

# Joint Infringement

## Introduction

This paper will first discuss indirect infringement as it relates to joint infringement and then discuss the history surrounding the current doctrine of joint infringement. It will examine the current rule of law for joint infringement as set forth by the Federal Circuit through an analysis of its recent decisions and offer suggestions as to the Court's future approach. Finally, it will discuss the practical impact of the doctrine on different topics for patent practitioners.

## Indirect Infringement

In many ways, Joint infringement is like a younger sibling to indirect infringement. Indirect infringement has been around longer and the doctrines have a lot in common with each other. Indirect infringement is now set forth in 35 U.S.C. §271(b) and 35 U.S.C. §271(c). 35 U.S.C. §271(b) states, "Whoever actively induces infringement of a patent shall be liable as an infringer." This is a change from the original patent principle that an infringer had to perform all limitations of the claim to infringe. In the case of this indirect infringement, an entity can perform *no* limitations of the claimed invention and still be liable as an infringer if the party induced a third party to infringe.

There are two different species of indirect infringement:

- (a) Inducement of infringement as outlined above in 35 U.S.C. §271(b) and
- (b) Contributory infringement outlined in 35 U.S.C. §271(c)

The latter doctrine, in essence, makes an entity liable for infringement if it knowingly imports, uses or sells an item used in an infringing manner. Both of these together, termed “indirect infringement,” attempt to close some holes which were being exploited in the realm of patent law.

The framework for contributory infringement originated as case law during the late nineteenth century in response to situations under which an entity did not themselves infringe, but aided others in infringing. There were circumstances under which a patent was being infringed by multiple entities and a single entity was found to be leading the infringement, but not themselves infringing. It was often difficult or economically infeasible for the patentee to sue each of these infringers separately, so the courts established the doctrine of indirect infringement to hold the instigator liable for their culpable act of aiding infringers. This doctrine helped to close a hole whereby a potential infringer could escape liability for infringement by inducing others to perform the infringing act on its behalf or by otherwise contributing to infringement such as by selling infringing items.

In the years that followed, some patent holders used this doctrine to broaden their rights as patent holders further and further until, in the mid-1940s, the Supreme Court stepped in to rule that these patent holders were taking things too far.<sup>1</sup> It coined such abuse “patent misuse doctrine.” This shut the door for contributory infringement until Congress enacted 35 U.S.C. §271 as a component of the Patent Act of 1952. This section put the indirect infringement into statutory form in response to the Supreme Court’s narrowing and codified its patent misuse doctrine as §271(d).

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<sup>1</sup> *Mercoird Corp. v. Mid-Continent Inv. Co. et al.*, 320 U.S. 661 (1944).

The Federal Circuit recently restated its standard for inducement of infringement as requiring “evidence of culpable conduct, directed to encouraging another’s infringement, not merely that the inducer had knowledge of the direct infringer’s activities.”<sup>2</sup> Further, the Federal Circuit has made clear that in order for indirect infringement to apply, there must be direct infringement underlying that claim.<sup>3</sup> This requires direct infringement by the third party in order for indirect infringement to be applicable against the inducer.

To summarize, there are two species of indirect infringement, inducement to infringe and contributory infringement. Inducement to infringe, set forth in 35 U.S.C. §271(b), requires that the plaintiff prove:

1. Direct infringement by another;
2. Defendant’s actions led to that direct infringement;
3. Defendant possessed knowledge that the actions of the other would infringe under a willful blindness standard<sup>4</sup>;
4. Defendant possessed specific intent to induce infringement by that third party.

Contributory infringement, set forth in 35 U.S.C. §271(c), requires that the plaintiff prove:

1. Direct infringement<sup>5</sup> by another;
2. Knowledge of the patent;

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<sup>2</sup> *DSU Medical Corporation v. JMS Company, Ltd.*, 471 F.3d 1293 at 1306 (Fed. Cir. 2006).

<sup>3</sup> *Dynacore Holdings Corp. v. U.S. Philips Corp.*, 363 F.3d 1263 at 1272 (Fed. Cir. 2004).

<sup>4</sup> *Global-Tech Appliances, Inc. v. SEB S.A.*, U.S. at 14 (2011).

<sup>5</sup> *Met-Coil Sys. Corp. v. Korners Unlimited, Inc.*, 803 F.2d 684 at 687 (Fed. Cir. 1986).

3. Knowledge that the component was designed for an infringing use;
4. The component is a material part of the patented product; and
5. The component is not a staple article of commerce

Both of these doctrines serve to patch holes in the patent framework whereby entities were able to avoid infringement liability by indirectly infringing, often simply by outsourcing infringing acts.

## **Conception of the Modern Theory of Joint Infringement**

After the introduction of indirect infringement, another hole in patent infringement became apparent for which there was no patch. While the doctrine of indirect infringement made it an infringing act to contribute to or induce infringement by another entity, it still required a direct act of infringement by the other entity. However, there was nothing in the patent framework which prevented one entity from performing some limitations of a patented invention while outsourcing one or more remaining limitations to a third party.

For example, imagine a company has the following hypothetical patent:

*A method for making a grilled cheese sandwich comprising:*

*placing a slice of cheese between two slices of bread to form a sandwich; and,*

*heating said sandwich until the cheese reaches its melting point.*

A single entity would have to perform all limitations of the patented method to be liable for direct infringement, in this case both constructing the sandwich and heating it. If fictional company Alphacorp performs both of these limitations, it has directly infringed on the patent and the patent holder would be able to recover. If Alphacorp instructs fictional company Bravocorp to perform both limitations of the claim to construct a sandwich, Alphacorp could be liable for inducement of infringement, one form of indirect infringement. If Alphacorp offers to sell or import a grilled cheese sandwich created using this method which Alphacorp knew was patented, Alphacorp could be liable for contributory infringement, the other form of indirect infringement. However, if Alphacorp places the cheese between the slices of bread and passes it to Bravocorp who then heats the sandwich, Alphacorp is liable neither under direct infringement nor either species of indirect infringement discussed thus far. Bravocorp is also not liable under any of these forms of infringement. Since neither Alphacorp nor Bravocorp will have performed all limitations of the patented claim, there is no direct infringement by either, and direct infringement by a single entity is a prerequisite for all flavors of infringement discussed thus far.

Courts have recently started to recognize that there are issues with this approach, particularly when the two entities performing complimentary limitations of the claim have some relationship as in the above example where Alphacorp simply outsourced the heating step of the claim to Bravocorp. Another, more complex example, if Alphacorp is attempting to create the patented grilled cheese sandwich, but does not want to be held liable for infringement, it could spawn off Bravocorp and CharlieCorp as separate companies without strong ties to Alphacorp, have them each perform one element of the claim, and together neither will have infringed under this classic formulation. As long as Bravocorp and CharlieCorp are not wholly owned

subsidiaries of Alphacorp such that their actions could be attributed to Alphacorp, Alphacorp will not be liable for direct infringement. Further, though Alphacorp has induced Bravocorp and CharlieCorp working in concert to infringe, Alphacorp could not be found liable for contributory infringement because contributory infringement requires an underlying finding of direct infringement by a single entity which is not present here since neither Bravocorp nor CharlieCorp performed all limitations of the claim. In this example, the patent holder cannot recover from Bravocorp nor CharlieCorp for direct infringement and they also cannot recover from Alphacorp for either species of indirect infringement. All three companies working in concert can infringe and there is no way the patent holder can recover for infringement by any of them.

In recent times, courts have realized this is a significant hole and they have been grappling with where to draw the line. It seems somewhat apparent that if one company simply outsources a single step of the claimed invention to another company, there ought to be some way for the patent holder to recover as this infringer is simply exploiting a hole in the system. It is from the need to fill this hole in the patent system that the doctrine of joint infringement was conceived.

In the first of many recent cases which have attempted to sort out this matter, *BMC Resources, Inc. v. Paymentech*, the Court of Appeals for the Federal Circuit explained that, “A party cannot avoid infringement, however, simply by contracting out steps of a patented process to another entity. In those cases, the party in control would be liable for direct infringement. It would be unfair indeed for the mastermind in such situations to escape liability.”<sup>6</sup> This is one of the first modern cases where the Federal Circuit discussed joint infringement as a method of recovery for patent holders.

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<sup>6</sup> *BMC Resources, Inc. v. Paymentech, L.P.*, 498 F.3d 1373 at 1381 (Fed. Cir. 2007).

In joint infringement, the infringement can be achieved by two or more entities, each performing some limitations of the claim. The interesting point is that there must be some kind of relationship between those entities in order for such joint infringement to apply. Recent case law has been developing around the issue in an attempt to find the appropriate cut off point. If joint infringement falls on a continuum with a strong connection between two entities, such as a company and its subsidiary at one end, we want it to be considered joint infringement so the patent holder can enforce it and recover, whereas on the other end of the continuum, where the two entities are loosely or not connected at all, we do not want joint infringement to apply. In fact, in this latter case, it could potentially be dangerous to hold two parties liable for infringement if neither performed all limitations of the claim or neither intended to infringe as a litigious patent holder may be able to find liability in multiple, entirely disjointed, innocent parties. The Court of Appeals for the Federal Circuit has been working recently to figure out where the line ought to be drawn on that continuum between where joint infringement should arise and where it should not.

## **Recent Developments in Joint Infringement**

As mentioned above, this is a current topic; there have been a series of recent cases discussing joint infringement, each attempting to clarify and develop a standard.

### **BMC Resources, Inc. v. Paymentech, L.P. (2007)**

This was one of the first recent cases to deal with joint infringement. In this case, the Federal Circuit tackled the question of whether to extend patent protection to instances where

there are joint infringers instead of a single actor who performs every element of a claim as in direct infringement.

BMC brought a case against Paymentech for patent infringement, alleging that although Paymentech did not perform all limitations of the claim, they ought to be liable under a theory of joint infringement. The patent claims at issue dealt with bank transactions, specifically processing debit transactions without a Personal Identification Number (PIN). BMC conceded that Paymentech did not perform all limitations of the claim. BMC instead argued that though Paymentech did not solely infringe, Paymentech did infringe jointly in concert with the ATM networks and the banks who were their clients. The Federal Circuit remained unconvinced by BMC's allegations and upheld the lower court's summary judgment ruling.

In its analysis, the Federal Circuit said, "a party cannot avoid infringement, however, simply by contracting out steps of a patented process to another entity."<sup>7</sup> Here, the court is essentially applying a vicarious liability standard whereby an agency relationship must exist between the infringer and the third party in order for joint infringement to apply. This is very broad and the court even admits the hole it has just made very explicitly:

This court acknowledges that the standard requiring control or direction for a finding of joint infringement may in some circumstances allow parties to enter into arms-length agreements to avoid infringement. Nonetheless, this concern does not outweigh concerns over expanding the rules governing direct infringement.

So the court is very hesitant to expand infringement into this realm, so much so that it is willing to leave a significant hole in the system and even explicitly describe it in their holding.

This decision likely made many patent holders nervous as it opened some doors for would-be infringers while closing others. According to this decision, two would-be infringers

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<sup>7</sup> Id. at 1381.



could enter into an agreement with each other whereby each performed half the steps outlined in a patented claim and together they would be able to perform the patented claim without consequence. Provided neither party asserted control such that one acted as the agent and the other the principal, they could skirt infringement.

The main takeaway here in *BMC Resources, Inc. v. Paymentech, L.P.* is that in order for joint infringement to be a viable option for recovery by a patent holder, the defendant must have what is essentially an agency relationship with the third party performing the limitations of the claimed invention they themselves have not performed. If there are two companies contracting at arms length such that there is no such “control or direction” as necessary for an agency relationship, then joint infringement will not be available as a method for recovery.

### **Muniauction v. Thomson (2008)<sup>8</sup>**

In this case, Muniauction had a patent on a system involving an auction system which relied on both that system and the bidders to perform each element of the claimed method. Muniauction, the plaintiff, attempted to claim that Thomson’s system, in concert with the bidders that used that system ought to be liable under a theory of joint infringement. The court quoted *BMC Resources* heavily in its dismissal of Muniauction’s claim for joint infringement.

The Federal Circuit reiterates that a single entity must exercise “control or direction” over the entire process such that every step is attributable to the controlling party. In this case, the owner of the auction system does not exert the necessary amount of control over the bidders such that they can be said to have performed every element of the claim. Again the court looks to

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<sup>8</sup> *Muniauction v. Thomson*, 532 F.3d 1318 (Fed. Cir. 2008).

vicarious liability as a guide and here finds neither was there vicarious liability nor did Thomson solely perform all limitations of the claimed method and therefore that infringement does not apply.

The important addition by Muniauction to the doctrine of joint infringement is that it addressed the question of whether instructions by an entity were enough to establish control or direction over the entire process. In this ruling, the Federal Circuit decided that instructions alone were not enough to make up the control or direction necessary for joint infringement liability to be a viable avenue for recovery by the patent holder. It again maintained that a vicarious liability standard applies, requiring more than just instructions to create the necessary amount of control or direction for two entities to be joint infringers.

### **Akamai Technologies v. Limelight Networks (2010)<sup>9</sup>**

In this case, the Federal Circuit further develops its requirement that for joint infringement there must be a certain amount of control or direction by explicitly describing the different relationships that meet these qualifications.

Akamai is a content delivery network (CDN) and their patents involve methods of distributing embedded objects over multiple servers to increase performance both by spreading the load on any individual server and by allowing users to retrieve content from the closest server geographically. These methods are used to scale for performance, particularly in moments where there are multiple simultaneous requests for the same objects, and to guarantee uptime for users so there is not a single point of failure. They hold multiple patents related to this process. The

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<sup>9</sup> *Akamai Technologies, Inc. v. Limelight Networks, Inc.*, 629 F.3d 1311 (2010).

main patent here at issue has claims which cover the process of uploading the documents to their servers and tagging them so they can be accessed.<sup>10</sup>

Limelight is a competitor to Akamai and offers Content Delivery Network services which are similar in many ways. One point of distinction between the two is that instead of tagging these uploads for their customers as Akamai does, Limelight has contracts with their customers whereby they tag the objects they have chosen to upload according to Limelight's instructions. Upon doing so, Limelight then replicates the objects across their CDN. The key distinction here is that the customers are the ones who are tagging these objects, not Limelight themselves.

There is no issue here as to whether Limelight solely performs every step of the asserted claims, they do not. The issue is whether Limelight, along with their customers, are jointly liable for infringing on Akamai's patent. Akamai argues that since the customers are doing the tagging in response to Limelight's instructions, they are acting under the "direction and control" of Limelight and therefore Limelight can be deemed as the mastermind. Since the Federal Circuit made it abundantly clear in both *BMC Resources* and *Muniauction* that a single entity had to be found responsible for performing all limitations of the claimed method for joint infringement to be appropriate, Akamai attempted to claim that Limelight performed all limitations of the claim. Akamai claimed that Limelight's customers, acting under their control, performed the limitation for tagging and as such are acting as its agents so their actions can be attributable to Limelight. In this manner they argue that Limelight is a single entity who has performed all limitations of the claim and therefore a claim of joint infringement ought to be reasonable.

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<sup>10</sup> U.S. Patent No. 6,108,703 (issued Aug 22, 2000).

The main question before the Federal Circuit in this case is “whether the furnishing of instructions is sufficient to attribute the actions of the instructed party to the accused.”<sup>11</sup> In answering this question, the court states that the essential element is not simply the exercise of control or providing of instructions, but whether the parties interact in such a way that the acts of one may be attributed to the other. If so, joint liability for infringement would apply. If instructions are insufficient to cross the threshold where one party is exercising control over the other, Limelight would not be liable for infringement for they would not be found to be a single entity performing all elements of the claim and therefore joint infringement would not be merited under the framework the Federal Circuit has created.

In its discussion, the court restates that a single entity must be responsible for performing all limitations of a method in order for a finding of joint liability to be proper:

Implicit in this court’s holdings in *BMC Resources* and *Muniauction* is that the performance of a method step may be attributed to an accused infringer when the relationship between the accused infringer and another party performing a method step is that of principal and agent, applying generally accepted principles of the law of agency as explicated by the Supreme Court and the Restatement of Agency.<sup>12</sup>

Further, the court states that for an agency relationship to exist, “both parties must consent that the agent is acting on the principal’s behalf and subject to the principal’s control.” So the Federal Circuit is really driving the point home that an agency relationship must exist in order for there to be a finding of joint infringement. One party must clearly control the other and have the actions of one attributable to the other.

In this case, the court finds that there is nothing to indicate that Limelight’s customers are acting as Limelight’s agents while performing the tagging. In fact, the court goes on to say that

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<sup>11</sup> *Akamai* at 1319.

<sup>12</sup> *Akamai Technologies, Inc. v. Limelight Networks, Inc.*, 629 F.3d 1311, 1318 (2010).

there is no obligation created by Limelight's customers to perform the limitation of the claimed method that they themselves do not perform. This is very important because it seems to allege that if there were a contractual obligation created by Limelight to perform the action, it would cross the threshold to joint infringement. However, they hold that there was no such contractual obligation, but rather the users were given the option of whether or not to tag the uploaded files and since there was no such a requirement, the users cannot be found to have acted under Limelight's "direction and control."

This is new ground carved out by the court for joint infringement, however in this instance they find that no such contractual obligation existed. On these facts the court reasons that the customer can choose to tag or not and therefore the customers are not contractually obligated to perform the actions. Since there is no contractual obligation to perform the limitations of the claimed method and the customers are not working as agents on Limelight's behalf to perform the limitations, there is no finding of liability for joint infringement.

The court mentions, almost in passing, that it is implicit that joint infringement occurs when a party is contractually obligated to the accused infringer to perform a method step. This broadens the doctrine of joint infringement to include not only parties in an agency relationship, but also helps to close the hole opened in *BMC Resources* of two parties contracting with each other to each perform some steps in a process of a claimed method. It seems most interesting because they state this as fact, as though they meant a contractual obligation to satisfy the test all along when they explicitly stated in *BMC Resources* that there was a hole where two parties contracted with each other, implying that a contractual obligation would not suffice. So this

appears to be an after the fact expansion of the BMC Resources standard, now including contractual obligations to perform limitations of a claimed method where it did not previously.

Again, this outcome appears to imply that if Limelight's instructions or contract created an obligation whereby the customers were required to perform the tagging step, then potentially the customers could be considered to have performed the steps of the claimed method on behalf of Limelight and therefore a finding of joint infringement would be appropriate. However, since there was no actual obligation created here, only an election by the customer to perform the steps, it does not cross the threshold.

The Court looks to the agency law to define the level of requirement necessary to constitute the obligation. They reference the Restatement of Agency in their holding, but does not give an in depth analysis of the agency factors. From the Restatement of Agency, agency is defined as "the fiduciary relation which results from the manifestation of consent by one person to another that the other shall act on his behalf and subject to his control, and consent by the other so to act."<sup>13</sup> Looking to this set of facts and circumstances, do Limelight's customers fit into that definition? The Court arrives at the conclusion that they do not. The customers are not subject to Limelight's control as they are not required to perform the tagging step. There is no manifestation of consent by Limelight that its customers will act on its behalf. Instructions which inform the customers how they can upload and tag these documents simply do not create an agency relationship. Since it does not find an agency relationship between Limelight and its customers, the Federal Circuit is unable to find a single entity has infringed all limitations of the claim and therefore rules that Limelight cannot be liable for joint infringement.

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<sup>13</sup> Restatement (Second) of Agency §1(1) (1958)

This case is due for an en banc rehearing by the Federal Circuit so this ruling has been discarded. The order for the en banc review of *Akamai v. Limelight* says the court will address the following issue: “If separate entities each perform separate steps of a method claim, under what circumstances would that claim be directly infringed and to what extent would each of the parties be liable?”<sup>14</sup> They may answer this question directly with a simple ruling that would clarify this area of the law a bit, but not introduce any landmark change. However, they may choose to rule a bit broader and change their view on the single entity rule.

However, the main takeaways here are that the Federal Circuit is holding to its single entity rule and that it is looking to agency law in order to define the relationship necessary for a finding that a single entity performed, as principal, all limitations of the claimed invention. Further, simply creating instructions for a third party which they have the election to perform or ignore does not rise to the level of control necessary to constitute the prerequisite agency relationship for joint infringement.

### **Golden Hour Data Systems, Inc. v. emsCharts, Inc. and Softtech, Inc. (2010)<sup>15</sup>**

In this case, the court gave more guidance on how to deal with a partnership where there is no clear leader or subordinate. As discussed at length above, started in *BMC Resources* and furthered in *Muniauction*, the court required that all limitations of a claimed method be performed by a single entity and its agents for a determination of joint infringement to be proper. The court set forth a standard that one party must act as the “mastermind” exercising “control or

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<sup>14</sup> *Akamai Technologies, Inc. v. Limelight Networks, Inc.*, Federal Circuit (order dated April 20, 2011).

<sup>15</sup> *Golden Hour Data Systems, Inc. v. emsCharts, Inc. and Softech, Inc.*, 614 F.3d 1367 (Fed. Cir. 2010).

direction” over all steps in the claimed method<sup>16</sup>. However, in *Golden Hour*, *emsCharts* and *Softtech* both claimed to be independent and equal partners with neither acting as the mastermind.

*Golden Hour* holds a patent on computer systems and methods for use in the field of emergency medical transport. In particular, it deals with a system for dispatching and tracking emergency medical teams as well as managing patient diagnosis and billing.<sup>17</sup> *Softtech* produces flight dispatch software for emergency medical transports called *Flight Vector* and *emsCharts* produces software called *emsCharts* which deals with patient information and billing. These two wholly independent companies decided to form a partnership to make their programs interoperable and market as a single unit. Neither *emsCharts* nor *Softtech* took on a principal or agent role; the two companies both came together at arms length and made the deal to collaborate. Both pieces of software were developed and existed separate of the other and it was only through this partnership that they decided to marry the two and market them as a software package.

*Golden Hour* alleges that *emsCharts* and *Softtech* jointly infringe on its ‘073 patent as their combined software performs all limitations of the relevant claims. There is no argument that *emsCharts* and *Softtech* each perform different limitations of the claim. The contention surrounds their relationship and whether one is an agent and therefore subordinate to the other.

The District Court granted a Judgment as a Matter of Law (“JMOL”) of no joint infringement of the claims in favor of the defendants after a jury verdict found for the plaintiff on the question of joint infringement. The Federal Circuit here affirmed the District Court’s JMOL

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<sup>16</sup> *Muniauction* at 1329.

<sup>17</sup> U.S. Patent No. 6,117,073 (issued Sept 12, 2000).



by stating there was insufficient evidence of control or direction as a matter of law to show the single entity mastermind as required for joint infringement.

This ruling was particularly interesting because it met, head on, the question of what happens when two companies work in concert to infringe on a patent, each performing some limitations of the claimed method with neither acting on the other's behalf. According to the court here, there must be a showing that one entity acted as the principal mastermind while the other was subordinate in order for a determination of joint infringement to be upheld.<sup>18</sup> It is further interesting because it states that even if two companies create a partnership, there is no joint infringement. This should send a message to potential infringers that all they need to do to skirt joint infringement liability is find another company and create a strategic partnership with each infringing on some limitations of a claimed invention. As long as neither exerts control over the actions of the other, neither will be liable to the patent holder under joint infringement. Likewise, it leaves patent holders in a disadvantageous position where they are unable to recover from either company thereby devaluing their patent.

The main takeaway from this case is that, in a situation with two equal partners where together they infringe, joint infringement is not applicable.

## **Current State of Joint Infringement**

Until the outcome of the en banc hearing in *Akamai v. Limelight*, the current state of joint infringement is as follows. No plaintiff has yet successfully won a case claiming joint

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<sup>18</sup> While other issues were discussed in this case, the discussion here has been limited solely to those matters affecting joint infringement.

infringement. However, based on the cases decided thus far by the Federal Circuit, the theory of joint infringement requires that the plaintiff prove:

1. Infringement of some limitations of a patented claim by Defendant;
2. Infringement of the remaining limitations of that claim by one or more third parties;
3. The acts of infringement by the third party(s) occurred in such a way as they may be attributed to the Defendant as though Defendant were a “single entity”
4. The infringement by the above parties, taken together, constitute infringement under 35 U.S.C. §271(a).

A few notable points here. First, there has thus far been no discussion of intent in relation to joint infringement. This may be construed either that the Federal Circuit does not require intent as an element for joint infringement or that it has simply not met with a case necessitating that determination. Second, there is no discussion of knowledge of the patent. Both of these, intent and knowledge, are prerequisites for a finding of indirect infringement. Although the court has yet to address them, it seems likely that they would require both elements for joint infringement as well.

## **Future Developments in Joint Infringement**

It is worth noting that the Federal Circuit will be rehearing the *Akamai v. Limelight* case en banc sometime in the near future and the actual order from the December 2010 decision previously discussed was vacated along with the en banc order. As previously mentioned, the en

banc order stated that it will be looking specifically at situations where separate entities each perform separate steps of a claim and under which situations they ought to be liable. So this area of law is still in a state of flux. However, as of this moment, the above discussion is current and does not reflect a grand departure from the Federal Circuit's past rulings but rather more definition and slight broadening. It is likely that the upcoming en banc hearing will similarly not represent a sea change but rather clarify many of the open questions, though anything is possible.

Interestingly enough, while the Federal Circuit has discussed the doctrine of joint infringement and there have been a series of recent cases on the matter, not a single plaintiff has been successful on such a claim. This begs the question, is joint infringement even good law? Or is it just a theory discussed by the Federal Circuit and doomed to remain nothing but a theory. Or, if the theoretical framework exists but the rules are so stringent that no one can recover, what is the point of its existence?

With the passing of the recent patent legislation known as the America Invents Act, Congress did not choose to alter or clarify §271(a) with respect to whether it ought to apply to multiple parties or joint infringers.<sup>19</sup> As this was one of the largest changes in recent patent law and it will likely be many years before another such change, the burden falls to the Federal Circuit to interpret this area of the law. They would be ill-advised to await future legislative changes for clarification of this area as any such changes will likely be a long time coming, if at all. So it is quite likely that they will realize this and take it into account during their en banc rehearing of Akamai in the coming months.

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<sup>19</sup> *Smith-Leahy America Invents Act*, H.R. 1249, 112th Cong., 1st Sess. (2011).

## **Suggested Strategies for the Federal Circuit**

As previously discussed, joint infringement is still an actively developing area in the field of patent law. With no plaintiffs successfully winning such a case on an allegation of joint infringement thus far, the Federal Circuit has a wide berth to rule as it pleases in its en banc rehearing of *Akamai* without upsetting precedent. It could choose to expand the doctrine to include situations under which there is only an arms length contract between two parties and other such situations under which the actions cannot be pinned to a single entity, or it could choose to limit or even completely invalidate the doctrine. It could also look to other areas of law which have tackled similar issues of multiple actors working in concert. Following is a discussion of the possible approaches which the Federal Circuit may take along with each approach's merits and downsides.

### **Invalidate the Doctrine of Joint Infringement**

First, as previously mentioned, it could invalidate the doctrine altogether. However, this does not seem like the appropriate way to handle the situation. There are some significant holes in the patent system and, by ignoring it, the Federal Circuit would simply leave the door wide open for would be infringers thereby diluting the rights of patent holders in the process. To ignore the holes without proposing some alternative method of recovery for patent holders would be unjust.

## **Refine the Doctrine of Joint Infringement**

The most likely outcome will be that the Federal Circuit will continue with the rules it has already set forth but further refine and clarify the relationship necessary to constitute joint infringement. It initially required a kind of agency relationship in *BMC Resources*, relating it to a theory of vicarious liability and later, in the now discarded *Akamai* decision, grew it to include contractual relationships where there is a requirement to perform by the subordinate party. Again, if such acts fall on a continuum with a very strong relationship between the parties on one end and a nonexistent relationship on the other, we want the line drawn somewhere in the middle such that it appropriately finds liability where the parties have performed some culpable acts and does not when two innocent parties unknowingly perform different limitations of a patented claim.

However, this approach is not without its flaws. It leaves one major hole open to potential infringers, specifically that it still requires a single entity, either solely or with subordinates, infringe all limitations of a claim. Within the framework of such a structure, multiple entities can work in concert to infringe jointly. As long as none fills the role of mastermind or contracts subcomponents of the claim to other entities, such infringement can take place with no party liable to the patent holder. Some, particularly patent holders, may argue that this is a downside. The Patent and Copyright Clause in the Constitution gives Congress the right to secure for inventors the exclusive rights to their discoveries and patent holders could argue that allowing multiple parties to infringe in this manner is a violation of Congress' intent in drafting 35 U.S.C. §271. There is nothing in the statute that explicitly states the single entity principle, that element is added through interpretation by the courts.

Those in favor of such a limitation, may argue that the single entity limitation is an upside, and the act of holding multiple entities liable for acts they performed separately is broadening the patent law too far. Patent holders ought to be able to recover when a party has infringed, but taking it too far conflicts with the principles of free enterprise, preventing businesses from interacting with each other at arms length and potentially finding liability against parties who had no intent of infringing to begin with. For example, in *Golden Hour*, if emsCharts and Softtech each innocently worked on their halves of the process, neither of which alone infringed and they were able to collaborate and pair the two, should they be liable for the infringement? As another hypothetical, imagine these two companies made software on their own and did not couple them together. Maybe they had knowledge that the combination would infringe so they refrained from such a collaboration. Now, what if some third party comes along, licenses both of their software, and uses them together? Is this third party now infringing? Before the coupling, it seems unjust to hold either emsCharts or Softtech liable for infringement as neither entity's software performs all limitations of a claim. It would run up against the statute if the court started to hold parties accountable for infringing only components of a claim.

### **Discard the Single Entity Requirement**

One solution to close this hole without expanding patent law beyond its current limits would be to discard the single entity requirement for the underlying actions in joint infringement. Currently, the Federal Circuit has reasoned that by discarding the single entity requirement, they would inappropriately expand the scope of a patent holder's rights beyond what was intended by the legislature. 35 U.S.C. §271(a) says, "*whoever* without authority makes, uses, offers to sell, or

sells any patented invention” (emphasis added) to describe direct infringement. The Federal Circuit has construed the word “whoever” to apply only to a single entity.

However, this single entity requirement, discussed at length throughout this document, has the downsides of requiring a very high standard of proof for a plaintiff while simultaneously leaving major gaps in the framework, particularly for multiple parties who contract at arms length to infringe with neither entity being in a position as the mastermind leading the infringement. While the Federal Circuit does have a job to construe the laws promulgated by Congress, it seems that, in this case at least, they are chaining a fair amount of logic off of a very simple starting premise which may be flawed.

Further, Dolly Wu of the Journal of the Patent and Trademark Office Society makes the argument that the maintenance of the single entity requirement could lead to the invalidation of many internet software patents, including Akamai’s ‘703 patent. In response to Muniauction, she says,

For a plaintiff to succeed with joint method claims, he must demonstrate the existence of vicarious liability between, say, a Web site provider and an end-user consumer where each of them performs some steps in the claim. The decision creates a catch-22 situation because it is unlikely for vicarious liability relationships to exist across the Internet.<sup>20</sup>

Her point being that with the single entity requirement, which requires the vicarious liability relationship, most any patent relating to the internet will not be enforceable as internet software will not provide the relationship required for the requisite vicarious liability between the software creator and its users.

By dropping this single entity requirement, they would close the holes currently in the doctrine while not expanding the rights of the patent holders too much. Certainly the Court

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<sup>20</sup> *Joint Infringement and Internet Software Patents: An Uncertain Future?*, 91 J. Pat & Trademark Off. Soc’y 439 (2009).

would have to establish some limits in such a decision, particularly to limit the ability of patent holders to recover from multiple unconnected parties who each performed some limitations of a claimed invention. However, they are not entirely without precedent in other areas of the law. The Federal Circuit could look to these other areas of the law for guidance. For example, there are many overlaps between theories of joint liability in tort law and the theories of joint liability in patent law.

### **Look to Tort Law for Guidance**

The Federal Circuit could instead take cues from the tort liability doctrine of concerted action. While a tort doctrine, concerted action shares many common threads with the type of actions meant to be halted by the doctrine of joint infringement. From a seminal case on concerted action liability, the Court of Appeals of New York stated that:

Concerted action liability rests upon the principle that “[a]ll those who, in pursuance of a common plan or design to commit a tortious act, actively take part in it, or further it by cooperation or request, or who lend aid or encouragement to the wrongdoer, or ratify and adopt his acts done for their benefit, are equally liable with him”<sup>21</sup>

If the Federal Circuit decided to adopt a similar approach for joint liability in patent infringement, this would close the hole for multiple entities working in concert to escape liability, making those parties liable who acted in concert to infringe just as concerted action in tort law makes multiple parties liable where multiple tortfeasors act in concert to commit tort. In order to adopt such an approach, the Court would have to remove the single entity requirement.

Concerted action liability also carries some of the same rightful caution from the courts applying it as a means for recovery. Very few cases have been successfully argued on the theory

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21 *Bichler v. Eli Lilly & Co.*, 55 N.Y.2d 571, 580, 436 N.E.2d 182, 186 (1982).



of concerted action because the courts are generally reluctant to hold parties liable when there is not a strong causal link between those parties and the wrongdoing. However, some jurisdictions adopted this theory in their fabric of tort liability in a similar attempt to close a hole which then existed in tort law.

### **Collusion or Conspiracy**

Yet another approach the Federal Circuit could take if they decide to discard the single entity requirement is to require collusion or conspiracy by the parties to infringe on a patent. This would help fill the gap of two or more parties conspiring to work in concert to infringe without requiring a particular mastermind. It would also not condemn parties who are unaffiliated or disjointed that each perform some limitations of a claim. Since collusion and conspiracy both require an agreement between the parties, it would help to avoid the court's hesitation to extend joint infringement beyond the single entity restriction for fear of capturing innocent parties, neither of which intended to infringe, being potentially liable under a theory of joint infringement. This is another developed area of law dealing with liability of multiple parties working in concert and would lend itself nicely to application in joint infringement.

### **Conclusion**

While the Federal Circuit has many options, most of the approaches which solve all aspects of the problem by closing holes and preventing collateral damage to innocent parties have something in common -- each approach demands that the Court to drop the single entity requirement. Again, the more likely outcome is that the Court will hold to the single entity

requirement and instead just refine and clarify their current construction. However, in the long run they will have to confront the issues with the single entity requirement which leave major holes for potential infringers.

## Strategies For Patent Practitioners

### Claim Drafting

In *BMC v. Paymentech*, the court noted that a patentee could help to avoid the problem of arms-length cooperation by proper claim drafting. The court further states that a patentee can usually structure a claim to capture infringement by a single party instead of requiring multiple parties which necessarily voids that claim.<sup>22</sup> The claims in that case were worded such that they required multiple entities working together to perform all limitations of the claim. Since direct and indirect infringement both require that a single actor perform all limitations of the claim, there is a fundamental problem here.

The Federal Circuit suggests that through proper drafting, BMC could have written the claim such that it required only a single entity. By drafting a claim in this manner and not having the claim dependent on multiple actors, it is easier to show that one entity performed all limitations of the claim, with some of those limitations performed by a third party under their direction and control. Therefore, every patent attorney working in patent prosecution ought to take notice here and take steps to draft every claim such that it requires a single entity to perform all limitations of the claim. This could change if the Federal Circuit decides to do away with the single entity requirement, but as things stand this is the optimal way for claims to be drafted. And

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<sup>22</sup> *BMC. v. Paymentech*, 498 F.3d at 1381.

even if the Court does away with the single entity requirement, it still makes more sense to draft claims in this manner because the Court is unlikely to do away with the single entity requirement for the each species of indirect infringement.

As an example, if an entity were drafting a claim for making a widget that included two steps, the claim ought to avoid language that would explicitly require one entity to perform the first step and another to perform the second. By requiring two distinct entities instead of a single one, they have drafted a claim that would not be protectable. On the other hand, if the wording of the claim could be interpreted as having a single entity perform each part, then even if a competitor is made up of multiple entities, the patentee could at least make the argument that one is acting as a subordinate of the other and therefore the principal is infringing. Without being able to point to any one entity as having performed all limitations of the claim, it would be ineffective from the start.

## **Discovery**

When doing interrogatories, document requests, and depositions during discovery, it is vital for a plaintiff to request anything that may suggest a link between the defendant against whom the infringement action is brought and the third party the defendant is alleged to have used to carry out the other limitations of the infringement not undertaken by the defendant themselves. After *Akamai*, the plaintiff will have to show that either an agency relationship exists between the defendant and the third party wherein the third party is an agent acting on behalf of the defendant and subject to defendant's control or that there is some contractual obligation on the part of the third party to perform limitations of the claim. Note, after *Akamai*, this must rise to

the level of obligation, if there is simply an election by the third party to perform the limitations or not then such action will not suffice.

These items are crucial to ferret out during discovery because they will make or break the case and, regardless of whether the plaintiff or defendant is being advised, the knowledge of whether these relationships exist will guide any discussion of settlement, going to trial, or appeal.

## **Pleading**

### *Plaintiff*

Following Akamai, the optimal strategy when pleading is to include and allege either an agency relationship between the defendant (as the principal) and any third party or a contractual obligation to perform any steps in the claimed method not performed by the defendant themselves. If these relationships or contractual obligations are omitted, the case could risk being discarded on summary judgment as, without such a relationship, there can be no finding of joint infringement as a matter of law. By bringing this to the forefront in the pleadings, it can shift the burden to the defendant to prove that they did not have such a relationship which puts them on the defensive. By having the nature of the relationship between the defendant and the other parties as a question of fact, this further helps to prevent summary judgment.

Further, it is likely a good strategy to plead that the defendant performed all steps of the claimed method with the third party acting either as its agent or under a contractual obligation to the defendant. Again, this strongly mirrors the Akamai decision and puts the onus on the opposing party to show that they did not have such a relationship while simultaneously protecting against a determination for summary judgment. If this were omitted from the

pleading, the opponent would likely attempt to frame their response in such a way as to imply that the defendant did not perform all steps of the claimed method or that there was no agency relationship and that therefore, as a matter of law, there ought to be no finding of joint infringement. By framing it in this manner, the defendants have the upper hand by then provoking a weaker counter-response from the plaintiff alleging a question of fact surrounding the nature of their relationship with the third party.

Unfortunately, with the current single entity requirement, this also implies that if a patent holder discovers that multiple entities are infringing and the patent holder is unable to determine if any of those entities is masterminding the infringement, they are essentially left without a means for recovery and ought to save themselves the legal fees.

### *Defendant*

On the other side of the line, the strategy post-Akamai is very much a mirror image. In their response, the defendant should plead that there is an insufficient element of control to establish an agency relationship between the alleged infringer and the third party. They should respond by pleading that multiple entities each performed different steps of the claimed method as case law requires that a single entity perform all steps in order for there to be a finding of joint infringement.

The defendant could make a motion for summary judgment if the plaintiff fails to allege any kind of agency or contractual relationship between the defendant and any third parties which have performed steps of the claimed method. If the plaintiff did not suggest any such relationship in their original pleading and in their response the defendant makes clear that there is no such

relationship and therefore as a matter of law there ought to be no finding of joint liability, the defendant may succeed on a summary judgment motion. Likewise, if the case makes it to trial and the plaintiff fails to bring sufficient evidence to support their claim of such a relationship or contractual obligation, the defendant would be well advised to make a motion for judgment as a matter of law.

If applicable, the defendant should also assert that the claim(s) in the plaintiff's patent are worded such that they require multiple entities to carry out each step. If a single entity cannot be found to have carried out each element of the claimed method, then the defendant cannot be found to jointly infringe.

## **Conclusion**

This is an area of patent law that is new and developing. Related to indirect infringement, joint infringement seeks to close some holes which have been exploited by some infringers. It is to be hoped that the Federal Circuit's en banc hearing for *Akamai* will clarify the doctrine and establish more clear guidelines for its application. In an ideal world, it would also help to close some of the holes it established with institution of the single entity requirement in joint infringement, but that may take further developments or some intervention at some point by the Supreme Court. There are many strategies the Federal Circuit may choose to adopt from other areas of the law, but if their past decisions are any indicator, it is more likely to simply refine its current methodology. For patent practitioners there are a series of guidelines and best practices to deal with the Federal Circuit's current stance.

If there are to be a few key points they are that the current conception of joint infringement is extremely difficult to litigate and that, if the single entity requirement stands, there will still be substantial holes in the framework which any suitably savvy business will be able to exploit to avoid liability under joint infringement. Ideally the Federal Circuit will come up with a solution that can make recovery possible for patent holders whose patents are infringed, regardless of the number of entities or the relationships of those entities while preventing companies without the intent to infringe from getting pinned with liability for innocent actions.

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