machine Corp. v. Ingram Indus., Inc.*⁵³ The patent claimed systems and methods for manufacturing a single copy of a book, which required certain steps to be performed by a bookseller and others to be performed by a customer wishing to make a purchase.⁵⁴ The lower court had instructed

⁴⁶ See *id.* at 1311 (highlighting a defense to direct infringement by claiming the surgeons are not agents of Medtronic when making the apparatus).

⁴⁷ See *id.* (citing *Shields v. Halliburton Co.*, 493 F. Supp. 1376, 1389 (W.D. La. 1980) and relying on evidence that the defendant’s representatives were present during surgeries and assisted the surgeons in creating the claimed apparatus).

⁴⁸ *Id.*

⁴⁹ See *id.* (citing *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1317-18 (Fed. Cir. 2005)).

⁵⁰ See *Cross Medical Prods., Inc.*, 424 F.3d at 1311-12 (citing language from *Hewlett-Packard Co. v. Bausch & Lomb, Inc.*, 909 F.2d 1464, 1468 (Fed. Cir. 1990) that states “[a]pparatus claims cover what a device *is*, not what a device *does*.” (emphasis in original)).

⁵¹ See *id.* at 1312 (relying on the facts that “[t]he anchor seat of the device does not contact bone until the surgeon implants it.”)

⁵² See *id.* at 1324 (finding there was a material issue of fact in question that could be decided upon remand to the lower court).

⁵³ 442 F.3d 1331 (Fed. Cir. 2006).

⁵⁴ See *id.* at 1334 (setting forth the factors required for producing the Ross patent for manufacturing a “Single Book Copy”).

the jury that “[i]t is not necessary for the acts that constitute infringement to be performed by one person or entity” but “[w]hen infringement results from the participation and combined actions of more than one person or entity, they are all joint infringers.”⁵⁵ Based on this instruction, the jury found the defendants jointly liable for infringing the asserted method claims.⁵⁶ The Federal Circuit reversed the jury’s finding of infringement on the basis of an improper claim construction, but stated in dicta that it “discern[ed] no flaw” in the lower court’s jury instruction.⁵⁷

To the extent that *On Demand* may have signaled a relaxation of the requirement that a single actor practice every element to be a direct infringer, it was short-lived.⁵⁸ In *BMC Res., Inc. v. Paymentech, L.P.*,⁵⁹ the Federal Circuit clearly reaffirmed an “all elements” rule while also commenting on the practical realities of its application.⁶⁰ *BMC* involved methods for processing pin-less debit transactions that required multiple actors.⁶¹ The appellant argued that *On Demand* had changed the law governing joint infringement and, because Paymentech performed the steps in combination with other actors, it should be held liable for infringing the asserted method claims.⁶²

⁵⁵ *Id.* at 1344-45 (quoting the lower court’s jury instructions, outlining what is necessary for a finding of joint infringement).

⁵⁶ *See id.* at 1336-37 (awarding \$15,000,000 in compensatory damages as a result of the defendants’ patent infringements).

⁵⁷ *See id.* at 1345 (explaining the defendant’s method for receiving orders from its customers does not by itself constitute infringement).

⁵⁸ *See id.* at 1344-45 (providing an instruction that “[i]t is not necessary for the acts that constitute infringement to be performed by one person or entity,” which was subsequently modified to a more rigid definition).

⁵⁹ 498 F.3d 1373 (Fed. Cir. 2007).

⁶⁰ *See id.* at 1378, 1380-81 (explaining a “mastermind[s]” as those who contract out to avoid infringement but may still be liable).

⁶¹ *See id.* at 1375 (describing patented invention). “BMC’s patents disclose a method for PIN-less debit bill payment (PDBP) featuring the combined action of several participants, including the payee’s agent (for example, BMC), a remote payment network (for example, an ATM network), and the card-issuing financial institutions.” *Id.*

⁶² *See id.* at 1378 (reasoning contended by Paymentech since it did not perform every step involved in the direct infringement process).

The Federal Circuit disagreed.⁶³ Noting that *On Demand* concerned issues of claim construction, not the relationship between the parties, the court held that it did not affect the traditional standard requiring a single party to perform all steps of a claimed method.⁶⁴ Commenting further, the *BMC Res.* court emphasized that “[w]hen a defendant participates in or encourages direct infringement but does not directly infringe a patent, the normal recourse under the law is for the court to apply the standards for liability under indirect infringement,” which still requires “a finding that some party amongst the accused actors has committed the entire act of direct infringement.”⁶⁵

The *BMC Res.* court also elaborated on the circumstances under which the acts of a third party could be attributed to an accused direct infringer.⁶⁶ The court explained that one party must “control or direct” each step of the patented process.⁶⁷ As a result, “[a] party cannot avoid infringement . . . simply by contracting out steps of a patented process to another entity,” because “[i]t would be unfair indeed for the mastermind in such situations to escape liability.”⁶⁸ The court acknowledged, however, that requiring a single party to exert control or direction in order to be found liable under concepts of joint infringement may allow parties to avoid infringement through “arms-length agreements.”⁶⁹ On the other hand, a more expansive approach to direct infringement that could include the independent acts of multiple parties would undermine the statutory scheme for indirect infringement.⁷⁰ Moreover, the court noted that issues of joint in-

⁶³ *See id.* at 1380, 1382 (opposing BMC’s arguments by affirming summary judgment in favor of Paymentech).

⁶⁴ *See id.* at 1380 (agreeing with defendant’s statement that the Court’s decision did not change precedent).

⁶⁵ *BMC Res.*, 498 F.3d at 1379 (citing *Dynacore Holdings Corp. v. U.S. Philips Corp.*, 363 F.3d 1263, 1272 (Fed. Cir. 2004)).

⁶⁶ *See id.* at 1381 (expanding upon third party infringement liability).

⁶⁷ *See id.* at 1380 (providing the requirements for a finding of joint infringement).

⁶⁸ *Id.* at 1381.

⁶⁹ *See id.* (describing the expanded possibilities granted to parties as a result of “control or direction for a finding of joint infringement”).

⁷⁰ *See id.* (indicating the consequences under the control or direction scheme is preferable to the opportunities under an expanded approach).

fringement could often be avoided through proper claim drafting.⁷¹

Shortly after *BMC Resources*, the Federal Circuit was presented with another case involving business transactions occurring over the Internet in *Muniauction, Inc. v. Thomson Corp. Muniauction*⁷² dealt with methods for conducting electronic auctions, including certain steps performed by the auctioneer's systems and others by bidders.⁷³ The *Muniauction* court focused on the "direction or control" standard from *BMC Res.*⁷⁴ A jury instruction of the lower court suggested, among other things, that if the defendant instructed bidders how to use the system, then there might be joint infringement.⁷⁵ The Federal Circuit concluded that merely providing instructions to the bidders was not sufficient to demonstrate "control or direction," however, and other considerations listed in the jury instruction were also not relevant to the "control or direction" standard.⁷⁶ The court concluded that because the defendant did not perform every step of the claimed methods or have another party perform the steps on its behalf, it could not directly infringe the claims.⁷⁷

Last year, in *Golden Hour Data Sys., Inc. v. EMSCharts, Inc.*,⁷⁸ the Federal Circuit yet again addressed claims requiring

⁷¹ See *BMC Res.*, 498 F.3d at 1381 (supporting concerns of the parties avoiding infringement claims by asserting preference for proper claim drafting).

⁷² 532 F.3d 1318 (Fed. Cir. 2008).

⁷³ See *id.* at 1328-29 (describing the electronic auction process). The court observed that "at least the inputting step of claim 1 is completed by the bidder, whereas, at least a majority of the remaining steps are performed by the auctioneer's system." *Id.*

⁷⁴ See *id.* at 1323 (indicating the court would adhere to the requirements established by *BMC Res.*).

⁷⁵ See *id.* at 1329-30 (summarizing the jury instructions of the lower court to elucidate at what point joint infringement may be triggered).

⁷⁶ See *id.* at 1330 (explaining why the court did not find the defendant vicariously liable for joint infringement).

⁷⁷ See *id.* (concluding that there is no infringement liability if every step of the method is not performed individually or jointly).

⁷⁸ 614 F.3d 1367 (Fed. Cir. 2010).

actions to be performed by multiple parties.⁷⁹ This case involved methods and systems for dispatching emergency medical teams, tracking their movement, managing diagnosis and treatment and billing the patient.⁸⁰ The two co-defendants—whose combined actions were required to practice the claims—had formed a “strategic partnership” and collaborated to sell their programs as a unit.⁸¹ The court found that the evidence of “control or direction” was insufficient to uphold a finding of joint infringement of any asserted method claim; neither defendant could qualify as the “mastermind.”⁸² While recognizing that the defendant might still be liable for the sale of the patented systems, the court declined to reach the issue because the parties had agreed to submit the question of infringement to the jury only on a theory of joint infringement, which could be sustained only if there was “control or direction” by a single entity.⁸³ The *Golden Hour* case is perhaps most notable, however, because it included a dissent by Judge Newman, which indicated that the Federal Circuit judges might not all be in agreement regarding all the earlier cases.⁸⁴ Judge Newman stated that “[a] collaborative effort as here, a ‘strategic partnership’ to sell the infringing system as a unit, is not immune from infringement simply because the participating entities have a separate corporate status.”⁸⁵

Next, at the end of 2010, the Federal Circuit decided *Akamai Techs. v. Limelight Networks, Inc.*,⁸⁶ which involved methods for delivering information over the Internet, with some steps carried out by the defendant’s “content delivery networks” and oth-

⁷⁹ See *id.* at 1369 (upholding the district court’s finding of no joint infringement by the co-defendants).

⁸⁰ See *id.* (discussing the details of the allegedly infringed upon programs).

⁸¹ See *id.* at 1371 (demonstrating the benefit to the co-defendants by forming a “strategic partnership”).

⁸² See *id.* at 1380-81 (discussing the court’s holding in regard to joint infringement).

⁸³ See *id.* at 1380-81 (explaining that due to a prior agreement the court only entertained the issue of joint infringement).

⁸⁴ See *Golden Hour*, 614 F.3d at 1383 (Newman, J., dissenting) (rejecting the “control or direction” principle articulated in *Muniauction*).

⁸⁵ *Id.* (Newman, J., dissenting).

⁸⁶ 629 F.3d 1311 (Fed. Cir. 2010).

ers performed by “content providers.”⁸⁷ In *Akamai*, the issue of instructions, brought up tangentially in *Muniauction*, was raised more explicitly because “there was evidence that not only was there a contractual relationship between Limelight and its customers, but that it provided those customers with instructions explaining how to utilize its content delivery service.”⁸⁸ The lower court had relied on *BMC* in denying a motion for judgment as a matter of law of noninfringement.⁸⁹ On reconsideration, however, following the Federal Circuit’s decision in *Muniauction*, the lower court found no material difference between the facts of the case and those presented in *Muniauction* and thus found noninfringement as a matter of law, reversing its earlier decision.⁹⁰ The Federal Circuit affirmed, holding that “as a matter of Federal Circuit law that there can only be joint infringement when there is an agency relationship between the parties who perform the method steps or when one party is contractually obligated to the other to perform the steps.”⁹¹ The Federal Circuit went further to distinguish the type of contractual relationship required for a finding of joint infringement.⁹² The contract must “obligate [the third party] to perform . . . the method steps,” not “merely explain that the [third party] will have to perform the steps *if* it decides to take advantage of [the alleged direct infringer’s] service.”⁹³ The latter situation is the type of “arms-length cooperation” that does not give rise to direct infringement by any single entity.⁹⁴

⁸⁷ See *id.* at 1317 (stating “Limelight provides the information necessary for its customers, the content providers, to modify their web pages or Internet address routing information to use the Limelight service. However, the content providers perform the actual tagging step . . . themselves.”).

⁸⁸ *Id.* at 1318.

⁸⁹ See *id.* (distinguishing between *BMC Res.* and *Akamai* where the latter presented a direct relationship of instruction regarding the patented product).

⁹⁰ See *id.* (explaining that due to the similarities of *Akamai* and *Muniauction*, the district court later reversed its decision).

⁹¹ *Id.* at 1320.

⁹² See *Akamai Techs.*, 629 F.3d at 1320-21 (indicating that there must be an agency relationship and that there must be a contractual relationship that obligates the performance of method steps).

⁹³ *Id.* at 1321 (emphasis in original).

⁹⁴ See *id.* at 1321 (finding that, “[m]ere ‘arms-length cooperation’ will not give rise to direct infringement by any party.” (citing *Muniauction*, 532 F.3d at 1329)).

About two weeks later, in *Uniloc USA, Inc. v. Microsoft Corp.*,⁹⁵ the Federal Circuit again addressed the issue of infringement of system claims involving the conduct of multiple entities.⁹⁶ The asserted software registration station required a “remote licensee unique ID generating means” and “mode switching means,” both of which were implemented on the computer of the end user of the claimed system.⁹⁷ Relying on *Cross Medical*, Microsoft argued that it could not be a direct infringer because it did not supply or use the required end users’ computers.⁹⁸ The court disagreed, reasoning that, although end users were “necessary to complete the environment in which the claimed element functions,” the claim language did not divide the infringement between parties.⁹⁹ In contrast to the system at issue in *Cross Medical*—an apparatus including an interface “operatively joined” to (in contact with) a bone¹⁰⁰—Uniloc’s asserted claim—a “remote registration station” with a “local license unique ID generating means”—was “structure[d] . . . to capture infringement by a single party.”¹⁰¹ In other words, because of the wording of the claim language, there actually was no divided infringement.¹⁰²

Yet another two weeks later, in *Centillion Data Sys., LLC v. Qwest Commc’ns. Int’l, Inc.*,¹⁰³ the Court elaborated on the level of

⁹⁵ 632 F.3d 1292 (Fed. Cir. 2011).

⁹⁶ *See id.* at 1296 (elucidating the central issue of the case). The court further explains that the patent at issue in the case was formulated “as an early attempt to combat . . . software piracy.” *Id.*

⁹⁷ *See id.* (characterizing how the patent at issue in the case operates).

⁹⁸ *See id.* at 1308-09 (outlining Microsoft’s theory of the case as to why *Uniloc* failed to prove direct infringement).

⁹⁹ *See id.* at 1309 (explaining that “claim 19 . . . focuses exclusively on the ‘remote registration station,’ and defines the environment in which that registration station must function That other parties are necessary to complete the environment in which the claimed element functions does not necessarily divide the infringement between the necessary parties.”).

¹⁰⁰ *See Cross Medical Prods., Inc.*, 424 F.3d at 1305-09 (explaining that the apparatus required a second party, a surgeon, to operatively join the apparatus to the bone).

¹⁰¹ *See Uniloc*, 632 F.3d at 1308-09 (quoting how one party infringes the patented system).

¹⁰² *See id.* (reasoning that while two parties may be involved, the construction of the claim can negate a finding of joint infringement).

¹⁰³ 631 F.3d 1279 (Fed. Cir. 2011).

control required to constitute infringing “use” of a “system” claim under § 271(a).¹⁰⁴ *Centillion* involved a system to process and deliver telephone company billing data to clients.¹⁰⁵ The claims required certain “back-end” and “front-end” components, each of which was controlled and maintained by a different entity (the telephone company and the customer, respectively).¹⁰⁶ The accused products included back-office systems and also client applications that an end user would install onto his or her personal computer.¹⁰⁷

The district court found that Qwest did not control the claimed “personal computer processing means” and therefore did not “use” the patented systems under § 271(a) because it did not “practice[] each and every element of the system claim.”¹⁰⁸ It also determined that Qwest could not be held vicariously liable for the actions of its customers because *Centillion* could not establish the requisite direction or control of the customers by Qwest.¹⁰⁹ Finally, the district court also found that customers did not infringe because the customers did not “direct[] or control[] the ‘[data] processing means’ of the accused systems’ ‘back-end.’”¹¹⁰

On appeal, the Federal Circuit first focused on the definition of “use” under § 271(a) that had been applied by the district court.¹¹¹ The court revisited its decision in *NTP v. RIM*, in which it had determined that “[t]he use of a claimed system under section 271(a) is the place at which the system as a whole is put into

¹⁰⁴ See *id.* at 1284 (citing *NTP, Inc. v. Research in Motion, Ltd.*, 418 F.3d 1282, 1317 (Fed. Cir. 2005) (expanding upon the meaning of “use” of a “system” in complex detail)).

¹⁰⁵ See *id.* at 1281 (stating the facts of the case).

¹⁰⁶ See *id.* (detailing how the facts of the accused products require two parts in order to work).

¹⁰⁷ See *id.* at 1281-82 (furthering the details of how the infringement passes on to the customer).

¹⁰⁸ See *id.* at 1282 (setting forth the lower court’s finding that Qwest did not infringe because it did not “use” the system within the meaning of §271(a)).

¹⁰⁹ See *Centillion*, 631 F.3d at 1282 (indicating that the lower court did not find Qwest vicariously liable due to the absence of the “control” element).

¹¹⁰ See *id.* (quoting a holding of the district court, “that Qwest’s customers did not ‘use’ the patented system under §271(a).”).

¹¹¹ See *id.* at 1283-84 (discussing the various ways to define “use”).

service, *i.e.* the place where control of the system is exercised and beneficial use of the system is obtained.”¹¹² Although *NTP* focused on the *situs* of infringement, rather than the level of activity required for an act of infringement, the court held that the district court had properly decided that the definition of “use” from *NTP* was the correct one to apply.¹¹³

The Court disagreed with the level of “control” over the system that the lower court had found to be required to constitute “use,” however.¹¹⁴ While “use” under § 271(a) requires control, it is not direct and physical control over each element of the system.¹¹⁵ All that is required is “the ability to place the system as a whole into service.”¹¹⁶

Turning first to “use” by Qwest’s customers, the court found that by creating a query and transmitting it to Qwest’s back end system, the customers put the system as a whole into service, and therefore “used” the system claims, without having to rely on a vicarious liability theory.¹¹⁷ The issue of “use” by Qwest was different, however.¹¹⁸ Qwest itself did not “use” the claimed system because it never put into service the personal computer data processing means, which was exclusively controlled by its customers, and therefore Qwest did not “use” the system claims.¹¹⁹ Furthermore, Qwest could not establish that it was vicariously liable for the actions of its customers because Qwest does not direct its customers to perform nor do its customers act as

¹¹² See *id.* at 1284 (quoting *NTP, Inc.*, 418 F.3d at 1317).

¹¹³ See *id.* (reasoning that while the facts of *NTP* are not applicable in this case, the definition of use from *NTP* applies appropriately).

¹¹⁴ See *id.* (suggesting that the district court was too strict in their interpretation of control).

¹¹⁵ See *Centillon*, 631 F.3d at 1284 (interpreting the definition of “use” under § 271(a)).

¹¹⁶ *Id.*

¹¹⁷ See *id.* at 1285 (explaining “use” by Qwest’s customers that demonstrated their control of the process).

¹¹⁸ See *id.* at 1286 (distinguishing “use” by Qwest from “use” by Qwest’s customers).

¹¹⁹ See *id.* (holding that Qwest did not “use” the system).

agents.¹²⁰ Thus, in *Centillion*, the Federal Circuit set forth a very different criteria for assessing joint infringement of “system” claims than the criteria used for “method” claims.¹²¹

The most recent case decided by the Federal Circuit was *McKesson Techs., Inc. v. Epic Sys. Corp.*¹²² There, the court addressed infringement of a method claim for electronically communicating between a health care provider and the health care provider’s customers.¹²³ The court held that because not every step of the method claim was performed by a single party, including a step of “initiating a communication” that is performed by a user rather than the healthcare provider, and there was no agency relationship between the parties that collectively performed the steps, there was no infringement.¹²⁴ In view of the other recent decisions, this was a straightforward application of the law.¹²⁵ There was also a concurring and dissenting opinion, however.¹²⁶ In Judge Bryson’s concurrence, he agreed that the majority’s decision was correct in view of *BMC Res., Muniauction* and *Akamai*, but he also stated: “[w]hether those decisions are correct is another question, one that is close enough and important enough that it may warrant review by the en banc court in an appropriate case.”¹²⁷ In Judge Newman’s dissent, she argued *BMC Res.* and *Muniauction* were incorrectly decided because they

¹²⁰ See *id.* at 1287 (establishing Qwest’s defenses for the claim of vicarious liability).

¹²¹ See *id.* at 1283, 1286-87 (contrasting the diverse ways to construe claims of infringement).

¹²² 98 U.S.P.Q.2d 1281 (Fed. Cir. April 12, 2011), *reh’g granted*, 2011 WL 2173401 (Fed. Cir. May 26, 2011).

¹²³ See *id.* at 1282 (stating the facts of the case, which led to the conflict).

¹²⁴ See *id.* at 1284-85 (relying on recent precedent to determine that the facts in this case do not support infringement of the patent).

¹²⁵ See *id.* at 1284 (maintaining that the court did not stray from recent precedent in affirming this decision).

¹²⁶ See *id.* at 1285-86 (concurring opinion was provided by Justice Bryson and the dissenting opinion was written by Justice Newman).

¹²⁷ See *id.* at 1285 (Bryson, J., concurring) (questioning accuracy of recent precedent, although in agreement with majority to follow it)

conflicted with earlier Federal Circuit cases.¹²⁸ Judge Newman also stated that it was confusing that “system” and “method” claims should be treated differently, as established by the *Centilion* case.¹²⁹

Judge Bryson’s suggestion for an *en banc* review in an appropriate case was quickly heeded.¹³⁰ Just two weeks after the *McKesson* decision, the court vacated its opinion in *Akamai* and ordered a rehearing *en banc* to address the following question: “If separate entities each perform separate steps of a method claim, under what circumstances would that claim be directly infringed and to what extent would each of the parties be liable?”¹³¹

Then, at the end of May, the court also granted rehearing *en banc* in *McKesson* to address the following two issues: 1) “If separate entities each perform separate steps of a method claim, under what circumstances, if any, would either entity or any third party be liable for inducing infringement or for contributory infringement?” and 2) “Does the nature of the relationship between the relevant actors—e.g., service provider/user; doctor/patient—affect the question of direct or indirect infringement liability?”¹³²

B. Synthesis of the Cases – “Method” vs. “System” Claims

At least as of today, before the Federal Circuit has further addressed these issues *en banc*, the divided infringement cases demonstrate that “method” and “system” claims are treated very

¹²⁸ *McKesson Techs.*, 98 U.S.P.Q.2d at 1287 (Newman, J., dissenting) (disagreeing with majority by describing the incorrect application of *BMC* and *Muniauction* to this case, as well as flawed holdings in recent precedential cases).

¹²⁹ *See id.* at 1290 (Newman, J., dissenting) (questioning the inconsistent treatment of “method” and “system” claims).

¹³⁰ *Id.* at 1285 (Bryson, J., concurring) (stating in regards to the recent precedential cases that “[w]hether those decisions are correct is another question . . . important enough that it may warrant review by the en banc court in an appropriate case”).

¹³¹ *Akamai Techs.*, 419 F. App’x at 989.

¹³² *McKesson Techs. v. Epic*, 2011 WL 2173401, at *1 (Fed. Cir. May 26, 2011).

differently.¹³³ Consequently, the first step in determining whether and how your claims may be impacted by issues of divided infringement is to separate claims directed at methods from apparatus or system claims.

For method claims, to be liable for infringement where the actions of multiple parties combine to perform the claim, one party must exercise “control or direction” over the entire process, “such that every step is attributable to the controlling party, i.e. the ‘mastermind.’”¹³⁴ Mere “arms length cooperation” is not enough.¹³⁵ Even providing instructions to a third party is not sufficient to establish control or direction.¹³⁶ The requisite level of control is present—and, therefore, direct infringement may be found—only where “the law would traditionally hold the alleged direct infringer vicariously liable for the acts committed by another party.”¹³⁷ This means that “there can only be joint infringement when there is an agency relationship between the parties who perform the method steps or when one party is contractually obligated to the other to perform the steps.”¹³⁸ In situations involving a contractual relationship, the contract must “*obligate* [the third party] to perform the [claimed] steps,” not “merely explain[] that the [third party] will have to perform the steps *if* it decides to take advantage of [the alleged direct infringer’s] services.”¹³⁹

¹³³ See *McKesson Techs.*, 98 U.S.P.Q.2d at 1283 (discussing that in method claims, each step must be completed by a single party); See *Uniloc*, 632 F.3d at 1309 (discussing that in system claims, where more than one party may contribute to making the product there can still be infringement).

¹³⁴ See *Muniauction*, 532 F.3d at 1329 (recognizing that another party who is merely under the control or direction of the “mastermind” is not liable for infringement (citing *BMC Res.* 498 F.3d at 1380-81)).

¹³⁵ See *id.* (elucidating that “arms-length cooperation” does not amount to infringement as would direct control of another party).

¹³⁶ See *Akamai Techs.*, 629 F.3d at 1319-20 (explaining that the emphasis is on the relationship between the parties rather than the instructions provided).

¹³⁷ See *Muniauction*, 532 F.3d at 1330 (maintaining that for direct infringement the behavior must be tantamount to a finding of vicarious liability (citing *BMC Res.*, 498 F.3d at 1379)).

¹³⁸ *Akamai Techs.*, 629 F.3d at 1320.

¹³⁹ *Id.* at 1321 (emphasis in original).

In contrast, the involvement of multiple independent actors does not preclude infringement of a “system” claim.¹⁴⁰ With claims to a system or apparatus, a party may infringe if it “put[s] the invention into service, *i.e.* control[s] the system as a whole and obtain benefit from it.”¹⁴¹ This standard is met where “but for the [user’s] actions, the entire system would never have been put into service.”¹⁴² As long as the patentee can prove that some party among the alleged infringers meets the definition of “use” articulated in *NTP*, the relevant inquiry may become whether another entity is liable for indirectly infringing the asserted system or apparatus claim under 35 U.S.C. § 271(b) or (c).¹⁴³ Issues of vicarious liability, such as those discussed in *Muniauction* and *Akamai*, become less relevant because they resolve only “the actions of one party ought to be attributed to a second party for purposes of direct infringement-vicarious liability.”¹⁴⁴

IV. Case Law on Indirect Infringement

As discussed above, the issue of joint or divided infringement typically overlaps with the doctrine of indirect infringement,¹⁴⁵ which is actually two separate doctrines—induced and contributory infringement.¹⁴⁶ The reason is that, as the above cases demonstrate, there are situations in which the customers of a defendant company are the “direct infringers,” rather than the defendant company itself.¹⁴⁷ A patent holder generally does not want to sue all the customers individually, however, as this can be difficult in terms of proving infringement by each customer

¹⁴⁰ See *Centillion Data Sys.*, 631 F.3d at 1283-84 (addressing multiple actors in regard to a “system” claim and relying on precedent in determining infringement).

¹⁴¹ *Id.* at 1284 (citing *NTP*, 418 F.3d at 1317).

¹⁴² *Id.* at 1285.

¹⁴³ See *id.* (implying that there may be a secondary issue of joint infringement once “use” is established).

¹⁴⁴ See *id.* at 1286-87 (considering vicarious liability by reviewing case history).

¹⁴⁵ See *Kyocera Wireless Corp.*, 545 F.3d at 1352-53 (showing that you can allege direct and indirect infringement).

¹⁴⁶ See 35 U.S.C. §§ 271(b), (c) (defining infringement by inducement and contributory infringement).

¹⁴⁷ See *Akamai Techs.*, 629 F.3d at 1317-18 (describing a circumstance in which due to the nature of the claim—a method claim—it is the customers that are directly infringing).

and also is expensive, among other things.¹⁴⁸ Consequently, if the direct infringer is a customer of a company that the patent holder actually wants to target, the patent holder must rely on theories of induced or contributory infringement to find the defendant company liable as an “indirect infringer.”¹⁴⁹

Induced infringement is defined by 35 U.S.C. § 271(b), which provides that “[w]hoever actively induces infringement of a patent shall be liable as an infringer.”¹⁵⁰ Contributory infringement is defined by § 271(c), which provides that:

Whoever offers to sell or sells within the United States . . . a component of a patented machine, manufacture, combination or composition . . . constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.¹⁵¹

Although not explicit in § 271(b), courts have found that each of these statutes has an intent element.¹⁵² Not surprisingly, in multiple actor situations an alleged indirect infringer defendant will commonly seek to distance itself from the actions of the direct infringer, which often is not even a party to the litiga-

¹⁴⁸ See *id.* at 1321-22 (suggesting the reasons that the patent holder is suing the manufacturer instead of their individual customers).

¹⁴⁹ See *BMC Res. Inc.*, 498 F.3d at 1379 (imposing vicarious liability to close third party loophole). “When a defendant participates in or encourages infringement but does not directly infringe a patent, the normal recourse under the law is for the court to apply the standards for liability under indirect infringement.” *Id.*

¹⁵⁰ 35 U.S.C. § 271(b).

¹⁵¹ 35 U.S.C. § 271(c).

¹⁵² See *Metabolite Labs., Inc. v. Lab. Corp. of America, Inc.*, 370 F.3d 1354, 1365 (Fed. Cir. 2004) (recognizing that while not expressly stated in the statute, proof of intent is still required to induce infringement (citing *Hewlett-Packard Co. v. Bausch & Lomb, Inc.*, 909 F.2d 1464, 1469 (Fed. Cir. 1990)).

tion.¹⁵³ Liability under § 271(b) or (c) therefore often turns on the ability of the patentee to show that the alleged indirect infringer displayed the level of intent that is required by each section of the statute.¹⁵⁴ Courts have considered the intent requirement of both induced and contributory infringement on a number of occasions, and until recently, it was unclear whether the level of intent was the same under both doctrines.¹⁵⁵ The Supreme Court recently stated that the level of intent must be the same for both, however.¹⁵⁶

In *Aro Mfg. Co. v. Convertible Top Replacement Co.*,¹⁵⁷ the Supreme Court held that § 271(c) requires more than simple knowledge of how one's goods are being used, and instead requires knowledge that the component was patented and infringing.¹⁵⁸ *Aro Manufacturing* involved the sale of ready-made replacement fabrics for tops to convertible automobiles.¹⁵⁹ The defendant's replacement fabrics were made to be incorporated into certain convertible tops.¹⁶⁰ The Supreme Court held that liability for contributory infringement required not only that Aro knew "that its replacement fabrics were especially designed for use . . . in the [infringing] convertible tops and were not suitable for other use," but "a showing that [Aro] knew that the combina-

¹⁵³ See *BMC Res.*, 498 F.3d at 1377-78 (denying infringement since other parties, including parties not involved in the litigation, performed some of the method steps).

¹⁵⁴ See *id.* at 1381 (noting that for contributory infringement, another type of indirect infringement, there is a mens rea requirement).

¹⁵⁵ See *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060, 2062 (2011) (indicating that prior to the Court's decision in *Global-Tech*, the connection between induced and contributory infringement was poorly defined).

¹⁵⁶ See *id.* (articulating the holding of *Global-Tech*). The Supreme Court addressed whether both §§ 271(b) and (c) required knowledge of the patent that is infringed, but reasoned that because the two provisions have a common origin, the intent requirement should be the same. See *id.* The Court specified that the provisions "require[] knowledge that the induced acts constitute patent infringement." *Id.*

¹⁵⁷ 377 U.S. 476 (1964).

¹⁵⁸ See *id.* at 488 (providing additional requirements for a finding of infringement under § 271(c)).

¹⁵⁹ See *id.* at 479-80 (commenting on the nature of the business in which Aro-Manufacturing was engaged).

¹⁶⁰ See *id.* at 482-83 (establishing the presence of intent).

tion for which [its] component was especially designed was both patented and infringing.”¹⁶¹ Prior to the litigation, Aro had received a letter from the patentee informing it of the patent-in-suit and that certain convertible tops for which its fabrics were especially designed were unlicensed and therefore infringing.¹⁶² The Court found these facts sufficient to support a finding of contributory infringement under § 271(c) for sales made after it received the letter, although Aro could not be liable for sales before that date because it did not know of the patent yet.¹⁶³

For a while after *Aro Manufacturing*, there was a question about whether inducement under § 271(b) required a lower showing of intent than this standard articulated in *Aro Manufacturing*.¹⁶⁴ In particular, cases were split on whether knowledge of the patent was even required to be liable for inducement.¹⁶⁵ Two cases from the Federal Circuit in 1990 expressed different views.¹⁶⁶ In *Manville Sales Corp. v. Paramount Sys. Inc.*, the Federal Circuit held that “[t]he plaintiff has the burden of showing that the alleged infringer’s actions induced infringing acts *and* that he knew or should have known his actions would induce actual infringements.”¹⁶⁷ This standard requires both knowledge of the patent and a belief that the patent is infringed, as the court found that there could be no inducement where the defendants were not aware of the patent until the suit was filed and then had a “good faith belief,” based on advice of counsel, that the product

¹⁶¹ *Id.* at 488.

¹⁶² *See id.* at 489-90 (stipulating one way in which knowledge on the part of Aro was clearly established).

¹⁶³ *See Aro Mfg. Co.*, 377 U.S. at 491 (elucidating the Court’s holding). The Court held that Aro was only liable for subsequent sales within the terms of § 271(c). *See id.*

¹⁶⁴ *See infra* note 165 (demonstrating split in case decisions).

¹⁶⁵ *Compare* *Manville Sales Corp. v. Paramount Sys., Inc.*, 917 F.2d 544, 553 (Fed. Cir. 1990) (establishing unequivocally a knowledge requirement for a finding of inducement), *with* *Hewlett-Packard Co. v. Bausch & Lomb, Inc.*, 909 F.2d 1464, 1469 (1990) (requiring a showing of intent to constitute infringement).

¹⁶⁶ *Compare* *Manville Sales Corp.*, 917 F.2d at 553, *with* *Hewlett-Packard Co.*, 909 F.2d at 1469.

¹⁶⁷ *Manville Sales*, 917 F.2d. at 553.

did not infringe.¹⁶⁸ In contrast, in *Hewlett Packard Co. v. Bausch & Lomb Inc.*, the Federal Circuit appeared to apply a much lower intent standard when it stated that § 271(b) requires “proof of actual intent to cause the acts which constitute the infringement,” while not stating that knowledge of the patent was required.¹⁶⁹ In *DSU Med. Corp. v. JMS Co., Ltd.*,¹⁷⁰ however, this conflict was resolved by the Federal Circuit *en banc*, when the court adopted the standard expressed in *Manville Sales* requiring that a defendant knew or should have known his actions would induce actual infringements before it can be liable for induced infringement.¹⁷¹ It also follows that, under this standard, there is a requirement that the defendant knew of the patent.¹⁷²

If this were all that the Federal Circuit stated, it might have been clear to most that the intent requirement for induced and contributory infringement was the same.¹⁷³ Only part of the *DSU* opinion was *en banc*, however.¹⁷⁴ In the panel part of the opinion, the Federal Circuit suggested that it may find a lesser showing of intent sufficient to satisfy contributory infringement

¹⁶⁸ See *id.* at 553 (expanding upon why a finding of knowledge is so crucial to establishing inducement).

¹⁶⁹ See *Hewlett-Packard Co.*, 909 F.2d at 1469 (establishing a clear requirement of intent to demonstrate that the acts at issue constitute infringement).

¹⁷⁰ 471 F.3d 1293 (Fed. Cir. 2006).

¹⁷¹ See *id.* at 1304 (confirming the court’s reliance on the *Manville Sales* decision, particularly its knowledge requirement for a finding of infringement). The Federal Circuit also emphasized that “knowledge of the patent is not enough,” however, and that, in order to be liable for active inducement, it must be shown that “once the defendants knew of the patent they ‘actively and knowingly aid[ed] and abet[ed] another’s direct infringement.’” *Id.* at 1305 (quoting *Water Techs. Corp. v. Calco, Ltd.*, 850 F.2d 660, 668 (Fed. Cir. 1988) (emphasis in original)). While reiterating that the defendant must be shown to have “knowingly induced infringement,[] not merely knowingly induced the acts that constitute infringement,” the Federal Circuit emphasized that “‘direct evidence [of intent] is not required; rather circumstantial evidence may suffice.’” *Id.* at 1306 (quoting *Water Techs.*, 850 F.2d at 668) (emphasis in original).

¹⁷² See *id.* at 1305 (indicating at what point knowledge may be imputed as it relates specifically to knowledge of the patent).

¹⁷³ See *infra* note 179 (demonstrating how further analysis by Federal Circuit creates confusion).

¹⁷⁴ See *DSU Medical Corp.*, 471 F.3d at 1304 (articulating that only part of the decision was decided *en banc*).

under § 271(c) than to show induced infringement under § 271(b).¹⁷⁵ *DSU* involved a patented locking needle guard and assembly for reducing the risk of accidental needle-stick injuries.¹⁷⁶ The accused components were “sheathing structures,” which lacked certain claim elements, but were designed to be combined with a “needle assembly” to achieve the claimed combination.¹⁷⁷ The Federal Circuit found that the lower court had “properly applied the[] legal principles [of contributory infringement]” by finding that the defendant “supplied the [accused components], that the [accused components] had no substantial non-infringing uses . . . and that [the defendant] intended to make the [accused components] that resulted in the potential for contributory infringement as a product designed for use in the patented combination.”¹⁷⁸ The Federal Circuit then suggested that the intent to make the products was sufficient, as it added that “even beyond the minimal intent requirement for contributory infringement, [the defendant] acted with knowledge of the ’311 patent and knowledge that the component was especially made or adapted for use in an infringing manner.”¹⁷⁹ This statement by the panel suggested that even knowledge of the patent was not necessarily required to show contributory infringement, and also that a good faith belief of non-infringement would also not be a defense to contributory infringement, as it is to induced infringement.¹⁸⁰

As a result, some courts, including the Federal Circuit, have applied different intent standards for contributory infringement and induced infringement, even though such a distinction did not appear to be supported by either the statutory language of § 271(c) (which requires “knowing the [component]

¹⁷⁵ See *id.* at 1303 (noting the minimal requirements to demonstrate intent for contributory infringement).

¹⁷⁶ See *id.* at 1297 (providing a description of the patent at issue in the case).

¹⁷⁷ See *id.* at 1298-99 (describing how the patented design operates).

¹⁷⁸ *Id.* at 1303.

¹⁷⁹ *Id.* This analysis by the panel, however, was actually unnecessary because there was no underlying direct infringement in the United States, and thus the Federal Circuit determined that there was no contributory infringement on those grounds. See *id.* at 1303-04.

¹⁸⁰ See *DSU Medical Corp.*, 471 F.3d at 1303 (affirming defendants’ liability for contributory infringement).

to be especially made or especially adapted for use in an infringement of such patent”)¹⁸¹ or Supreme Court precedent (which provided that contributory infringement requires “a showing that the alleged . . . infringer knew that the combination for which [its] component was especially designed was both patented and infringing.”).¹⁸² For example, in *Spansion v. ITC*,¹⁸³ the patentee included allegations of both induced and contributory infringement, and the International Trade Commission (“ITC”) determined that although the defendant was not liable for induced infringement because it did not have the requisite intent, it was liable for contributory infringement.¹⁸⁴ With respect to contributory infringement, the ITC determined that because the defendant had knowledge of the patent through license negotiation, and the plaintiff had shown that the accused devices did not have any substantial non-infringing uses, the requisite knowledge for contributory infringement could be presumed.¹⁸⁵ The Federal Circuit agreed with the ITC’s analysis.¹⁸⁶ This suggested, among other things, that a party’s belief that it was not infringing would not provide a defense against contributory infringement, and other courts have explicitly found that a party’s subjective belief that it was not infringing is irrelevant to whether it satisfied the intent prong of the contributory infringement analysis.¹⁸⁷

Recently, however, the Supreme Court appears to have determined that the intent prong of contributory and induced in-

¹⁸¹ See 35 U.S.C. § 271(c) (providing statutory definition establishing knowledge requirement).

¹⁸² *Aro Mfg. Co.*, 377 U.S. at 488.

¹⁸³ 629 F.3d 1331 (Fed. Cir. 2010).

¹⁸⁴ See *id.* at 1355 (illustrating the distinction between the requirements for making a proper finding of both induced and contributory infringement).

¹⁸⁵ See *id.* (upholding the judgment of the ITC in imputing knowledge for contributory infringement).

¹⁸⁶ See *id.* (concluding that the ITC’s decision regarding contributory infringement was correct).

¹⁸⁷ See, e.g., *Petter Invs., Inc. v. Hydro Eng’g, Inc.*, 664 F. Supp. 2d 816, 827 (W.D. Mich. 2009) (confirming the irrelevancy of subjective intent when making a finding of contributory infringement); *Sandisk Corp. v. Lexar Media, Inc.*, 91 F. Supp. 2d 1327, 1335 (N. D. Cal. 2000) (explaining why making a finding of subjective intent is unnecessary).

fringement should be the same.¹⁸⁸ In *Global-Tech*, the patent concerned a deep fryer.¹⁸⁹ In developing the accused products, defendant Pentalpha obtained plaintiff's deep fryer and copied the patented features.¹⁹⁰ Pentalpha then sold the allegedly infringing deep fryers to a number of other companies who resold them in the United States.¹⁹¹ Shortly after agreeing to distribute the accused products, Pentalpha had obtained a "right-to-use" study, which concluded that none of the claims of twenty-six patents read on Pentalpha's deep fryer.¹⁹² Pentalpha had not informed the attorney that it had copied the plaintiff's deep fryer, however, and therefore the attorney had not analyzed the patent-in-suit.¹⁹³ The plaintiff alleged induced infringement by Pentalpha under § 271(b) for actively inducing those companies to which it had sold the deep fryers to then sell or offer to sell the deep fryers.¹⁹⁴ The defendant argued that because it did not actually know of the patent until it received notice of lawsuit, which was a result of the fact that the product it bought to copy was made for sale in a foreign market and thus was not marked with the U.S. Patent number, it could not be liable for induced infringement.¹⁹⁵ The Court first addressed the issue of whether § 271(b) requires only that the inducer lead another to engage in conduct that happens to amount to infringement or, alternatively, requires that the inducer lead another to engage in conduct that the inducer knows is infringement.¹⁹⁶ The Court looked to the case law that predated the Patent Act of 1952 and noted that before 1952, both the conduct covered by § 271(b) and § 271(c)

¹⁸⁸ See *infra* note 200 and accompanying text (reasoning intent prong should be the same under the statute).

¹⁸⁹ See *Global-Tech*, 131 S. Ct. at 2063 (illustrating the underlying patent in the infringement claim).

¹⁹⁰ See *id.* at 2064 (stating the facts of the case).

¹⁹¹ See *id.* (noting facts in regard to why the patent was infringed).

¹⁹² See *id.* (finding Pentalpha had not infringed, because Pentalpha did not disclose that the design was copied from SEB).

¹⁹³ See *id.* (noting the attorney did not have knowledge of the copying of the design and therefore would not know to look for the patent on file).

¹⁹⁴ See *id.* (identifying the claims alleged by the plaintiff).

¹⁹⁵ See *Global-Tech*, 131 S. Ct. at 2064 (summarizing the defendant's argument regarding their liability for induced infringement).

¹⁹⁶ See *id.* at 2064-65 (setting forth how the Court intended to interpret the statute).

was called “contributory infringement.”¹⁹⁷ While the pre-1952 case law was unclear, the Court had previously determined in *Aro Manufacturing* that “a violator of § 271(c) must know ‘that the combination for which his component was especially designed was both patented and infringing’”¹⁹⁸ The Court therefore held that because induced and contributory infringement were lumped together under one theory of “contributory infringement” in the pre-1952 case law, the same knowledge requirement required under § 271(c), as expressed in *Aro Manufacturing*, should be required under § 271(b).¹⁹⁹ The Court reasoned that it would be “strange to hold the knowledge of the relevant patent is needed under § 271(c) but not under § 271(b).”²⁰⁰

The Court also then addressed whether “deliberate indifference” to a known risk that a patent exists is the appropriate standard to support a finding of knowledge required to support liability under § 271(b).²⁰¹ The Court rejected that approach and instead borrowed the standard of “willful blindness” from criminal law, which the Court described as requiring that “(1) the defendant must subjectively believe that there is a high probability that a fact exists and (2) the defendant must take deliberate actions to avoid learning of that fact.”²⁰²

V. Implications

The Federal Circuit’s decisions in the joint infringement and indirect infringement cases discussed above have a number of practical implications. Among other things, they have important effects on whether to obtain opinion letters, counseling with respect to contractual relationships, and litigation and prosecu-

¹⁹⁷ See *id.* at 2065-67 (tracing a historical interpretation of the statute).

¹⁹⁸ *Id.* at 2067 (quoting *Aro Mfg.*, 377 U.S. at 488).

¹⁹⁹ See *id.* at 2067 (concluding that the knowledge requirement must be found in both parts (b) and (c) of section 271).

²⁰⁰ *Global-Tech.*, 131 S. Ct. at 2068.

²⁰¹ See *id.* (regarding whether the defendant should be held to a standard of “deliberate indifference”).

²⁰² *Id.* at 2068-70.

tion strategies.²⁰³ Of course, some of these implications may be altered by the Federal Circuit's upcoming decisions in the *Akamai* and *McKesson* cases; practitioners need to plan for change. Many of the considerations will be unaffected, however, and many others may be unaffected, depending on how the court rules or how specific the court is in its rulings.

A. Opinion Letters

The Federal Circuit's case law with respect to joint infringement and induced or contributory infringement may have a profound effect on whether parties seek opinions of counsel. Under the joint infringement cases, a patentee may often have to rely on induced or contributory infringement when suing a defendant company in which the customer is the direct infringer. And, under the induced and contributory infringement cases, knowledge of infringement may be critical to prove infringement under either theory. Consequently, although the 2007 *In re Seagate Technology, LLC*²⁰⁴ case diminished the importance of such opinions when defending against allegations of willful infringement, where there are potential or actual indirect infringement allegations, opinions of counsel may now be more important than ever.²⁰⁵

An opinion letter is a letter from a lawyer or law firm analyzing a patent and opining whether or not the person or company infringes the patent and whether or not the patent is valid.²⁰⁶ Traditionally, companies have obtained opinion letters to defend against an actual or potential allegation of willful infringement of a patent.²⁰⁷ While infringement is a strict liability offense, if a

²⁰³ See *infra* notes 204, 209, 211, 213, 215, 216, 219 (presenting cases that describe author's contention).

²⁰⁴ 497 F.3d 1360 (Fed. Cir. 2007).

²⁰⁵ See *id.* at 1371 (emphasizing no affirmative obligation to obtain opinion of counsel).

²⁰⁶ See Saina S. Shamilov, *Opinion Letters in the Wake of In re Seagate*, DAILY JOURNAL, July 18, 2008, archived at <http://www.webcitation.org/62Wqp5Iqq> (defining an opinion letter).

²⁰⁷ See *id.* (recounting the historical role of opinion letters in defending against potential willful infringement claims).

party is found to have willfully infringed a patent, enhanced damages may be warranted, which may be up to three times the damages award.²⁰⁸ In *Underwater Devices, Inc. v. Morrison-Knudsen, Inc.*,²⁰⁹ the court determined that:

Where . . . a potential infringer has actual notice of another's patent rights, he has an affirmative duty to exercise due care to determine whether or not he is infringing Such an affirmative duty includes, *inter alia*, the duty to seek and obtain competent legal advice from counsel *before* the initiation of any possible infringing activity.²¹⁰

Although the Federal Circuit announced a number of other factors to be assessed in the willfulness inquiry,²¹¹ the *Underwater Devices* case also set forth an affirmative duty to obtain an opinion of counsel, and thus accused infringers routinely obtained opinions of counsel to defend against allegations of willful infringement.²¹² In 2004, however, this duty first faded somewhat when, in *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.*,²¹³ the Federal Circuit held that the failure to produce an opinion of counsel during litigation would not warrant an inference that it either obtained no advice of counsel or that it did and was advised that it was infringing, as the court had previously held.²¹⁴ Then, in 2007, in *In re Seagate*, the Federal Circuit explicitly overruled the standard set forth in *Underwater Devices*, and “h[e]ld that proof of willful infringement permitting en-

²⁰⁸ See 35 U.S.C. § 284 (codifying “the court may increase the damages up to three times the amount found or assessed”); see also *In re Seagate*, 497 F.3d at 1368, 1371 (pointing to the judicial trend of increasing damages where there is a showing of willful infringement).

²⁰⁹ 717 F.2d 1380 (Fed. Cir. 1983).

²¹⁰ *Id.* at 1389-90.

²¹¹ See *The Read Corp. v. Portec, Inc.*, 970 F.2d 816, 826-27 (Fed. Cir. 1992) (identifying the factors considered in determining bad faith infringement).

²¹² See *Underwater Devices*, 717 F.2d at 1390 (asserting that opinion of counsel is standard practice prior to exercising possible infringing activity).

²¹³ 383 F.3d 1337 (Fed. Cir. 2004).

²¹⁴ See *id.* at 1344 (stating a finding of the court in the case).

hanced damages requires at least a showing of objective recklessness.”²¹⁵

In view of these decisions, some parties obtain fewer formal opinions of counsel to defend against willful infringement allegations, particularly because there are countervailing reasons not to obtain an opinion, including the fact that if an advice of counsel defense is asserted in the lawsuit, the attorney-client privilege and work product protection will be waived for all communications on the subject matter.²¹⁶ (There are other reasons to get opinions, including wishing to formalize and memorialize the advice). In addition, in a very recent case, *Spectralytics, Inc. v. Cordis Corp.*,²¹⁷ the Federal Circuit concluded that the failure to get an opinion of counsel may be considered in deciding whether to enhance damages once willfulness is found—perhaps breathing new life into the help an opinion provides in defending against charges of willful infringement.²¹⁸

A company facing a possible allegation of induced or contributory infringement may have a strong reason, however, even a duty, to obtain an opinion of counsel, regardless of the willfulness issue.²¹⁹ This is because of the Federal Circuit’s decision in *Broadcom Corp. v. Qualcomm Inc.*²²⁰ There, the jury returned a verdict finding induced infringement and willful infringement, but because *Seagate* was decided after the trial, the court vacated the willfulness verdict.²²¹ On appeal, Qualcomm argued that the court should have also overturned the indirect infringement ver-

²¹⁵ See *In re Seagate*, 497 F.3d at 1371 (striking down the *Underwater Devices* standard).

²¹⁶ See *In re Echostar Commc’n Corp.*, 448 F.3d 1294, 1299, 1302-03 (Fed. Cir. 2006) (setting forth reasons why opinions of counsel are often not obtained).

²¹⁷ 649 F.3d 1336 (Fed. Cir. 2011).

²¹⁸ See *id.* at 1348 (reevaluating the failure to obtain opinion of counsel and the possible consequences of that failure).

²¹⁹ See *Broadcom Corp. v. Qualcomm Inc.*, 543 F.3d 683, 699 (Fed. Cir. 2008) (holding that a failure to obtain opinion of counsel may be probative of intent).

²²⁰ *Id.*

²²¹ See *id.* at 687 (relying on the *Seagate* decision to vacate the willfulness part of the recently decided case in point).

dict.²²² The jury had been instructed that as part of the specific intent prong of inducement, “*you may consider all of the circumstances, including whether or not Qualcomm obtained the advice of a competent lawyer.*”²²³ The jury was also instructed that, with respect to willful infringement: “The absence of a lawyer’s opinion, by itself, is insufficient to support a finding of willfulness, and you may not assume that merely because a party did not obtain an opinion of counsel, the opinion would have been unfavorable.”²²⁴ There was no corresponding instruction with respect to induced infringement, however.²²⁵ Qualcomm argued that *Seagate* reemphasized that there is no affirmative duty to obtain an opinion of counsel and that because the “objective recklessness” willfulness standard is lower than the intent required to prove induced infringement, evidence not probative of willfulness cannot be probative of induced infringement.²²⁶ The Court rejected this argument, however.²²⁷ Instead, the Court found that an opinion-of-counsel is relevant because it “may reflect whether the accused infringer ‘knew or should have known’ that its actions would cause another to directly infringe”²²⁸ The Court further held that the failure to procure an opinion-of-counsel may be probative of intent, and thus the jury instructions were not incorrect.²²⁹

Consequently, it may be very important to obtain an opinion-of-counsel to defend against any potential allegation of induced infringement, and this is an allegation that will frequently

²²² See *id.* at 697 (arguing that the jury instructions were not appropriate in light of *Seagate*).

²²³ *Id.* at 698 (emphasis in original).

²²⁴ *Id.*

²²⁵ See *Broadcom Corp.*, 543 F.3d at 698 (omitting the information regarding induced infringement from the instructions read to the jury).

²²⁶ See *id.* at 699 (summarizing the defendant’s argument that “opinion-of-counsel evidence is no longer relevant in determining the intent of an alleged infringer in the inducement context”).

²²⁷ See *id.* (disagreeing with Qualcomm’s legal argument regarding the jury instructions that were given).

²²⁸ *Id.*

²²⁹ See *id.* at 699-700 (providing a basis for their decision in finding no error with the jury instructions).

arise in a potential joint infringement scenario.²³⁰ Moreover, because the intent portion of induced and contributory infringement appears to be the same, an opinion-of-counsel may be equally important to defend against any potential allegation of contributory infringement.²³¹ Indeed, the *Broadcom* decision suggests that there is an affirmative duty to obtain an opinion.²³²

While an opinion-of-counsel will be important in defending against a charge of induced or contributory infringement, one should bear in mind that the existence of such an opinion alone may not prevent the issue of induced or contributory infringement from being a factual issue decided by a jury.²³³ Additionally, even if an accused indirect infringer ultimately succeeds in proving lack of intent when faced with an allegation of induced or contributory infringement, this will only prevent the plaintiff from receiving damages prior to a verdict.²³⁴ If a jury otherwise finds infringement, then at the time of the verdict, it becomes impossible for the accused infringer to argue lack of intent for any future infringement.²³⁵ Thus, the plaintiff in such a situation should still be able to receive an injunction and damages for future infringement.²³⁶ Nonetheless, the ability of an opinion-of-

²³⁰ See *id.* at 699 (indicating that failure to obtain an opinion-of-counsel may be probative of intent).

²³¹ See *Broadcom Corp.*, 543 F.3d at 699 (stating that an opinion-of-counsel is relevant to the intent analysis).

²³² See *id.* at 699-700 (implying an obligation to seek advice of counsel because failure to do so is indicative of intent).

²³³ See, e.g., *nCube Corp. v. Seachange Int'l, Inc.*, 436 F.3d 1317, 1324-25 (Fed. Cir. 2006) (affirming lower court's finding of inducement despite reliance on the opinion of outside counsel); *Technology Patents, LLC v. Deutsche Telekom AG*, No. AW-07-3012, 2010 WL 3895338, at *5 (D. Md. Sept. 29, 2010) (finding that "counsel's opinion regarding infringement does not categorically shield Samsung from liability" under § 271(b) and thus denying summary judgment of no induced infringement where the defendant obtained an opinion of counsel).

²³⁴ See, e.g., *Technology Patents, LLC*, 2010 WL 3895338, at *4-5 (denying summary judgment because genuine dispute regarding Samsung's intent to induce infringement).

²³⁵ See *Illinois Cent. Gulf R.R. Co., v. Parks*, 390 N.E.2d 1078, 1080-81 (Ind. App. 1979) (discussing estoppel by verdict and estoppels by judgment).

²³⁶ See *Nat'l R.R. Passenger Corp. v. Pa. Pub. Util. Comm'n*, 288 F.3d 519, 525 (3rd Cir. 2002) (allowing offensive issue preclusion to pursue injunctive relief).

counsel to potentially preclude pre-verdict damages should normally be a strong enough incentive to obtain one.

B. Litigation

The current state of the case law regarding joint infringement also has implications for litigation. Defendants should carefully review patent claims asserted in lawsuits to determine whether multiple entities perform the steps. In many cases, the determination of whether an element is performed by a certain entity will not be obvious, and defendants therefore should seek claim constructions of terms to clarify that multiple actors perform the steps.²³⁷ Additionally, as discussed above, a defendant faced with potential joint infringement and indirect infringement allegations would be wise to obtain an opinion of counsel that it does not infringe, which it can offer to show that it lacks the requisite intent to satisfy the indirect infringement allegations.²³⁸

Also, if there is a contributory infringement allegation, which requires one actor selling a component of the system, the defendants (and plaintiffs) also must focus on whether the component has “substantial non-infringing uses.”²³⁹ If a component is sold or offered for sale that also has a substantial non-infringing use, then there can be no contributory infringement by the company that sells it.²⁴⁰

A patentee in litigation has its own unique considerations. Mainly, it should try to assert system claims, if they are available, in addition to any method claims.²⁴¹ Because the court in *Centillion* determined that for system claims, the “use” of an element is

²³⁷ See *Datapoint Corp. v. Standard Microsystems Corp.*, 31 Fed. App'x 685, 695 (Fed. Cir. 2002) (noting the complexity at the intersection of claim construction and infringement analysis).

²³⁸ See *Broadcom Corp.*, 543 F.3d at 699 (indicating that a party's failure to obtain opinion of counsel may be probative of intent).

²³⁹ See 35 U.S.C. § 271(c) (highlighting one aspect of contributory infringement).

²⁴⁰ See *id.* (indicating the circumstances in which use will not constitute contributory infringement).

²⁴¹ See *Centillion*, 631 F.3d at 1282 (discussing system claims); *McKesson Techs.*, 2011 WL 1365548 at *1284-85 (discussing method claims).

where it is put into service, a plaintiff asserting a system claim will not need to rely on joint infringement and vicarious liability for system claims.²⁴²

On the other hand, even for system claims, plaintiffs face hurdles. A patentee may need to bring suits against customers of the company it believes is the true infringer, rather than that company.²⁴³ Alternatively, or additionally, it may need to rely on theories of induced or contributory infringement to successfully assert infringement against a defendant company if it is that company's customers that directly infringe the system claims.²⁴⁴ In either case, another hurdle the patentee faces is proving that the customers actually infringe, which is necessary to show direct infringement, even if relying on an inducement theory.²⁴⁵

²⁴² See *Centillion*, 631 F.3d at 1285 (highlighting that after *Centillion*, system claims can be easier to prove).

²⁴³ See *Akamai Techs.*, 629 F.3d at 1317-18 (illuminating difficulty of pursuing patent claims when infringement is divided).

²⁴⁴ See *BMC Res. Inc.*, 498 F.3d at 1379 (illustrating an alternative route to claiming patent infringement).

²⁴⁵ See *Centillion*, 631 F.3d at 1285-86 (quoting “We note that, although the customers ‘use’ the system as a matter of law, this does not settle the issue of infringement. . . .”); see also, e.g., *ACCO Brands, Inc. v. ABA Locks Mfr. Co.*, 501 F.3d 1307, 1312-13 (Fed. Cir. 2007) (finding that an expert’s testimony that the “natural and intuitive way to employ” the accused product was insufficient to prove direct infringement); *E-Pass Techs., Inc. v. 3Com Corp.*, 473 F.3d 1213, 1222 (Fed. Cir. 2007) (finding that evidence from product manuals was insufficient to show direct infringement); *SRI Int’l Inc. v. Internet Security Sys.*, 647 F. Supp. 2d 323, 342-44 (D. Del. 2009) (reversing jury verdict of induced infringement because there was no evidence of infringement by customers); *Minsurg Int’l, Inc. v. Frontier Devices, Inc.*, No. 8:10-cv-1589-T-33 (EAJ), 2011 WL 486120, at *3 (M.D. Fl. Feb. 7, 2011) (determining that there was no inducement because the plaintiff failed to provide a single affidavit of a surgeon confirming the use of the system); but see *Symantec Corp. v. Computer Assoc. Int’l, Inc.*, 522 F.3d 1279, 1292-93 (Fed. Cir. 2008) (finding because the product manual encouraged the customer to use the device in an infringing way and there were no non-infringing uses, a genuine issue of material fact still existed regarding whether the customer infringed, even though no actual evidence of infringement by a specific customer was offered); *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1317-19 (Fed. Cir. 2009) (holding that evidence of direct infringement based on circumstantial evidence of providing customers with instructions to use the product in the infringing manner may be sufficient).

Furthermore, as discussed above, plaintiffs also need to focus on the intent requirement of both types of indirect infringement.²⁴⁶ They must be able to show that the defendant at least knew of the patent, and they will also need to focus on showing that the defendant could not have believed that the patent was not infringed.²⁴⁷

Additionally, even at the outset of litigation, a plaintiff may need to make sure that it pleads induced or contributory infringement with sufficient specificity,²⁴⁸ as a number of courts have found that these causes of action are subject to a higher pleading standard than required to plead direct infringement.²⁴⁹

²⁴⁶ See, e.g., *Global-Tech Appliances, Inc.*, 131 S. Ct. at 2062; *Aro Mfg. Co.*, 377 U.S. at 488; *Spansion*, 629 F.3d at 1355; *DSU Med. Corp.*, 471 F.3d at 1304, 1305; *Metabolite Labs., Inc.*, 370 F.3d at 1365; *Manville Sales Corp.*, 917 F.2d at 553; *Hewlett-Packard Co.*, 909 F.2d at 1469 (discussing the intent requirement for contributory and inducement infringement).

²⁴⁷ See, e.g., *Aro Mfg. Co.*, 377 U.S. at 488; *DSU Med. Corp.*, 471 F.3d at 1304, 1305 (elucidating additional burden on plaintiff to prove infringement).

²⁴⁸ See *Bell Atlantic Corp. v. Twombly*, 550 U.S. 544, 555 (2007) (noting, “[f]actual allegations must be enough to raise a right to relief above the speculative level”); *Ashcroft v. Iqbal*, 129 S. Ct. 1937, 1950 (2009) (setting forth that, “only a complaint that states a plausible claim for relief survives a motion to dismiss”).

²⁴⁹ See, e.g., *Tech. Licensing Corp. v. Technicolor USA, Inc.*, No. CIV. 2:03-1329 (WBS) (EFB), 2010 WL 4070208, at *3 (E.D. Cal. Oct. 18, 2010) (granting motion for judgment on pleadings because the “[p]laintiff has not alleged third-party direct infringement (required for success on both indirect claims), defendant’s knowing inducement and intent to encourage infringement (required for inducement of infringement), or defendant’s knowledge of a combination’s infringement and lack of substantial non-infringing uses (required for contributory infringement)”; *Anticancer, Inc. v. Fujifilm Med. Sys. U.S.A., Inc.*, 745 F. Supp. 2d 1165, 1170 (S.D. Cal. 2010) (granting motion to dismiss on contributory infringement allegation because the plaintiff “has not pled any facts which would establish that the devices at issue are not ‘suitable for substantial non-infringing use’”); *XPoint Techs., Inc. v. Microsoft Corp.*, 730 F. Supp. 2d 349, 357 (D. Del. 2010) (dismissing claims for indirect infringement against those defendants where the complaint failed to allege factual allegations supporting the claims); *In re Bill of Lading Transmission and Processing Sys. Patent Litig.*, 695 F. Supp. 2d 680, 685 (S.D. Ohio 2010) (dismissing indirect infringement claims because the “allegations . . . measured against the elements . . . [were] insufficient under *Twombly* and *Iqbal* to plausibly state a claim”); *Best Medical Int’l, Inc. v. Accuray, Inc.*, No. 2:10-cv-1043, 2011 WL 860423, *8 (W.D. Pa. Mar. 9, 2011) (dismissing count asserting induced infringe-

For method claims, plaintiffs, like defendants, may need to focus on claim construction issues, with the plaintiff seeking constructions that clarify that the claim is performed by only one actor.²⁵⁰ For example, if a claim element requires that something is “displayed” on a user’s computer, with all other steps being explicitly performed by a service provider, the plaintiff might seek a construction which sets forth that “display” includes the service provider causing the display to occur on the user’s computer, while the defendant might seek a construction that “display” is necessarily performed by the user’s computer.²⁵¹ Similarly, if a claim element requires that a message is “communicated,” with all other steps explicitly performed by a telephone provider, the plaintiff might seek a construction which sets forth that “communicate” includes the telephone provider causing the message to be sent over telephone lines, while the defendant might seek a construction that “communicate” is something done by the author that writes the message itself.²⁵² As discussed below, clearer claim drafting can sometimes eliminate these issues from the outset.²⁵³ Additionally, plaintiffs may need to carefully investigate whether a defendant actually directs and controls any other entity that may perform some of the steps of the claim. Although it may be difficult to prove an agency relationship, in some cases it may be possible, or at least it may be a factual issue that is submitted to the jury.

C. Counseling

The joint infringement cases also create an issue for attorneys to consider when drafting contracts. If a company is contracting with another to perform some step of an overall process, from a patent infringement perspective, it may be beneficial to

ment for failing to alleged specific intent, among other insufficiently pled allegations).

²⁵⁰ See *Centillion*, 631 F.3d at 1286-87 (explaining that for a method patent a single party must complete all of the steps in the process for a court to find infringement).

²⁵¹ See *BMC Res.*, 498 F.3d at 1381 (suggesting that parties can avoid infringement claims by asserting preference for proper claim drafting).

²⁵² See *id.* (finding that a well drafted claim can help to avoid issues in proving infringement later on).

²⁵³ See *infra* Part C (discussing how counseling could eliminate issues from the outset of a patent)

clarify in the contract that there is no agency relationship.²⁵⁴ Also, the contract should not specify that the party is required to perform the steps.²⁵⁵ If drafted in this manner, the company may be able to avoid infringement of a method claim that requires performance of steps by both companies.²⁵⁶ Of course, there may be reasons outside of patent law why such provisions would not be desirable, but it is, at least presently, wise to consider that issue when drafting such contracts.

D. Claim Drafting

Finally, the present law concerning joint infringement obviously creates some important issues for claim drafting. In view of *Centillion*, it is wise to draft at least some claims as “system” claims because such claims may not be subject to divided infringement at all.²⁵⁷

Additionally, claim drafters should carefully attempt to draft claims in a manner such that a single entity performs all the steps.²⁵⁸ For example, if data is being transmitted and received, to avoid divided infringement caused by the receiving entity performing some of the steps, claims can often be drafted with a step such as “transmitting the data to the receiver,” rather than “receiving the data.”²⁵⁹ As the Federal Circuit stated, “a claim that

²⁵⁴ See *infra* notes 256, 258, 262 and accompanying text (providing how claims can be constructed depending on facts of case).

²⁵⁵ See *Centillion*, 631 F.3d at 1286-87 (reiterating elements of infringement of method claims).

²⁵⁶ See *id.* at 1287 (finding “for infringement to be found when more than one party performs the steps of a method claim, an agency relationship or other contractual obligation to perform the steps must exist”).

²⁵⁷ See *id.* (implying system claims have less proof requirements than method claims).

²⁵⁸ See *BMC Resources*, 498 F.3d at 1381 (noting that “[a] patentee can usually structure a claim to capture infringement by a single party” by “focus[ing] on one entity”).

²⁵⁹ See *SIRF Tech., Inc. v. Int’l Trade Comm’n*, 601 F.3d 1319, 1329-30 (Fed. Cir. 2010) (finding that the claim elements “communication [sic] [of] the satellite ephemeris to a mobile GPS receiver at a second location” and “transmitting the formatted data to a remote receiver,” while only possible if the customer forwards the data to the end user and the end user downloads the data, the fact that other par-

reads ‘An algorithm incorporating means for receiving e-mails’ may require two parties to function, but could nevertheless be infringed by the single party who uses an algorithm that receives e-mails.”²⁶⁰

Some apparatus claims also can be written in a manner such that an accused device merely be capable of operating in a certain mode infringes, rather than including language with a structural limitation that is implemented by a second party. Thus, for example, the claim language of the patent in *Cross Medical* that included a lower bone interface that was “operatively joined” to (in contact with) a bone segment could have been altered such that it was merely capable of being operatively joined to a bone segment.²⁶¹ This change of language likely would have avoided divided infringement because it would no longer be relevant that, for the accused products, the bone segment and bone interface were connected by the second party—the surgeons performing the operations.²⁶²

Another drafting consideration is to potentially omit certain steps in a process as claim elements entirely if they are performed by a second entity.²⁶³ There may be drawbacks, however, if this omits a significant part of the invention, including making it more difficult to demonstrate that the claims satisfy 35 U.S.C. §§ 102 and 103, and later, potentially smaller damages for infringement if the infringed process is also a smaller part of a larger process.²⁶⁴

ties perform the forwarding or downloading did not preclude a finding of direct infringement).

²⁶⁰ *Uniloc*, 632 F.3d at 1309.

²⁶¹ See *Cross Medical*, 424 F.3d at 1299, 1305-06 (discussing at length what exactly “operatively joint” meant in the context of this particular patent).

²⁶² See *id.* at 1311 (contrasting the claim language with the language of the patent in *Intel Corp. v. ITC*, 946 F.2d 821, 832 (Fed. Cir. 1991), in which the term “programmable selection means” required only that the accused device be capable of operating in the enumerated mode).

²⁶³ See, e.g., *Centillion*, 631 F.3d at 1283-84; *Akamai Techs.*, 629 F.3d at 1318-19; *Minn. Mining & Mfg. Co.*, 303 F.3d at 1304-05 (providing case law that discusses infringement by multiple parties if pleaded).

²⁶⁴ See, e.g., *Mobil Oil*, 367 F. Supp. at 230-232 (indicating that inadequately defining a claim can be raised as a defense by the infringing party).

VI. Conclusion

The law regarding “joint” or “divided” infringement is complex, especially when combined, as it often is, with the law regarding indirect infringement, and that complexity has been demonstrated by the cases decided over the last several years that set forth various rules for addressing joint infringement. Some of these rules may change or be clarified by the upcoming *en banc* rulings by the Federal Circuit in *Akamai* and *McKesson*. Either way, patent holders and practitioners should be aware of the issues so that they can properly address them in claim drafting, litigation tactics, decision-making regarding seeking opinions of counsel and contract drafting.