United States Court of Appeals for the Federal Circuit

AKAMAI TECHNOLOGIES, INC.,

Plaintiff-Appellant,

AND

THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY,

Plaintiff-Appellant,

 $\mathbf{v}.$

LIMELIGHT NETWORKS, INC.,

Defendant-Cross Appellant.

2009-1372, -1380, -1416, -1417

003-1372, -1300, -1410, -1417

Appeal from the United States District Court for the District of Massachusetts in Nos. 06-CV-11109 and 06-CV-11585, Judge Rya W. Zobel.

AND

MCKESSON TECHNOLOGIES, INC. (formerly McKesson Information Solutions, LLC), Plaintiff-Appellant,

v.

EPIC SYSTEMS CORPORATION.

Defendant-Appellee.

2010-1291

Appeal from the United States District Court for the Northern District of Georgia in No. 06-CV-2965, Judge Jack T. Camp.

Decided: August 31, 2012

Donald R. Dunner, Finnegan, Henderson, Farabow, Garrett & Dunner, LLP, of Washington, DC, argued for plaintiffs-appellants on rehearing en banc in appeal nos. 2009-1372, -1380, -1416, and -1417 ("the Akamai appeals"). With him on the brief for Akamai Technologies, Inc. were Kara F. Stoll and Elizabeth D. Ferrill. Of counsel on the brief was Jennifer S. Swan, of Palo Alto, California. On the brief for The Massachusetts Institute of Technology was Robert S. Frank, Jr., Choate, Hall & Stewart, LLP, of Boston, Massachusetts. Of counsel were G. Mark Edgarton and Carlos Perez-Albuerne.

AARON M. PANNER, Kellogg, Huber, Hansen, Todd, Evans & Figel, P.L.L.C. of Washington, DC, argued for defendant-cross appellant on rehearing en banc in the Akamai appeals. With him on the brief was MICHAEL E. JOFFRE. Of counsel on the brief were DION MESSER, Limelight Networks, Inc., of Tempe, Arizona. Also on the brief were ALEXANDER F. MACKINNON, Kirkland & Ellis, LLP, of Los Angeles, California and YOUNG J. PARK, of New York, New York. On counsel was JOHN C.

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RAYMOND P. NIRO, Niro, Haller & Niro, of Chicago, Illinois, for amici curiae Cascades Ventures, Inc. and VNS Corporation on rehearing en banc in the Akamai appeals. With him on the brief was JOHN C. JANKA.

MEREDITH MARTIN ADDY, Brinks Hofer Gilson & Lione, of Chicago, Illinois, for amici curiae Aristocrat Technologies Australia Pty Limited, et al. on rehearing en banc in the Akamai appeals. Of counsel on the brief was Anthony De Alcuaz, McDermott Will & Emery, LLP, of Menlo Park, California.

ERIC L. ABBOTT, Shuffle Master, Inc., of Las Vegas, Nevada, for amicus curiae Shuffle Master, Inc. on rehearing en banc in the Akamai appeals.

JEFFREY W. FRANCIS, Pierce Atwood LLP, of Boston, Massachusetts, for amicus curiae Boston Patent Law Association on rehearing en banc in the Akamai appeals.

BENJAMIN G. JACKSON, Myriad Genetics, Inc., of Salt Lake City, Utah, for amicus curiae Myriad Genetics, Inc. on rehearing en banc in the Akamai appeals. With him on the brief was JAY M. ZHANG.

WILLIAM G. BARBER, Pirkey Barber, LLP, of Austin, Texas, for amicus curiae American Intellectual Property Law Association on rehearing en banc in the Akamai appeals.

JOHN W. RYAN, Sullivan & Worcester, of Washington, DC, for amicus curiae Biotechnology Industry Organization on rehearing en banc in the Akamai appeals. With

him on the brief was THOMAS M. HAAS. Of counsel on the brief was HANS SAUER, Ph.D., Biotechnology Industry Organization, of Washington, DC.

ROBERT P. TAYLOR, Arnold & Porter, LLP, of San Francisco, California, for amicus curiae Pharmaceutical Research and Manufacturers of America on rehearing en banc in the Akamai appeals. With him on the brief was Monty M. Agarwal. Of counsel on the brief were David R. Marsh and Lisa A. Adelson, of Washington, DC and David E. Korn, Senior Assistant General Counsel, Pharmaceutical Research and Manufacturers of America, of Washington, DC.

STEVEN C. SEREBOFF, SoCal IP Law Group, LLP, of Westlake, Village, California, for amicus curiae Conejo Valley Bar Association on rehearing en banc in the Akamai appeals. With him on the brief were MARK A. GOLDSTEIN and M. KARLA SARVAIYA.

JULIE P. SAMUELS, Electronic Frontier Foundation, of San Francisco, California, for amicus curiae Electronic Frontier Foundation on rehearing en banc in the Akamai appeals. Of counsel on the brief was MICHAEL BARCLAY.

MICHAEL K. KIRSCHNER, Hillis Clark Martin & Peterson, P.S., of Seattle, Washington, for amicus curiae Washington State Patent Law Association on rehearing en banc in the Akamai appeals. With him on the brief was ALEXANDER M. WU.

JERRY R. SELINGER, Patterson & Sheridan, LLP, of Houston, Texas, for amicus curiae Altera Corporation, et al. on rehearing en banc in the Akamai appeals. With him on the brief were B. TODD PATTERSON; and GERO G. MCCLELLAN, of Greensboro, North Carolina.

CHARLES A. WEISS, New York Intellectual Property Law Association, of New York, New York, for amicus curiae New York Intellectual Property Law Association on rehearing en banc in the Akamai appeals. With him on the brief was THERESA M. GILLIS.

CALVIN L. LITSEY, Faegre & Benson, LLP, of Minneapolis, Minnesota, for amicus curiae Thomson Reuters Corporation on rehearing en banc in the Akamai appeals. With him on the brief were AARON D. VAN OORT, CHRISTOPHER J. BURRELL, and TIMOTHY M. SULLIVAN.

PETER J. BRANN, Brann & Isaacson, of Lewiston, Maine, for amici curiae Internet Retailers on rehearing en banc in the Akamai appeals. With him on the brief were DAVID SWETNAM-BURLAND and STACY O. STITHAM.

GARRETH A. SAROSI, MetroPSC Wireless, Inc. of Richardson, Texas, for amicus curiae MetroPCS Wireless, Inc. on rehearing en banc in the Akamai appeals. With him on the brief was MARK A. STACHIW. On the brief for CTIA-The Wireless Association were GREGORY P. STONE, ANDREW W. SONG and HEATHER E. TAKAHASHI, Munger, Tolles & Olson, LLP, of Los Angeles, California.

TIMOTHY S. TETER, Cooley, LLP, of Palo Alto, California, for amicus curiae Apple Inc. on rehearing en banc in the Akamai appeals. With him on the brief were LORI R. MASON and BENJAMIN G. DAMSTEDT. Of counsel on the brief were IAIN R. CUNNINGHAM and PATRICK J. MURPHY, Apple, Inc., of Cupertino, California.

VICKI G. NORTON, Duane Morris LLP, of San Diego, California, for amici curiae San Diego Intellectual Property Law Association, et al. on rehearing en banc in the Akamai appeals.

EDWARD R. REINES, Weil, Gotshal & Manges, LLP, of Redwood Shores, California, for amici curiae Cisco Systems, Inc., et al. on rehearing en banc in the Akamai appeals. With him on the brief was NATHAN GREENBLATT.

MATTHEW D. MCGILL, Gibson, Dunn & Crutcher LLP, of Washington, DC, for amici curiae for Facebook, Inc., et al. on rehearing en banc in the Akamai appeals. With him on the brief was WILLIAM G. JENKS.

STEVEN GARDNER, Kilpatrick Townsend & Stockton LLP, of Winston-Salem, North Carolina, for amicus curiae The Financial Services Roundtable on rehearing en banc in the Akamai appeals. With him on the brief was ALTON L. ABSHER III. Of counsel on the brief was GIA L. CINCONE, of San Francisco, California.

DARYL L. JOSEFFER, King & Spalding, LLP, of Washington, DC, argued for plaintiff-appellant on rehearing en banc in appeal no. 2010-1291 ("the McKesson appeal"). With him on the brief were TIMOTHY G. BARBER and ADAM M. CONRAD, of Charlotte, North Carolina. Of counsel was PAUL D. CLEMENT, King & Spalding, of Washington, DC.

STEVEN D. MOORE, of Kilpatrick Stockton LLP, of Atlanta, Georgia, argued for defendant-appellee on rehearing en banc in the McKesson appeal. With him on the brief were WILLIAM H. BOICE, RUSSELL A. KORN, D. CLAY HOLLOWAY and JASON D. GARDNER. Of counsel on the brief was ADAM H. CHARNES, of Winston-Salem, North Carolina.

MEREDITH MARTIN ADDY, Brinks Hofer Gilson & Lione, of Chicago, Illinois, for amici curiae Aristocrat Technologies Austrialia Pty Limited, et al. on rehearing en banc in the McKesson appeal. With her on the brief was Anthony De Alcuaz, McDermott Will & Emery LLP, of Menlo Park, California.

JAY Z. ZHANG, Myriad Genetics, Inc., of Salt Lake City, Utah, for amicus curiae Myriad Genetics, Inc. on rehearing en banc in the McKesson appeal. With him on the brief was BENJAMIN G. JACKSON.

HANS SAUER, PH.D., Biotechnology Industry Organization, of Washington, DC, for amicus curiae Biotechnology Industry Organization on rehearing en banc in the McKesson appeal. Of counsel on the brief were JOHN W. RYAN and THOMAS M. HAAS, Sullivan & Worcester, of Washington, DC.

ROBERT P. TAYLOR, Arnold & Porter LLP, of San Francisco, California, for amicus curiae Pharmaceutical Research and Manufacturers of America on rehearing en banc in the McKesson appeal. With him on the brief was Monty M. Agarwal. Of counsel on the brief were David R. Marsh and Lisa A. Adelson, of Washington, DC; and David E. Korn, Senior Assistant General Counsel, Pharmaceutical Research and Manufacturers of America, of Washington, DC.

WILLIAM G. BARBER, Pirkey Barber LLP, of Austin, Texas, for amicus curiae American Intellectual Property Law Association on rehearing en banc in the McKesson appeal.

JULIE SAMUELS, Electronic Frontier Foundation, of San Francisco, California, for amicus curiae Electronic Frontier Foundation on rehearing en banc in the McKesson appeal. With her on the brief was MICHAEL BARCLAY.

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JERRY R. SELINGER, Patterson & Sheridan LLP, of Houston, Texas, for amicus curiae Altera Corporation, et al. on rehearing en banc in the McKesson appeal. With him on the brief were B. TODD PATTERSON; and GERO G. MCCLELLAN, of Greensboro, North Carolina.

GARRETH A. SAROSI, of MetroPCS Wireless, Inc. of Richardson, Texas, for amicus curiae MetroPCS Wireless, Inc. on rehearing en banc in the McKesson appeal. With him on the brief was MARK A. STACHIW. On the brief for CTIA-The Wireless Association were GREGORY P. STONE, ANDREW W. SONG and HEATHER E. TAKAHASHI, Munger, Tolles & Olson, LLP, of Los Angeles, California.

EDWARD R. REINES, Weil, Gotshal & Manges, LLP, of Redwood Shores, California, for amici curiae Cisco Systems, Inc., et al. on rehearing en banc in the McKesson appeal. With him on the brief was NATHAN GREENBLATT.

CHARLES A. WEISS, New York Intellectual Property Law Association, of New York, New York, for amicus curiae New York Intellectual Property Law Association, on rehearing en banc in the McKesson appeal. With him on the brief were JOHN M. HINTZ and THERESA M. GILLIS.

ERIC L. ABBOTT, Shuffle Master, Inc. of Las Vegas, Nevada, for amicus curiae Shuffle Master, Inc. on rehearing en banc in the McKesson appeal.

Before Rader, *Chief Judge*, Newman, Lourie, Bryson, Linn, Dyk, Prost, Moore, O'Malley, Reyna, and Wallach, *Circuit Judges*.

Opinion of the court filed PER CURIAM.

Dissenting opinion filed by Circuit Judge NEWMAN.

Dissenting opinion filed by *Circuit Judge* LINN, in which *Circuit Judges* DYK, PROST, and O'MALLEY join.

PER CURIAM.

When a single actor commits all the elements of infringement, that actor is liable for direct infringement under 35 U.S.C. § 271(a). When a single actor induces another actor to commit all the elements of infringement, the first actor is liable for induced infringement under 35 U.S.C. § 271(b). But when the acts necessary to give rise to liability for direct infringement are shared between two or more actors, doctrinal problems arise. In the two cases before us, we address the question whether a defendant may be held liable for induced infringement if the defendant has performed some of the steps of a claimed method and has induced other parties to commit the remaining steps (as in the Akamai case), or if the defendant has induced other parties to collectively perform all the steps of the claimed method, but no single party has performed all of the steps itself (as in the *McKesson* case).

The problem of divided infringement in induced infringement cases typically arises only with respect to

method patents. When claims are directed to a product or apparatus, direct infringement is always present, because the entity that installs the final part and thereby completes the claimed invention is a direct infringer. But in the case of method patents, parties that jointly practice a patented invention can often arrange to share performance of the claimed steps between them. In fact, sometimes that is the natural way that a particular method will be practiced, as the cases before us today illustrate. Recent precedents of this court have interpreted section 271(b) to mean that unless the accused infringer directs or controls the actions of the party or parties that are performing the claimed steps, the patentee has no remedy, even though the patentee's rights are plainly being violated by the actors' joint conduct. We now conclude that this interpretation of section 271(b) is wrong as a matter of statutory construction, precedent, and sound patent policy.

Much of the briefing in these cases has been directed to the question whether direct infringement can be found when no single entity performs all of the claimed steps of the patent. It is not necessary for us to resolve that issue today because we find that these cases and cases like them can be resolved through an application of the doctrine of induced infringement. In doing so, we reconsider and overrule the 2007 decision of this court in which we held that in order for a party to be liable for induced infringement, some other single entity must be liable for direct infringement. BMC Resources, Inc. v. Paymentech, L.P., 498 F.3d 1373 (Fed. Cir. 2007). To be clear, we hold that all the steps of a claimed method must be performed in order to find induced infringement, but that it is not necessary to prove that all the steps were committed by a single entity.

Ι

The essential facts of the cases before us are as follows:

Akamai Technologies, Inc., owns a patent that covers a method for efficient delivery of web content. The claimed method consists of placing some of a content provider's content elements on a set of replicated servers and modifying the content provider's web page to instruct web browsers to retrieve that content from those servers. Akamai filed a complaint against Limelight Networks, Inc., alleging infringement of the patent. In its complaint, Akamai alleged both direct and induced infringement. Limelight maintains a network of servers and, as in the patented method, it allows for efficient content delivery by placing some content elements on its servers. Limelight, however, does not modify the content providers' web pages itself. Instead, Limelight instructs its customers on the steps needed to do that modification.

McKesson Information Solutions LLC owns a patent covering a method of electronic communication between healthcare providers and their patients. McKesson filed a complaint against Epic Systems Corp. alleging that Epic induced infringement of the patent. Epic is a software company that licenses its software to healthcare organizations. The licensed software includes an application called "MyChart," which permits healthcare providers to communicate electronically with patients. McKesson alleged that Epic induced Epic's customers to infringe McKesson's patent. Epic does not perform any steps of the patent. Instead, those steps are divided between patients, who initiate communications, and healthcare providers, who perform the remainder of the steps.

In the respective district court cases, Limelight and Epic were held not to infringe the patents asserted against them. In *Akamai*, because Limelight's customers (and not Limelight itself) performed one of the steps of the claimed method, the district court granted Limelight's motion for judgment as a matter of law based on this court's opinions in *BMC* and *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318 (Fed. Cir. 2008). In *McKesson*, the district court relied on the same cases to grant summary judgment of noninfringement on the ground that the patients (and not Epic's direct customers) performed the step of initiating the communication.

II

A

This court has held that for a party to be liable for direct patent infringement under 35 U.S.C. § 271(a), that party must commit all the acts necessary to infringe the patent, either personally or vicariously. See Cross Med. Prods., Inc. v. Medtronic Sofamor Danek, Inc., 424 F.3d 1293, 1311 (Fed. Cir. 2005); Fromson v. Advance Offset Plate, Inc., 720 F.2d 1565, 1568 (Fed. Cir. 1983). In the context of a method claim, that means the accused infringer must perform all the steps of the claimed method. either personally or through another acting under his direction or control. Direct infringement has not been extended to cases in which multiple independent parties perform the steps of the method claim. Because direct infringement is a strict liability tort, it has been thought that extending liability in that manner would ensnare actors who did not themselves commit all the acts necessary to constitute infringement and who had no way of knowing that others were acting in a way that rendered their collective conduct infringing. See In re Seagate

Tech., LLC, 497 F.3d 1360, 1368 (Fed. Cir. 2007) (en banc) ("Because patent infringement is a strict liability offense, the nature of the offense is only relevant in determining whether enhanced damages are warranted."). For that reason, this court has rejected claims of liability for direct infringement of method claims in cases in which several parties have collectively committed the acts necessary to constitute direct infringement, but no single party has committed all of the required acts. See BMC, 498 F.3d at 1381 ("Direct infringement is a strict-liability offense, but it is limited to those who practice each and every element of the claimed invention."); see also Muniauction, 532 F.3d at 1329 (same).

To be sure, the court has recognized that direct infringement applies when the acts of infringement are committed by an agent of the accused infringer or a party acting pursuant to the accused infringer's direction or control. See BMC, 498 F.3d at 1380. Absent an agency relationship between the actors or some equivalent, however, a party that does not commit all the acts necessary to constitute infringement has not been held liable for direct infringement even if the parties have arranged to "divide" their acts of infringing conduct for the specific purpose of avoiding infringement liability. See Cross Med. Prods., 424 F.3d at 1311 (no liability for direct infringement if the party that is directly infringing is not acting as an agent of, or at the direction of, the accused infringer).

Because the reasoning of our decision today is not predicated on the doctrine of direct infringement, we have no occasion at this time to revisit any of those principles regarding the law of divided infringement as it applies to liability for direct infringement under 35 U.S.C. § 271(a).

В

The induced infringement provision of the Patent Act, 35 U.S.C. § 271(b), provides that "[w]hoever actively induces infringement of a patent shall be liable as an infringer." Because section 271(b) extends liability to a party who advises, encourages, or otherwise induces others to engage in infringing conduct, it is well suited to address the problem presented by the cases before us, i.e., whether liability should extend to a party who induces the commission of infringing conduct when no single "induced" entity commits all of the infringing acts or steps but where the infringing conduct is split among more than one other entity.

Induced infringement is in some ways narrower than direct infringement and in some ways broader. Unlike direct infringement, induced infringement is not a strict liability tort; it requires that the accused inducer act with knowledge that the induced acts constitute patent infringement. See Global-Tech Appliances, Inc. v. SEB S.A., 131 S. Ct. 2060, 2068 (2011). In fact, this court has described the required intent as follows: "[I]nducement requires that the alleged infringer knowingly induced infringement and possessed specific intent to encourage another's infringement." DSU Med. Corp. v. JMS Co., 471 F.3d 1293, 1306 (Fed. Cir. 2006) (en banc) (internal quotation marks omitted). On the other hand, induce-

Because liability for inducement, unlike liability for direct infringement, requires specific intent to cause infringement, using inducement to reach joint infringement does not present the risk of extending liability to persons who may be unaware of the existence of a patent or even unaware that others are practicing some of the steps claimed in the patent.

ment does not require that the induced party be an agent of the inducer or be acting under the inducer's direction or control to such an extent that the act of the induced party can be attributed to the inducer as a direct infringer. It is enough that the inducer "cause[s], urge[s], encourage[s], or aid[s]" the infringing conduct and that the induced conduct is carried out. *Arris Grp.*, *Inc. v. British Telecomms. PLC*, 639 F.3d 1368, 1379 n.13 (Fed. Cir. 2011); see also Tegal Corp. v. Tokyo Electron Co., 248 F.3d 1376, 1379 (Fed. Cir. 2001); Nat'l Presto Indus., Inc. v. West Bend Co., 76 F.3d 1185, 1196 (Fed. Cir. 1996) (analogizing inducement to aiding and abetting violations of criminal laws).

An important limitation on the scope of induced infringement is that inducement gives rise to liability only if the inducement leads to actual infringement. That principle, that there can be no indirect infringement without direct infringement, is well settled. *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 526 (1972); *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 365 U.S. 336, 341 (1961); *Henry v. A.B. Dick Co.*, 224 U.S. 1, 12 (1912). The reason for that rule is simple: There is no such thing as attempted patent infringement, so if there is no infringement, there can be no indirect liability for infringement.

That much is uncontroversial. In *BMC*, however, this court extended that principle in an important respect that warrants reconsideration. In that case, the court ruled that in order to support a finding of induced infringement, not only must the inducement give rise to direct infringement, but in addition the direct infringement must be committed by a single actor. The court reached that conclusion based on the propositions that (1) liability for induced infringement requires proof of direct infringe-

ment and (2) liability for direct infringement requires that a single party commit all the acts necessary to constitute infringement. While those two propositions were well supported in this court's law, the conclusion that the court drew from them was not.

Requiring proof that there has been direct infringement as a predicate for induced infringement is not the same as requiring proof that a single party would be liable as a direct infringer. If a party has knowingly induced others to commit the acts necessary to infringe the plaintiff's patent and those others commit those acts, there is no reason to immunize the inducer from liability for indirect infringement simply because the parties have structured their conduct so that no single defendant has committed all the acts necessary to give rise to liability for direct infringement.

A party who knowingly induces others to engage in acts that collectively practice the steps of the patented method—and those others perform those acts—has had precisely the same impact on the patentee as a party who induces the same infringement by a single direct infringer; there is no reason, either in the text of the statute or in the policy underlying it, to treat the two inducers differently. In particular, there is no reason to hold that the second inducer is liable for infringement but the first is not.

Likewise, a party who performs some of the steps itself and induces another to perform the remaining steps that constitute infringement has precisely the same impact on the patentee as a party who induces a single person to carry out all of the steps. It would be a bizarre result to hold someone liable for inducing another to perform all of the steps of a method claim but to hold harmless one who goes further by actually performing some of the steps himself. The party who actually participates in performing the infringing method is, if anything, more culpable than one who does not perform any steps.

The text of the induced infringement statute is entirely consistent with this analysis. While the direct infringement statute, section 271(a), states that a person who performs the acts specified in the statute "infringes the patent," section 271(b) is structured differently. It provides that whoever "actively induces infringement of a patent shall be liable as an infringer." Nothing in the text indicates that the term "infringement" in section 271(b) is limited to "infringement" by a single entity. Rather, "infringement" in this context appears to refer most naturally to the acts necessary to infringe a patent, not to whether those acts are performed by one entity or several.

C

The legislative history of the 1952 Patent Act provides strong support for interpreting induced infringement not to require that a single entity—as opposed to multiple entities—commit all the acts necessary to constitute infringement. Prior to the 1952 Act, inducement and contributory infringement were both referred to under the rubric of contributory infringement. Giles S. Rich, *Infringement Under Section 271*, 21 Geo. Wash. L. Rev. 521, 537 (1953). The 1952 Act broke the two concepts out into separate subsections of section 271, covering induced infringement (in subsection (b)) and contributory infringement (in subsection (c)). Subsection (b), the new inducement provision, was broad in scope. The House Report on the 1952 Act explained that the new subsection (b) "recites in broad terms that one who aids and abets an

infringement is likewise an infringer." H.R. Rep. No. 82-1923, at 9. See also P.J. Federico, Commentary on the New Patent Act reprinted in 75 J. Pat. & Trademark Off. Soc'y 161, 214 (1993) (section 271(b) "is a broad statement and enactment of the principle that one who actively induces infringement of a patent is likewise liable for infringement").² On the other hand, subsection (c) represented a compromise between differing views as to the proper scope of the doctrine of contributory infringement. The portions of the legislative history addressing subsection (c) show that it was responding to the Supreme Court's decisions in several then-recent cases that had applied the doctrine of patent misuse in a way that substantially restricted the scope of contributory infringe-The compromise that Congress adopted with respect to subsection (c) restored the doctrine of contributory infringement and confined the scope of the Supreme Court's patent misuse cases, but it did not go as far as some in the patent bar would have liked. See Hearing on H.R. 3866 Before Subcomm. No. 4 of the H. Comm. on the

² Federico's commentary, first published in 1954, has been cited by this court as constituting "an invaluable insight into the intentions of the drafters of the Act." *Symbol Techs., Inc. v. Lemelson Med.*, 277 F.3d 1361, 1366 (Fed. Cir. 2002).

The cases to which the legislation was principally directed were Mercoid Corp. v. Mid-Continent Investment Co., 320 U.S. 661 (1944), and Mercoid Corp. v. Minneapolis-Honeywell Regulator Co., 320 U.S. 680 (1944), which extended the patent misuse doctrine of Carbice Corp. of America v. American Patents Development Corp., 283 U.S. 27 (1931), and Leitch Manufacturing Co. v. Barber Co., 302 U.S. 458 (1938). See Contributory Infringement of Patents: Hearings Before the Subcomm. on Patents, Trademarks, and Copyrights of the H. Comm. on the Judiciary, 80th Cong. 4 (1948) (statement of G. Rich on behalf of the New York Patent Law Association).

Judiciary, 81st Cong. 20 (1949) ("1949 Hearing") (statement of G. Rich) ("So we have made what we consider to be a fair compromise, and we have pushed back these misuse situations to cover only those cases where we think the patentee is entitled to honest protection and justice.").

Although less was said about induced infringement than about contributory infringement in the legislative history, what was said was significant. Giles Rich, one of the principal drafters of the statute, and a frequent witness at hearings on the legislation, made clear in the course of his statement during an early House hearing on contributory infringement that the revised provisions on infringement were intended to reach cases of divided infringement, even when no single entity would be liable for direct infringement. In the course of his statement commenting on the proposed version of what was to become section 271(b) of the 1952 Act, Judge (then Mr.) Rich addressed the problem of "combination patents" and stated the following:

Improvements in such arts as radio communication, television, etc., sometimes involve the new combinations of elements which in use are normally owned by different persons. Thus, a new method of radio communication may involve a change in the transmitter and a corresponding change in the receiver. To describe such an invention in patent claims, it is necessary either to specify a new method which involves both transmitting and receiving, or a new combination of an element in the receiver and an element in the transmitter. There are patents with such claims covering television inventions of importance.

The recent decisions of the Supreme Court [the cases targeted by the statutory changes] appear to make it impossible to enforce such patents in the usual case where a radio transmitter and a radio receiver are owned and operated by different persons, for, while there is obvious infringement of the patent, there is no direct infringer of the patent but only two contributory infringers.

Contributory Infringement of Patents: Hearings Before the Subcomm. on Patents, Trade-marks, and Copyrights of the H. Comm. on the Judiciary, 80th Cong. 5 (1948) ("1948 Hearing") (statement of G. Rich on behalf of the New York Patent Law Association) (emphasis added).

Judge Rich's statement makes clear that he saw no anomaly in finding liability for indirect infringement when there was "obvious infringement of the patent" even though there was "no direct infringer of the patent." In the hypothetical case that he described, involving a claim to a method in which changes would be made in both a transmitter and a receiver, he expressly stated that the "obvious infringement" should be remediable, even though "there is no direct infringer" of the patent, a description that perfectly fits the two cases before us.

As if to lay to rest any doubts as to his views of the proper scope of indirect infringement under the new statute, Judge Rich added, in response to questioning, that "contributory infringement [apparently referring to both contributory infringement and induced infringement] is a specific application to patent law of the law of joint tort feasor where two people somehow together create an infringement which neither one of them individually or independently commits." *Id.* at 12; *see also* 1949 Hearing 3 (remarks of G. Rich) ("When two people

combine and infringe a patent in some way or other, they are joint tort feasors, and it so happens that patents are often infringed by people acting in concert, either specifically or by implication, where neither one of them is a direct infringer."). Again, Judge Rich's comments clearly indicate that he viewed indirect infringement as an available remedy even in the absence of any single direct infringer.

The principles of contributory and induced infringement set forth in the earlier bills were carried forward into the 1952 Act and continued to serve the purpose of restoring the principles of contributory infringement that had been cast into doubt by the then-recent patent misuse decisions. See H.R. Rep. No. 82-1923, at 9 (1952); Patent Law Codification and Revision, Hearings Before Subcomm. No. 3 of the H. Comm. on the Judiciary, 82d Cong. 151-52 (1951); Rich, Infringement Under Section 271, supra, at 535-36, 541 (substance of 271 was carried forward from previous bills).

D

A principal's liability for acts committed not only through an agent but also by an innocent intermediary who was induced by the principal is not an idiosyncrasy of patent law, but is found in other areas of the law as well. For example, the aiding and abetting provision in the Federal Criminal Code states, in language similar to the language of section 271(b) of the Patent Act, that "[w]hoever commits an offense against the United States or aids, abets, counsels, commands, induces or procures its commission is punishable as a principal," 18 U.S.C. § 2(a), and "[w]hoever willfully causes an act to be done which if directly performed by him or another would be an offense against the United States, is punishable as a

principal," id. § 2(b). That statute has been construed to permit the conviction of an accessory who induces or causes a criminal offense even when the principal is found not liable for the unlawful conduct. Standefer v. United States, 447 U.S. 10, 19 (1980). As long as the induced criminal conduct has occurred, the inducer's liability does not turn on whether the intermediary is factually guilty or even capable of committing the charged offense. See United States v. Tobon-Builes, 706 F.2d 1092, 1099 (11th Cir. 1983) (defendant is liable if he causes an intermediary to commit a criminal act, even though the intermediary who performed the act has no criminal intent and hence is innocent of the substantive crime charged); United States v. Gleason, 616 F.2d 2, 20 (2d Cir. 1979) ("[A] person who causes an innocent party to commit an act which, if done with the requisite intent, would constitute an offense may be found guilty as a principal even though he personally did not commit the criminal act.); United States v. Rapoport, 545 F.2d 802, 806 (2d Cir. 1976) ("Section 2(b) . . . 'removes all doubt that one who puts in motion or assists in the illegal enterprise or causes the commission of an indispensable element of the offense by an innocent agent or instrumentality, is guilty. ...") (quoting Reviser's Note to section 2(b)).4 Under that provision, a defendant cannot avoid criminal liability by

⁴ Shuttlesworth v. City of Birmingham, 373 U.S. 262 (1963), cited in Judge Linn's dissent, is inapposite. In that case, the underlying act was innocent, not because of any lack of scienter or immunity on behalf of the principals, but because the act the petitioners were charged with aiding and abetting did not constitute a crime. Id. at 265 ("There was no evidence that any of the demonstrations which resulted from the meeting were disorderly or otherwise in violation of law.") By analogy, in patent law a party would not be liable for inducing infringement by encouraging others to engage in conduct that is not within the claims of the patent in suit.

arranging for another to perform some part of the proscribed conduct. See United States v. Hornaday, 392 F.3d 1306, 1313 (11th Cir. 2004) ("Section 2(b) . . . is obviously designed for the situation in which . . . the defendant supplies the intent and maybe another element or two while getting someone else to supply at least one additional element that is necessary to the commission of the crime."); United States v. Pearson, 667 F.2d 12, 13 (5th Cir. 1982) (Section 2 "allows a jury to find a person guilty of a substantive crime even though that person did not commit all acts constituting the elements of the crime.").

Tort law also recognizes the doctrine of liability for inducing innocent actors to commit tortious acts. The Second Restatement of Torts provides that a person is liable for tortious conduct if he "orders or induces the conduct, if he knows or should know of circumstances that would make the conduct tortious if it were his own." Restatement (Second) of Torts § 877(a) (1979). That basis for liability is "independent of the existence of liability" based "on the ground that [the defendant] was principal or master." Id. § 877 cmt. a.

The analogy to tort law is particularly telling because for induced infringement under section 271(b) the courts look to the common law principles of joint tortfeasance. Hewlett-Packard Co. v. Bausch & Lomb, Inc., 909 F.2d 1464, 1469 (Fed. Cir. 1990); see also Aro Mfg. Co. v. Convertible Top Replacement Co., 377 U.S. 476, 500 (1964). Prior to the enactment of the Patent Act in 1952, courts applied indirect infringement to anyone who "commands, directs, advises, encourages, procures, instigates, promotes, controls, aids, or abets" patent infringement. Rich, Infringement Under Section 271, supra, at 525. Section 271(b) was enacted to codify that doctrine, which in turn was based on "the old common law doctrine of joint tort

feasors." *Id.* at 537. In that setting, liability requires proof that the defendant "knowingly induced infringement and possessed specific intent to encourage another's infringement." *DSU Med. Corp.*, 471 F.3d at 1306.

The First Restatement of Torts, which was in effect at the time the 1952 Patent Act was enacted, draws an even sharper line than the Second Restatement between vicarious liability for tortious conduct and liability for inducing tortious conduct by others. Section 877 of the First Restatement sets forth the rules of vicarious liability for "a person directing or permitting conduct of another." Restatement of Torts § 877 (1938). Section 876 sets forth the rules of liability for inducement of tortious conduct, including the requirement of scienter. It states that a person is liable if he "orders or induces [tortious] conduct, knowing of the conditions under which the act is done or intending the consequences which ensue," or if he "knows that the other's conduct constitutes a breach of duty and gives substantial assistance or encouragement to the other so to conduct himself." Id. § 876.

Moreover, the First Restatement makes clear that the rule imposing liability for inducement of a tort applies even if the person being induced is unaware that his act is injurious and is not liable for that reason. *Id.* § 876 cmt. b; see Hoyt v. Clancey, 180 F.2d 152, 158 (8th Cir. 1950) (defendant liable for false representations passed through an innocent intermediary; intermediary not liable); Davis v. Louisville Trust Co., 181 F. 10, 15 (6th Cir. 1910) (same); Graham v. Ellmore, 26 P.2d 696 (Cal. 1933) (same); Moyer v. Lederer, 50 Ill. App. 94 (Ill. App. Ct. 1893) (same); Kuehl v. Parmenter, 192 N.W. 429 (Iowa 1923) (same); see also Restatement of Torts § 880 cmt. a (one who induces a witness to make a defamatory remark on the witness stand is liable even though the witness

enjoys immunity from liability); Laun v. Union Elec. Co., 166 S.W.2d 1065, 1071 (Mo. 1943) (same); Midford v. Kann, 32 A.D. 228 (N.Y. App. Div. 1898) (defendant liable for false imprisonment for directing police to arrest former employees as trespassers without regard to whether police were liable). The implication of that principle, as applied in the divided infringement context, is that a party may be liable for inducing infringement even if none of the individuals whose conduct constituted infringement would be liable, as direct infringers, for the act of infringement that was induced.⁵

Judge Linn's dissent argues that the cited cases based liability on "breach of a direct duty" and are therefore "direct liability cases." That misses the point being made. The cited cases all involved intermediate actors who directly caused the injury to the plaintiff, but were not liable for that injury, while the party who induced the action causing the injury was held liable. As in those cases, an inducer of infringement has a duty not to cause the acts that constitute infringement even if the parties who cause the direct injury are not liable. The law frequently imposes a duty (and liability upon breach of the duty) on parties who use innocent third parties to carry out harmful acts. See Pelster v. Ray, 987 F.2d 514, 523-24 (8th Cir. 1993) (civil liability for rolling back odometer attaches to anyone in the chain of ownership who knew of fraudulent reading, but not to innocent intermediaries);

The same rule extending liability for "intentionally inducing or encouraging direct infringement" has been adopted in copyright law, see Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913, 930, 936 (2005), but the issue presented in this case—whether the induced acts of infringement must be performed by a single entity that would be liable for infringement—does not appear to have been addressed in copyright cases.

Learjet Corp. v. Spenlinhauer, 901 F.2d 198, 203 (1st Cir. 1990) (cause of action for fraudulent misrepresentation by aircraft owner against aircraft manufacturer was proper where manufacturer allegedly made false representations to FAA to obtain certification and owner relied on FAA certification when purchasing aircraft); Hawkins v. Upjohn Co., 890 F. Supp. 609, 611-12 (E.D. Tex. 1994) (indirect reliance by plaintiffs on misrepresentations by defendants to FDA in effort to secure approval of drugs was sufficient to state claim of fraud); see also Restatement (Second) of Torts § 533 (one who makes a fraudulent misrepresentation is subject to liability to one who relies on it to his detriment, even though the misrepresentation was not made directly to the injured party).

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Judge Linn's dissent argues that the approach we adopt today has the effect of "defin[ing] direct infringement differently for the purposes of establishing liability under §§ 271(a) and (b)." That is not so, and the structure of section 271 explains why. Section 271(a) does not define the term "infringement." Instead, it simply sets forth a type of conduct that qualifies as infringing, i.e., it provides that anyone who makes, uses, or sells, etc., any patented invention "infringes the patent." Section 271(b) sets forth another type of conduct that qualifies as infringing, i.e., it provides that anyone who induces infringement "shall be liable as an infringer." But nothing in the text of either subsection suggests that the act of "infringement" required for inducement under section 271(b) must qualify as an act that would make a person liable as an infringer under section 271(a).

An examination of other subsections of section 271 confirms that the statute uses the term "infringement" in

a way that is not limited to the circumstances that give rise to liability under section 271(a). For example, section 271(e)(2) makes it an "act of infringement" to submit an application to the FDA for a drug, or the use of a drug, claimed in a patent; that use of the term "infringement" is not in any way tied to the use of the term "infringes" in section 271(a). Similarly, section 271(f) provides that a party shall be "liable as an infringer" if it supplies in the United States a substantial portion of the components of a patented invention in such manner as to induce the combination of those components outside the United States. Again, the statutory term "infringer" does not advert to the requirements of section 271(a); indeed, it is not even necessary that the components are ever actually assembled abroad after export. See Waymark Corp. v. Porta Sys. Corp., 245 F.3d 1364, 1367-68 (Fed. Cir. 2001). Finally, section 271(g) provides that a person who imports into the United States a product made by a process patented in the United States "shall be liable as an infringer." That provision likewise does not require that the process used to make the imported product be "infringing" in a way that would satisfy section 271(a), such as being performed by a single entity.

Judge Linn's dissent also relies on another provision of the Patent Act, 35 U.S.C. § 281, which states, "A patentee shall have remedy by civil action for infringement of his patent." Section 281, however, was designed to serve as a "preamble" for the sections on remedies and to ensure that an action for infringement (a "civil action") would be triable to a jury. See H.R. Rep. No. 82-1923, at 10, 29 (1952). It also serves to ensure that only "[a] patentee" may bring a civil action for infringement. See Mentor H/S, Inc. v. Med. Device Alliance, Inc., 240 F.3d 1016, 1017 (Fed. Cir. 2001). It cannot also be read to mean that any act of infringement will necessarily be

remediable through a civil action; it does not, for example, give a patentee a "remedy by civil action" (i.e., in district court, see Fed. R. Civ. P. 2) against state or federal officers who are protected from suit and liability by sovereign immunity or (in the case of federal officers) who are suable only in a nonjury proceeding in the Court of Federal Claims.

The origin of section 281 is enlightening in this regard. When the bill that ultimately became the 1952 Act was first introduced in 1950 (as H.R. 9133), the subsection that would become section 271 read as follows: "Any person who makes, uses or sells any patented machine, manufacture, composition of matter or improvement, or uses any patented process or improvement, within the territory of the United States and its Territories during the term of the patent therefor without authority, infringes the patent and shall be liable to a civil action for *infringement*, except as otherwise provided in this title." (emphasis added). That version of section 271 stated only that one who directly infringes a patent shall be liable. It did not declare that any practicing of a patented invention necessarily brought with it the right of the patent owner to recover in a civil action for infringement. The emphasized language was later moved and turned into a separate section—section 281—but with no indication that a change in meaning was intended. There is certainly no suggestion in the legislative history (or in subsequent caselaw) that section 281 was meant to restrict the scope of liability for induced infringement under section 271(b) to cases in which a single entity would be liable for direct infringement.

Looking to case law, Judge Linn's dissent relies heavily on prior decisions of this court and on the Supreme Court's decision in *Aro*, contending that those authorities

compel us to hold that liability for induced infringement of a method claim depends on showing that a single induced entity would be liable for direct infringement of the claim. While the *BMC* case stands for that proposition, our earlier precedents, and the Supreme Court's decision in *Aro*, do not so hold.

In reciting the rule that indirect infringement requires a single entity to commit all the acts necessary to constitute direct infringement, the court in BMC cited this court's earlier opinion in Dynacore Holdings Corp. v. U.S. Philips Corp., 363 F.3d 1263, 1272 (Fed. Cir. 2004). The cited portion of the *Dynacore* case stands for the proposition that indirect infringement "can only arise in the presence of direct infringement." 363 F.3d at 1272. That proposition, however, is different in an important respect from the proposition articulated in BMC. Dynacore required that there be infringement in order for there to be inducement of infringement. As noted above, that is a sound and uncontroversial proposition. BMC, however, extended that proposition to require that a single party commit the entire act of direct infringement, an extension that is not supported by the decision in *Dynacore*. That broader proposition invites evasion of the principles of

The *Dynacore* case dealt with a patent on a type of local area network. 363 F.3d at 1266. The issue in the case was whether manufacturers of networking equipment that was capable of being used to form an infringing network were liable for indirect infringement. *Id.* at 1272. Dynacore alleged only a "hypothetical direct infringement" and did not show that any specific infringing network was ever created. The court held that liability for indirect infringement required proof that actual infringement occurred, but the court did not hold that Dynacore could meet its burden of showing direct infringement only by proving that a single entity created the infringing network.

patent infringement and serves no policy-based purpose. If an entity has induced conduct that infringes a patent, there is no justification for immunizing the inducer from liability simply because no single party commits all of the components of the appropriative act.

Both Limelight and Epic (like Judge Linn's dissent) rely on the Supreme Court's decision in Aro in support of their contention that liability for inducement requires that a single party be liable for direct infringement, but Aro does not stand for that proposition. Aro dealt with a patent for automobile convertible tops, including the fabric and supporting structures. 365 U.S. at 337. The accused product was fabric that was intended to replace the original fabric in the convertible top when it wore out. The specific question addressed by the Court was "does the car owner [directly] infringe (and the supplier contributorily infringe) the combination patent when he replaces the spent fabric without the patentee's consent?" Id. at 339. Because the Court concluded that replacing the fabric was not an infringing "reconstruction," but instead was a permissible "repair," the Court held that the car owner did not infringe the patent. And because there was no direct infringement, there was no contributory infringement. As the Court explained: "In a word, if there is no infringement of a patent there can be no contributory infringer[.]" Id. at 345. Importantly, it was because the purchaser of the fabric was engaged in repair rather than reconstruction—and thus was not guilty of infringement at all—that the Court found there could be no contributory infringement. That case therefore does not stand, expressly or implicitly, for the proposition that there can be no induced infringement if there is actual infringing conduct but the acts necessary to constitute the infringement are committed by more than one party.

In the course of its analysis, the *Aro* Court quoted from a dissenting opinion in an earlier case, which stated that "if the purchaser and user [of a product] could not be amerced as an infringer certainly one who sold to him . . . cannot be amerced for contributing to a non-existent infringement." *Id.* (quoting *Mercoid Corp. v. Mid-Continent Inv. Co.*, 320 U.S. 661, 674 (1944) (Roberts, J., dissenting)). Although the reference to a direct infringer being "amerced" as an infringer could suggest that the Court considered liability for direct infringement as a predicate for indirect infringement, the Court in both cases was addressing direct infringement involving only a single party.

Unlike the present case, which deals with method claims, Aro dealt with product claims. In the case of a product claim, the party that adds the final element to the combination "makes" the infringing product and thus is liable for direct infringement even if others make portions of the product. See Cross Med. Prods., 424 F.3d at 1312 (holding there was a genuine issue of fact as to whether surgeons infringe by "making" the claimed product when they complete the last limitation (contacting the anchor seat of the device with bone)). For product claims, whenever the product is made, used, or sold, there is always a direct infringer. Hence, the Aro Court, dealing only with product claims, was not presented with the divided infringement question we address today. For that reason, the Court's allusion to the potential liability of a direct infringer cannot reasonably be treated as suggesting that, as a predicate for indirect infringement, all of the steps necessary to constitute direct infringement of a method claim must be committed by a single party.

In cases prior to *BMC*, this court on numerous occasions recited the familiar and uncontroversial proposition

that one of the elements of induced infringement is proof that there has been direct infringement. See, e.g., Micro Chem., Inc. v. Great Plains Chem. Co., 103 F.3d 1538, 1549 (Fed. Cir. 1997); Joy Techs., Inc. v. Flakt, Inc., 6 F.3d 770, 774 (Fed. Cir. 1993); Met-Coil Sys. Corp. v. Korners Unlimited, Inc., 803 F.2d 684, 687 (Fed. Cir. 1986). On occasion, the court described that principle by reference to direct infringement by "some party" or the party accused of direct infringement in the case. See, e.g., Moba, B.V. v. Diamond Automation, Inc., 325 F.3d 1306, 1318 (Fed. Cir. 2003); Epcon Gas Sys., Inc. v. Bauer Compressors, Inc., 279 F.3d 1022, 1033 (Fed. Cir. 2002); Crystal Semiconductor Corp. v. Tritech Microelectronics Int'l, Inc., 246 F.3d 1336, 1351 (Fed. Cir. 2001); Kendall Co. v. Progressive Med. Tech., Inc., 85 F.3d 1570, 1573 (Fed. Cir. 1996); C.R. Bard, Inc. v. Advanced Cardiovascular Sys., Inc., 911 F.2d 670, 673 (Fed. Cir. 1990). But in none of those cases did the court hold that, as a predicate for a finding of indirect infringement, all the steps of a method claim must be performed by the same entity. Those cases trace the rule that direct infringement is a prerequisite for induced indirect infringement back to the Supreme Court's opinion in *Aro* and its predecessors which, as discussed above, did not require that all the infringing steps be performed by a single actor.

The cases that predated *Aro* likewise did not apply the "single direct infringer" requirement as a predicate for induced infringement; instead, they emphasized that what was induced was the fact of infringement, not liability for direct infringement by a single actor. In one of the leading early cases, Judge (later Chief Justice) Taft wrote for the Sixth Circuit that it was "well settled that where one makes and sells one element of a combination covered by a patent with the intention and for the purpose of bringing about its use in such a combination he is guilty

of contributory infringement." Thomson-Houston Elec. Co. v. Ohio Brass Co., 80 F. 712, 721 (6th Cir. 1897). Most of the early cases involved product claims, not process claims, and therefore the ultimate purchaser or user of the patented invention was a direct infringer, so the problem of divided infringement did not arise. Where it did arise, however, courts continued to look to the doctrine of induced (or contributory) infringement as a basis for liability of parties who had induced the infringing conduct.

For example, in *Solva Waterproof Glue Co. v. Perkins Glue Co.*, 251 F. 64 (7th Cir. 1918), the defendants performed one step of a two-step process claim and relied upon their customers to perform the second step of the process. The court held the defendant to be a contributory infringer. It explained that the "rule of law in such case is that one who makes and sells one element of a patented combination with the intention and for the purpose of bringing about its use in such a combination is guilty of contributory infringement." 251 F. at 73-74.

Similarly, in *Peerless Equipment Co. v. W.H. Miner, Inc.*, 93 F.2d 98 (7th Cir. 1937), the Seventh Circuit dealt with a case closely analogous to the cases at bar. In that case, which involved a patent containing process claims, the defendant performed all the steps of the claimed process except the last. The purchaser would perform the last step after delivery of the products. The court observed that the defendant knew that the purchasers would perform that step. Accordingly, the court held that the defendant was "guilty of contributory infringement of each of the process claims." 93 F.2d at 105.

This court reached the same result in Fromson v. Advance Offset Plate, Inc., 720 F.2d 1565 (Fed. Cir. 1983).

The patent in that case involved both product and process claims. As in the *Peerless* case, the defendant performed all but the last step of the recited process; the last step was performed by the defendant's customers. Because no single party performed all the steps, the court stated that the defendant "cannot be liable for direct infringement." Id. at 1568. However, it added, the defendant "could be Id. at 1567-68. liable for contributory infringement." That case thus provides direct support for the two key propositions at issue in this case: (1) that liability for direct infringement requires that some actor perform all of the limitations (including the steps of a process claim), either personally or vicariously; and (2) that induced infringement can be found even if there is no single party who would be liable for direct infringement.

In summing up its objections to this court's ruling, Judge Linn's dissent argues that the court today is making a "sweeping change to the nation's patent policy" that goes beyond the proper scope of the court's authority and that a step such as the one taken by the en banc court today should be left to Congress. Of course, the question whether the majority's position constitutes a change in the law, or whether the dissent's position would constitute a change, depends on what one thinks the prior rule was. Based on the legislative history, general tort principles, and prior case law, including this court's decision in Fromson, we believe that BMC and the cases that have followed it changed the pre-existing regime with respect to induced infringement of method claims, although admittedly at that time there were relatively few cases in which that issue had arisen. In either event, the court's task is to attempt to determine what Congress had in mind when it enacted the induced infringement statute in 1952. At the end of the day, we are persuaded that Congress did not intend to create a regime in which parties

could knowingly sidestep infringement liability simply by arranging to divide the steps of a method claim between them. And we have found no evidence to suggest that Congress intended to create different rules for method claims than for other types of claims. While we believe that our interpretation of section 271(b) represents sound policy, that does not mean that we have adopted that position as a matter of policy preference. In the process of statutory interpretation, it is relevant to ask what policy Congress was attempting to promote and to test each party's proposed interpretation by asking whether it comports with that policy. In these cases, we conclude that it is unlikely that Congress intended to endorse the "single entity rule," at least for the purpose of induced infringement, advocated by Epic and Limelight, which would permit ready evasion of valid method claims with no apparent countervailing benefits.

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In the *McKesson* case, Epic can be held liable for inducing infringement if it can be shown that (1) it knew of McKesson's patent, (2) it induced the performance of the steps of the method claimed in the patent, and (3) those steps were performed. McKesson preserved its claim of induced infringement, even though this court's decisions in *BMC* and *Muniauction* made the inducement claim difficult to maintain. McKesson is entitled to litigate that issue on remand to the district court.

In the *Akamai* case, although the jury found that the content providers acted under Limelight's direction and control, the trial court correctly held that Limelight did not direct and control the actions of the content providers as those terms have been used in this court's direct infringement cases. Notwithstanding that ruling, under the

principles of inducement laid out above, Limelight would be liable for inducing infringement if the patentee could show that (1) Limelight knew of Akamai's patent, (2) it performed all but one of the steps of the method claimed in the patent, (3) it induced the content providers to perform the final step of the claimed method, and (4) the content providers in fact performed that final step.

Although the patentee in Akamai did not press its claim of induced infringement at trial, it argues this court should overrule "the mistaken view that only a single entity can infringe a method claim." That argument, while focused on direct infringement, is critical to the conclusion that divided infringement can give rise to liability, whether under a theory of direct infringement or induced infringement. While we do not hold that Akamai is entitled to prevail on its theory of direct infringement, the evidence could support a judgment in its favor on a theory of induced infringement. For that reason, we conclude that Akamai should be given the benefit of this court's ruling disapproving the line of divided infringement cases that the district court felt compelled to follow. We therefore reverse the judgment in both cases and remand in both cases for further proceedings on the theory of induced infringement.

REVERSED and REMANDED

United States Court of Appeals for the Federal Circuit

AKAMAI TECHNOLOGIES, INC.,

Plaintiff-Appellant,

AND

THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY,

Plaintiff-Appellant,

 \mathbf{v}

LIMELIGHT NETWORKS, INC.,

 $Defendant\text{-}Cross\ Appellant.$

2009-1372, -1380, -1416, -1417

Appeal from the United States District Court for the District of Massachusetts in Nos. 06-CV-11109 and 06-CV-11585, Judge Rya W. Zobel.

AND

MCKESSON TECHNOLOGIES, INC. (formerly McKesson Information Solutions, LLC),

Plaintiff-Appellant,

v.

EPIC SYSTEMS CORPORATION.

Defendant-Appellee.

2010-1291

Appeal from the United States District Court for the Northern District of Georgia in No. 06-CV-2965, Judge Jack T. Camp.

NEWMAN, Circuit Judge, dissenting.

This *en banc* court has split into two factions, neither of which resolves the issues of divided infringement. A scant majority of the court adopts a new theory of patent infringement, based on criminal law, whereby any entity that "advises, encourages, or otherwise induces," maj. op. 14, or "causes, urges, encourages, or aids the infringing conduct," *id.* at 15, is liable for the infringing conduct. The majority further holds that only the "inducer" is liable for divided infringement, and that the direct infringers are not liable although the patent rights are "plainly being violated by the actors' joint conduct." *Id.* at 10. These are dramatic changes in the law of infringement.

On this new "inducement-only rule," the inducing entity is liable on greatly enlarged grounds, such as merely advising or encouraging acts that may constitute direct infringement. This new rule is not in accordance with statute, precedent, and sound policy. It raises new issues unrecognized by the majority, and contains vast potential for abuse. In turn, the two cases here on appeal can readily be resolved under existing law, as the majority

opinion almost acknowledges in its remand instructions. Maj. op. 35–36.

In contrast, a significant minority of the *en banc* court continues to favor the "single-entity rule," whereby divided infringement is not actionable at all unless all of the participants are in a contract or agency relationship that is directed or controlled by a single "mastermind." Although review of the singe-entity rule was the sole reason for this rehearing *en banc*, and the sole question briefed by the parties and the *amici curiae*, this aspect is not resolved by the majority, which simply states that it will not review the law of direct infringement, apparently on the theory that the inducement-only rule renders irrelevant whether there is a single mastermind of the direct infringement.

Neither faction provides a reasonable answer to the en banc questions concerning divided infringement. However, the issues of liability and remedy arising from interactive methods and collaborative performance are readily resolved by application of existing law. Issues of induced infringement are not new, but this aspect is ill served by the majority's distortion of the inducement statute, 35 U.S.C. §271(b), and has no support in theory or practice. This new rule simply imposes disruption, uncertainty, and disincentive upon the innovation communities. I respectfully dissent.

DISCUSSION

This en banc court was convened in order to resolve inconsistencies in past panel rulings for situations in which different entities perform separate parts of a patented method. In the two earlier decisions whose rulings were the announced focus of this en banc review, BMC Resources, Inc. v. Paymentech, L.P., 498 F.3d 1373 (Fed. Cir. 2007) and Muniauction, Inc. v. Thomson Corp., 532

F.3d 1318 (Fed. Cir. 2008), panels of this court held that when separate entities perform the steps of a patented method, there cannot be direct infringement unless a single mastermind directs or controls the performance of all of the steps. These decisions held that since there cannot be direct infringement without such direction or control, there cannot be indirect infringement by inducement or contributory infringement. Thus, the court held that there can be no liability for infringement, although all of the claim steps are performed. BMC Resources, 498 F.3d at 1379; Muniauction, 532 F.3d at 1329. This singleentity rule was applied by the district courts in the Akamai and McKesson decisions that are here on appeal, to deny all liability for infringement. We took these appeals en banc in order to resolve the conflicts within precedent.

The en banc court has been unable to reach consen-The dissenting opinion authored by Judge Linn adheres to the single-entity rule, and the majority opinion presents the new position that when more than one entity performs the steps of a patented invention, the only liable entity is the inducer, not those who directly infringe the Such an inducement-only rule has never been held, in any case. It has no foundation in statute, or in two centuries of precedent. The en banc majority, embracing this new rule, does not acknowledge the new problems of enforcement and compensation and defense that are also created, the new opportunities for gamesmanship and abuse and inequity. For example, if the direct infringers are not liable for infringement, one wonders whether they are subject to damages or injunction. These and other critical issues should be considered before a new law of inducement-only infringement is adopted.

The majority holds that there is "a duty not to cause the acts that constitute infringement even if the parties who cause the direct injury are not liable." Maj. op. 25. I agree that we all have a duty to respect the law, but in the complexities of technology and commerce, one must wonder at the imposition of liability solely for "urg[ing]" or encourag[ing]," *id.* at 15, while exonerating direct infringers from liability when the patented method is "collectively practice[d]." *Id.* at 16.

The prior laws of infringement effectively handled interactive and collaborative forms of infringement, before either the single-entity rule or the inducement-only rule. Before the law is changed so that only an inducer can be liable for divided infringement, on loose criteria for inducement, this court should at least obtain the advice of those who understand the consequences of this change in infringement law. This unannounced *en banc* ruling is made without briefing by the parties or notice to the *amici curiae*.¹

Briefs amicus curiae were filed by Altera Corp., HTC Corp., HTC America, Inc., and Weatherford International; American Intellectual Property Law Association; Aristocrat Technologies Australia Pty Ltd. and Aristocrat Technologies, Inc.; Apple Inc.; Biotechnology Industry Organization; Boston Patent Law Association; CTIA—The Wireless Association and MetroPCS Wireless, Inc.; Cascades Ventures, Inc. and VNS Corp.; Cisco Systems, Inc., Dell, Inc., eBay Inc., Google Inc., Hewlett-Packard Co., Intel Corp., Intuit, Inc., Micron Technology, Inc., NetApp, Inc., RingCentral, Inc., SAP America, Inc., Symantec Corp., Yahoo, Inc., and Zynga Inc.; Conejo Vally Bar Association; Electronic Frontier Foundation; Encore Wire Corp.; Facebook, Inc. and LinkedIn Corp.; Internet Retailers: Myriad Genetics, Inc.: New York Intellectual Property Law Association; Pharmaceutical Research and Manufacturers of America; Shuffle Master, Inc.; The Financial Services Roundtable; San Diego Intellectual

Ι

THE EN BANC ISSUE

The only issue for which these cases were taken en banc, the only issue on which briefing was solicited from the parties and *amici curiae*, was the conflict in precedent arising from the single-entity rule of BMC Resources and Muniauction. The concerned communities had expressed concern with this conflict, but the en banc majority now declines its responsibility, and states that "we have no occasion at this time to revisit any of those principles regarding the law of divided infringement as it applies to liability for direct infringement." Maj. op. 13. The majority rejects the single-entity rule only "as a predicate for a finding of indirect infringement." Id. at 32. The majority explains that it overrules BMC Resources "in which we held that in order for a party to be liable for induced infringement, some other single entity must be liable for direct infringement." Id. at 10.

Instead, the majority holds that when more than one entity is involved, only the inducer is liable for infringement, although the patent rights are "plainly being violated by the actors' joint conduct," and the inducer acts to "encourage[]" the infringement. *Id.* at 10, 14. The court thus avoids the *en banc* issue, even as it creates a new liability; yet the court gives no attention to the accompanying new issues such as the measure of damages, or the availability of remedy against direct infringement. While the majority states that it "overrule[s]" *BMC Resources*, *id.* at 10, it is far from clear, for the majority also cites *BMC Resources* and *Muniauction* as precedent, *id.* at 13 ("[T]his court has rejected claims of liability for direct

Property Law Association, The Foundry Group, First Round Capital, and Kedrosky Capital; Thomson Reuters Corp.; and Washington State Patent Law Association.

infringement of method claims in cases in which several parties have collectively committed the acts necessary to constitute direct infringement, but no single party has committed all of the required acts."), and id. ("To be sure, the court has recognized that direct infringement applies when the acts of infringement are committed by an agent of the accused infringer or a party acting pursuant to the accused infringer's direction or control."). The majority appears to overrule only a single sentence of BMC Resources, at 498 F.3d at 1379: "Indirect infringement requires, as a predicate, a finding that some party amongst the accused actors has committed the entire act of direct infringement." The majority also defines "inducement" as not "direction or control to such an extent that the act of the induced party can be attributed to the inducer as a direct infringer," maj. op. 15, and preserves the rulings of Muniauction and Golden Hour Data Systems, Inc. v. emCharts, Inc., 614 F.3d 1367 (Fed. Cir. 2010), and holds that interactive and collaborative infringement is not actionable. The majority's theory is a spontaneous judicial creation. And it is wrong.

It is apparent that this jurisprudence is in need of correction, clarification, and consistency, for neither the single-entity rule nor the majority's newly minted inducement-only rule is in accord with the infringement statute, or with any reasonable infringement policy. In contrast, the established law and precedent of 35 U.S.C. §271 can readily reach and remedy every infringement situation that has been presented.

Cases of divided infringement have not caused past turmoil, as the majority announces. However, turmoil will surely be created, to the detriment of technological advance and its industrial development, for stability and clarity of the law are essential to innovative commerce.

Π

THE SINGLE-ENTITY RULE

Questions of divided infringement are not new, but resolution by way of the single-entity rule is plainly inadequate. The district court remarked in the *McKesson* case, after applying this court's rulings in *BMC Resources* and *Muniauction*, that the single-entity rule leaves a meritorious patentee without redress:

[T]he single entity rule and *BMC*'s interpretation thereof severely limits the protection provided for patents which would otherwise be valid and enforceable. . . . As long as the sale of a product constitutes an arms length transaction between the customer and the infringing company, which is insufficient to create vicarious liability, the patent holder would likely have no redress against the infringer. This result weakens the policy of providing protection to those who devote the time and resources to develop otherwise novel and patentable methods.

McKesson Info. Solutions LLC v. Epic Sys. Corp., 2009 WL 2915778, at *7 (N.D. Ga. Sept. 8, 2009).

In *McKesson* the first step of the multi-step claim to an interactive health-care method requires the patient to enter the system—a step held not directed or controlled by contract or agency, whereby the district court stated that it was required to hold that there was not direct infringement, and thus that McKesson's claim for induced infringement must fail. Had the district court not been constrained by the single-entity rule, the case could easily have been decided on long-standing infringement law.

Direct infringement may be by more than one entity

The court in *BMC Resources* held that the singleentity rule "derives from the statute itself," 498 F.3d at 1380, and the defendants herein press this argument. The statute at §271(a) states the fundamental requirements of patent infringement, and is sometimes called the "direct infringement" provision:

§271(a) Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.

The word "whoever" in §271(a) does not support the single-entity rule. By statutory canon the word "whoever" embraces the singular and plural. The first statute in the United States Code, 1 U.S.C. §1, states that:

§1. In determining the meaning of any Act of Congress, unless the context indicates otherwise—

words importing the singular include and apply to several persons, parties, or things; . . . the words 'person' and 'whoever' include corporations, companies, associations, firms, partnerships, societies, and joint stock companies, as well as individuals

This principle was cited in *United States v. Oregon & C.R. Co.*, 164 U.S. 526, 541 (1896) and *Barr v. United States*, 324 U.S. 83, 91 (1945). The usage "whoever" appears not only in §271 of Title 35, but in §§101, 161, and 171 in referring to inventors without distinguishing between singular and plural. *See In re Henriksen*, 399 F.2d 253, 258 (CCPA 1968) (1 U.S.C. §1 applies to Title 35). Nei-

ther the defendants nor any *amicus* has offered any reason to view "whoever" differently in §271, the patent infringement statute.

Direct infringement requires that every claimed step of a patented method or system is performed in accordance with the limitations stated in the claim. Thus, when more than one entity performs all of the steps, the claim is directly infringed. Until the rulings in *BMC Resources* and *Muniauction*, it was not disputed that when a claimed method is performed without authorization, the claim is infringed. See, e.g., Graver Tank & Mfg. Co. v. Linde Air Products Co., 339 U.S. 605, 607 (1950) ("If accused matter falls clearly within the claim, infringement is made out and that is the end of it."); Warner–Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 29 (1997) (for infringement, every element of the claim must be performed, literally or by an equivalent).

Infringement is not a question of how many people it takes to perform a patented method. The Court observed in *Aro Manufacturing Co. v. Convertible Top Replacement Co.*, 365 U.S. 336, 342 (1961) that "§271(a) of the new Patent Code, which defines 'infringement,' left intact the entire body of case law on direct infringement." As applied to the steps of a claimed process, the law before and after the 1952 Act has been stable. *E.g., Joy Techs., Inc. v. Flakt, Inc.*, 6 F.3d 770, 773 (Fed. Cir. 1993) (to infringe a process claim, every claimed step of the process must be performed); *Mowry v. Whitney*, 81 U.S. 620, 652 (1871):

The exclusive use of them singly is not secured to him. What is secured is their use when arranged in the process. Unless one of them is employed in making up the process, and as an element of it, the patentee cannot prevent others from using it. The Court stated in *Deepsouth Packing Co. v. Laitram Corp.*, 406 U.S. 518, 522 (1972) that "Infringement is defined by 35 U.S.C. §271 in terms that follow those of §154." Section 154, "the keystone provision of the patent code," *id.*, codifies every patentee's right to exclude "others" from practicing the patented invention:

§154(a)(1) Every patent shall contain a short title of the invention and a grant to the patentee, his heirs or assigns, of the right to exclude others from making, using, offering for sale, or selling the invention

The legislative history of the 1952 Patent Act reflects the linkage between §154 and §271, the House Committee Report explaining that §271(a) was "not actually necessary":

Section 271, paragraph (a), is a declaration of what constitutes infringement. There is no declaration of what constitutes infringement in the present statute. It is not actually necessary because the granting clause [35 U.S.C. §154] creates certain exclusive rights and infringement would be any violation of those rights.

H.R. Rep. No. 82-1923, at 9 (1952). The same guidance appears in the Senate Committee Report, S. Rep. No. 82-1979, at 8 (1952). Giles S. Rich, a principal contributor to the 1952 Patent Act, summarized that "Paragraph (a) defines direct infringement and is present only for the sake of completeness. We got along without it for 162 years and we could again. Its omission would change nothing." G.S. Rich, *Infringement Under Section 271 of the Patent Act of 1952*, 21 Geo. Wash. L. Rev. 521, 537 (1953).

The linkage between §154 and §271 finds its mooring in the law as summarized in Professor Robinson's classic *The Law of Useful Inventions* (1890) at Section 897:

The nature of the act of infringement is indicated by that of the exclusive right which it invades. Hence an infringement may be committed either by making, using, or selling the patented invention. These words, however, are interpreted as comprehending every method by which the invention can be made available for the benefit of the infringer, and any person who participates in any wrongful appropriation of the invention becomes thereby a violator of the rights protected by the patent.

(footnote omitted). This court has lost sight of this statutory foundation, although, as the Court explained in *Bauer & Cie v. O'Donnell*, 229 U.S. 1, 10 (1913), "Congress did not use technical or occult phrases" in "defining the extent of the rights and privileges secured to a patentee."

The conflicts in precedent should be resolved

Although the word "whoever" in the infringement statute is not limited to a single-entity, this does not resolve the questions of joint or collaborative or interactive infringement that are raised by this court's rulings in *BMC Resources* and *Muniauction*, and relied on by the district courts in *Akamai* and *McKesson*. In *BMC Resources* this court held that the claims could not be directly infringed, on facts whereby the defendant Paymentech, who provided a computerized system for verifying and paying debit transactions, did not direct or control the performance of separate process steps by the debit networks that routed the transactions to the financial institutions who paid the amounts verified. Although

Paymentech administered the system and provided transaction information to the debit networks, the panel observed that it was not shown that "Paymentech also provides instructions or directions regarding the use of those data," and that there was "no evidence even of a contractual relationship between Paymentech and the financial institutions." *BMC Resources*, 498 F.3d at 1381–82. The panel held that because Paymentech did not direct or control the actions of these participating entities, the claims were not directly infringed, and that without direct infringement there could not be induced or contributory infringement by the provider of the claimed method.

In *Muniauction* this court elaborated on *BMC Resources*, and explained that direction or control requires more than controlling access to a system or the issuance of instructions for performance of a claim step. The claimed invention was a method of conducting bond auctions over an electronic network, and the patentee Muniauction had argued that direct infringement was met because the defendant Thomson controlled access to the auction system and instructed bidders on participating in the system. At the trial the district court instructed the jury on the law of direct infringement, as follows:

Consider whether the parties are acting jointly or together in relation to the electronic auction process. Are they aware of each other's existence and interacting with each other in relation to the electronic auction process? Is there one party teaching, instructing, or facilitating the other party's participation in the electronic auction process? These are the types of questions that you should ask in making your decision on this issue. If you find that there is a sufficient connection between

Thomson and the bidders and the issuers that used Thomson's process, then you could find Thomson liable for direct infringement.

Jury instruction, quoted in *Muniauction*, 532 F.3d at 1329. The jury found that the claims were infringed, and the district court denied JMOL. On appeal this court criticized the jury instruction, stating that "none of the questions identified by the jury instruction are relevant to whether Thomson satisfies the 'control or direction' standard of *BMC Resources*." *Id.* at 1330. The court held that although Thomson controlled access to its electronic auction system and instructed bidders on its use, the claimed method could not be directly infringed because Thomson did not direct or control the actions of the bidders.

Applying these principles, the Federal Circuit panel in *Akamai* elaborated that the requirements of direction or control are not satisfied unless any separate entity involved in direct infringement is acting as the agent of, or by contract with, the mastermind of the entire performance. 629 F.3d 1311 (Fed. Cir. 2010). This holding has no support in precedent. In *On Demand Machine Corp. v. Ingram Industries, Inc.*, 442 F.3d 1331, 1344–45 (Fed. Cir. 2006), this court approved a jury instruction that summarized precedent as it then existed, as follows:

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

fringement is the result of the participation and combined action(s) of one or more persons or entities, they are joint infringers and are jointly liable for the infringement.

To add to the confusion, some cases declined to follow the single-entity rule, or carved new exceptions. For example, in Uniloc USA, Inc. v. Microsoft Corp., 632 F.3d 1292, 1309 (Fed. Cir. 2011) a panel of this court held: "That other parties are necessary to complete the environment in which the claimed element functions does not necessarily divide the infringement between the necessary par-In Centillion Data Systems, LLC v. Qwest Communications International, Inc., 631 F.3d 1279, 1285 (Fed. Cir. 2011) a panel of this court held that a claim to a multi-step system could be directly infringed, although the infringer did not perform or direct or control "the back-end processing" of the accused system. In contrast, in Golden Hour, 614 F.3d at 1371, a panel of this court held that there could be no direct infringement, although all of the claim steps were performed by two entities that "formed a strategic partnership, enabled their two programs to work together, and collaborated to sell the two programs as a unit."

I take note of the Linn cadre's argument that ingenious patent claim drafting can avoid single-entity problems, and undoubtedly it would help in some situations. I do not discourage ingenuity, but the presence or absence of infringement should not depend on cleverness or luck to satisfy a malleable single-entity rule. The Court in *Dawson Chemical Co. v. Rohm & Haas Co.*, 448 U.S. 176, 188 (1980), discussing the law of contributory infringement, cautioned lest "the technicalities of patent law" enable persons "to profit from another's invention" by performing "acts designed to facilitate infringement by others."

Lessons from copyright law

Useful guidance has evolved in connection with copyright law, for copyright and patent law are in "close[] analogy." Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 439 (1984). The Court stated in Metro-Goldwyn–Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913, 930 (2005) that one "infringes vicariously by profiting from direct infringement while declining to exercise a right to stop or limit it," citing Shapiro, Berstein & Co. v. H.L. Green Co., 316 F.2d 304, 307 (2d Cir. 1963).

Defendants Limelight and Epic Systems state that vicarious infringement is inapposite in the cases before us, for no one entity performs all steps of the claimed invention. That theory is incorrect. Both of the defendants agree that agency is a form of attribution, which includes respondeat superior. Restatement (Third) of Agency §7.07(1) (2006). However, as explained in A&M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1022 (9th Cir. 2001), "Vicarious copyright liability is an 'outgrowth' of respondeat superior," quoting Fonovisa, Inc. v. Cherry Auction, Inc., 76 F.3d 259, 262 (9th Cir. 1996). Given "the historic kinship between patent law and copyright law," Sony, 464 U.S. at 439, there is no reason why agency theory attributes the performance of claim steps but the principle of vicarious infringement does not.

The court should simply acknowledge that a broad, all-purpose single-entity requirement is flawed, and restore infringement to its status as occurring when all of the claimed steps are performed, whether by a single entity or more than one entity, whether by direction or control, or jointly, or in collaboration or interaction.

III

THE INDUCEMENT-ONLY RULE

The majority opinion states that "Direct infringement has not been extended to cases in which multiple independent parties perform the steps of the method claim." Maj. op. 12. That is of course incorrect. Despite this challenged statement, the court's opinion never reaches the issue, although it was extensively briefed by the parties and the many amici curiae. Instead, the majority holds that "[i]t is not necessary for us to resolve that issue today" of "the question whether direct infringement can be found when no single entity performs all of the claimed steps of the patent." Id. at 10. The authority cited for "reject[ing] claims of liability for direct infringement of method claims in cases in which several parties have collectively committed the acts necessary to constitute direct infringement" is BMC Resources and Muniauction. *Id.* at 13. These are the cases that led to convening this en banc court. Thus the majority discards decades of precedent, refuses our en banc responsibility, and states that "we have no occasion at this time to revisit any of those principles regarding the law of divided infringement as it applies to liability for direct infringement." Id. The apparent justification is the new inducement-only rule of liability.

The court holds that only inducement to infringe is actionable when the claim is practiced by two or more entities, and that there can be no liability for direct infringement. The court holds that "the acts necessary to constitute direct infringement" are different from "the acts specified in the statute [§271(a)]," *id.* at 13, 17, and other new theories. The majority relies on the criminal law principles codified at 18 U.S.C. §2. However, "[t]he analogy between accomplice liability and contributory

infringement fails given careful consideration of the reasons behind imposing criminal sanctions on indirect actors." M. Bartholomew, Cops, Robbers, and Search Engines: The Questionable Role of Criminal Law in Contributory Infringement Doctrine, 2009 BYU L. Rev. 783, 786. Bartholomew points out at page 807 the differences between accomplice liability and contributory infringement:

As it stands currently, contributory infringement law does not require the strong showings of intent required for accomplice liability in criminal law. . . . [W]hile both contributory liability doctrines [e.g., induced and contributory infringement] allow the defendant's mental state to be inferred through circumstantial evidence, infringement law takes a comparatively generous approach in determining what evidence is probative of knowledge of the underlying illegal act. Most importantly, accomplice liability places little stock in the actus reus requirement while contributory infringement decisions often hinge on whether the defendant's actions were 'material' enough to justify liability.

The LaFave treatise reiterates that "[c]onsiderable confusion exists as to what the accomplice's mental state must be in order to hold him accountable for an offense committed by another." *Criminal Law* §13.2, at 712 (5th ed. 2010).²

The majority also defends its adventure into uncharted infringement law, by reciting other assorted special statutes, such as the Hatch-Waxman Act's artificial infringement provision for challenge to a patent when there is no case or controversy because there is no infringement, in order to enable generic drug producers to test the patent while prohibited from making or selling

The majority opinion states that "the problem presented by the cases before us [is] whether liability should extend to a party who induces the commission of infringing conduct." *Id.* at 14. That is not the problem presented. Liability for inducement is established by statute. The problem before the court is not whether an inducer, properly defined, is liable for infringement; the problem is whether a method patent is infringed when more than one entity performs the claimed steps of the method. Until the *BMC* line of cases held that the answer is "no" unless there is an agency or contractual relationship among all of the performing entities, this question was resolved by application of the existing laws of infringement, whether direct, induced, or contributory infringement.

In accordance with §271(c) the entity that provides the system that is used to perform the claimed method, or steps thereof, for which there is no substantial noninfringing use, is liable for contributory infringement—it is noteworthy that the court's opinion does not distinguish between induced and contributory infringement, misciting precedent accordingly. The rules of contributory infringement, in which the court seeks support for its elimiliability for nation direct infringement, established to provide liability in situations in which the contributory infringer knows that "the combination for which his component was especially designed was both patented and infringing," as the Court explained in Aro Manufacturing Co. v. Convertible Top Replacement Co., 377 U.S. 476, 488 (1964). In Fromson v. Advance Offset Plate, Inc., 720 F.2d 1565 (Fed. Cir. 1983) this court ruled that there could be contributory infringement by the

the patented product. §271(e)(2). This special expedient does not justify this court's creation of a new law of infringement.

provider of the printing plate, when the final step of coating of the plate is performed by the customer.

As summarized in *Aro*, 377 U.S. at 512, contributory infringement is "designed for cases where enforcement against direct infringers is impracticable." (quotation omitted). *See also Dawson*, 448 U.S. at 188 ("This protection [of contributory infringement] is of particular importance in situations, like the oil lamp case itself [*Wallace v. Holmes*, 29 F. Cas. 74 (No. 17,100) (C.C. Conn. 1871)], where enforcement against direct infringers would be difficult, and where the technicalities of patent law make it relatively easy to profit from another's invention without risking a charge of direct infringement."). The court's opinion incorrectly treats these cases as "inducement" cases. Inducement is a different concept, and the new breadth with which the court infuses the concept is an unwarranted and unsupported enlargement of the law.

Liability for inducement requires direct infringement

Precedent establishes the circumstances in which the purveyor of less than the entire claimed invention can be liable for infringement. For all forms of indirect infringement liability, it is necessary to establish that the claimed invention is directly infringed. My colleagues hedge, and while acknowledging that "there can be no indirect infringement without direct infringement," maj. op. 15, the court holds that there need not be direct infringers. I need not belabor the quandary of how there can be direct infringement but no direct infringers.

Judge Rich, in *Hewlett-Packard Co. v. Bausch & Lomb, Inc.*, 909 F.2d 1464, 1469 (Fed. Cir. 1990), explained that under common law "[contributory infringement] liability was under a theory of joint tortfeasence, wherein one who intentionally caused, or aided and

abetted, the commission of a tort by another was jointly and severally liable with the primary tortfeasor." The requirement of a "primary tortfeasor" applies to inducement, as has long been understood: "Liability under 35 U.S.C. 271(b) requires the existence of direct infringement by another party which is actionable under 35 U.S.C. 271(a)." C. Miller, Some Views on the Law of Patent Infringement by Inducement, 53 J. Pat. Off. Soc'y 86, 102 (1971). I take note of the majority's statement that an inducer is not liable for inducing "others to engage in conduct that is not within the claims of the patent in suit." Maj. op. 22–23 n.4 (citing Shuttlesworth v. City of Birmingham, 373 U.S. 262 (1963)). That statement is incomplete, for when the direct infringer is not liable, for whatever reason, the performance of claim steps is not prohibited by law. When the performance of the claim steps is not unlawful, the inducer cannot be liable for inducing infringement, on any theory of tort or criminal or patent law. See Shuttlesworth, 373 U.S. at 265 ("It is generally recognized that there can be no conviction for aiding and abetting someone to do an innocent act.").

Precedent routinely reflects that liability for inducement depends on liability for direct infringement. In *Met-Coil Systems Corp. v. Korners Unlimited, Inc.*, 803 F.2d 684, 687 (Fed. Cir. 1986) the court held that there was no liability for induced infringement by sale of equipment for use in the patentee's machine, because the "customers enjoyed an implied license to practice the inventions claimed." That is, although the customers "practice[d]" the claimed invention, maj. op. 16, they did not directly infringe, so there could be no inducement of infringement. *Cf. Giese v. Pierce Chem. Co.*, 29 F. Supp. 2d 33, 36 (D. Mass. 1998) ("If the end users are not infringers due to the protection of the experimental use doctrine, then the

defendants Vector and Pierce cannot be liable for contributory infringement or inducement.").

In NTP, Inc. v. Research in Motion, Ltd., 418 F.3d 1282, 1318 (Fed. Cir. 2005) the court held that there was no liability for inducement by sale of a system that had a component located in Canada, because the customers did not perform all the steps of the claimed method in the United States. That is, although "all the steps of a claimed method [were] performed," maj. op. 10, the customers did not directly infringe, so there could be no inducement. Cf. Everpure, Inc. v. Cuno, Inc., 875 F.2d 300, 302 (Fed. Cir. 1989) ("[T]here can be neither contributory nor induced infringement when, because of the permissible repair doctrine, there has been no direct infringement.").

In National Presto Industries, Inc. v. West Bend Co., 76 F.3d 1185 (Fed. Cir. 1996) the court held that there was no liability for inducing infringement before the patent issued, because there is no direct infringement before issuance. The court stated that "if the thing that was abetted was not illegal at the time of abetment, but depended on some future event that might not occur (such as issuance of the patent) liability can not be retroactively imposed." Id. at 1196; cf. Joy Techs., 6 F.3d at 775 ("If the plant sold by Flakt cannot be used by the purchaser to infringe directly because it will not be operational within the term of the patent, Flakt cannot be guilty on a theory of contributory infringement with respect to that plate.").

Discarding precedent, the majority holds that there is liability for inducement when the inducer breaches the "duty not to cause the acts that constitute infringement even if the parties who cause the direct injury are not liable." Maj. op. 25. Duty, breach, and causation apply in the tort of negligence, not patent infringement. Prosser &

Keeton explain that "in negligence cases, the duty is always the same—to conform to the legal standard of reasonable conduct in the light of the apparent risk." *Prosser & Keeton on the Law of Torts*, §53, at 356 (5th ed. 1984). In addition to its incorrect treatment of the foundational requirement of direct infringement, the majority creates a new, ill defined, and open-ended theory of liability for patent infringement, simply by "caus[ing], urg[ing], encourag[ing], or aid[ing]" someone to perform separate steps of a patented method. Maj. op. 15.

To support its unprecedented ruling of induced infringement without direct infringers, the court also misconstrues the 1952 Patent Act and its history. In 1948 then attorney Giles S. Rich testified that "obvious infringement" should be subject to remedy, and that judicial decisions "appear to make it impossible to enforce [combination] patents in the usual case." Contributory Infringement in Patents: Hearings Before the Subcomm. on Patents, Trade-Marks, and Copyrights of the House Comm. on the Judiciary, 80th Cong. 5 (1948) (statement of G.S. Rich on behalf of the New York Patent Law Association) ("1948 Hearings"). Mr. Rich gave an example of two equal participants in a radio system, sending and receiving, and described: "there is no direct infringer of the patent but only two contributory infringers." Id. The court today places great weight on this statement. However, a year later Mr. Rich testified again, stating that: "The law always has been that, to hold anyone for contributory infringement, there must have been somewhere a direct infringement which was contributed to." Contributory Infringement: Hearings on H.R. 3866 Before Subcomm. No. 4 of the House Comm. on the Judiciary, 81st Cong. 67 (1949) (statement of G.S. Rich) ("1949) Hearings"); id. at 5 ("Somewhere along the line there must be a direct infringement ").

In the 1951 hearings Mr. Rich again testified, stating that "wherever there is contributory infringement there is somewhere something called direct infringement, and to that direct infringement someone has contributed." Patent Law Codification and Revision: Hearings on H.R. 3760 Before Subcomm. No. 3 of the House Comm. on the Judiciary, 82nd Cong. 151 (1951) (statement of G.S. Rich). Mr. Rich never proposed the conditions of induced infringement that the court now propounds. Mr. Rich summarized, when the statute was enacted, that "[a]ctive inducement implies that there is not a direct infringement by the one doing the inducing and that the direct infringement was by another." G.S. Rich, Infringement Under Section 271 of the Patent Act of 1952, supra at 537.

The court's opinion quotes other testimony, none of which proposes or suggests the court's creative ruling. At the 1948 hearing Representative Kenneth Keating asked "[t]he law of torts is the basic part of patent law, is it not?," and Mr. Rich answered that: "Infringement is considered to be a tort and contributory infringement is a specific application to patent law of the law of joint tort feasor where two people somehow together create an infringement which neither one of them individually or independently commits." 1948 Hearings, at 12. At the 1949 hearing Mr. Rich again explained:

When two people combine and infringe a patent in some way or other, they are joint tort feasors, and it so happens that patents are often infringed by people acting in concert, either specifically or by implication, where neither one of them is a direct infringer. The only way you can protect your right is to proceed against someone who is not a direct infringer. That person who does something less than the direct infringement is called a contributory infringer.

1949 Hearings, at 3. The statements and testimony for the 1948 and 1949 hearings, quoted out of context in the court's opinion, do not state, or hint, that the proposed legislation would accommodate indirect infringement without direct infringers. Nowhere in the entire legislative effort did any supporter or sponsor of the codification of indirect infringement in §271(b) and (c) refer to "practicing" the claimed invention or "the acts necessary to constitute direct infringement" as liberated from the requirement of proving direct infringement, as the majority does today. Maj. op. 28, 13.

What about remedies?

According to the court's new ruling, it appears that the patentee cannot sue the direct infringers of the patent, when more than one entity participates in the infringement. The only remedial path is by way of "inducement." We are not told how compensation is measured. The only thing that is clear, is that remedy is subject to new uncertainties. Since the direct infringers cannot be liable for infringement, they do not appear to be subject to the court's jurisdiction. Perhaps the inducer can be enjoined—but will that affect the direct infringers? Since the inducer is liable when he breaches the "duty" not to induce, is the inducer subject to multiplication of damages? This return to the "duty to exercise due care to determine whether or not he is infringing" of *Underwater* Devices Inc. v. Morrison-Knudsen Co., Inc., 717 F.2d 1380, 1389 (Fed. Cir. 1983) raises tension with the ruling of the en banc court in In re Seagate Technology LLC, 497 F.3d 1360 (Fed. Cir. 2007) that overruled the standard of Underwater Devices.

Nor has the court ascertained the views of the communities affected by this change in law. The many *amici* curiae explained how the single-entity rule affects their

activities; none has had an opportunity to consider the effect of the inducement-only change now adopted *en banc*.

It is not necessary to change the law in order to design a fair infringement law. The court misconstrues "strict liability" as requiring that every participant in an interactive or collaborative method is fully responsible for the entire harm caused by the infringement. *Global–Tech Appliances, Inc. v. SEB S.A.*, 563 U.S. ____, 131 S. Ct. 2060, 2065 n.2 (2011), does not so hold. The tort principle of "strict liability" applies when injury results from inherently hazardous or dangerous activity, not from patent infringement. Black's Law Dictionary 998 (9th ed. 2009) sums up the law:

Liability that does not depend on actual negligence or intent to harm, but that is based on the breach of an absolute duty to make something safe. Strict liability most often applies either to ultrahazardous activities or in products-liability cases.

Although the term "strict liability" has crept into patentese, it does not have the consequences given by my colleagues. Proper analysis is illustrated by Blair & Cotter, who point out the inapplicability to patent infringement. Strict Liability and its Alternatives in Patent Law, 17 Berkeley Tech. L.J. 799 (2002). For example, they explain at page 808 that under a true strict liability standard, damages would be recoverable even before the accused infringer has "knowledge or notice that the conduct infringes." See 35 U.S.C. §287 (notice requirements).

As stated in *Carbice Corp. of America v. American Patents Development Corp.*, 283 U.S. 27, 33 (1931), "Infringement, whether direct or contributory, is essentially a tort, and implies invasion of some right of the patentee."

When the patent is infringed through the cooperation or interaction of more than one entity, assessment of remedy is appropriately allocated in accordance with traditional tort principles. The Court stated in *Burlington Northern & Santa Fe Railway Co. v. United States*, 556 U.S. 599, 614 (2009) that "apportionment is proper when there is a reasonable basis for determining the contribution of each cause to a single harm" (quotation omitted). These fundamentals apply here, and resolve all of the issues for which both factions of the court disrupt law and precedent.

Remedy for infringement may be apportioned on such traditional tort factors as the relative contribution to the injury to the patentee, the economic benefit received by the tortfeasor, and the knowledge and culpability of the actor. Applicable considerations are summarized in the Restatement of the Law Torts: Apportionment of Liability (2000), as follows:

- §8. Factors for Assigning Shares of Responsibility Factors for assigning percentages of responsibility to each person whose legal responsibility has been established include
- (a) the nature of the person's risk-creating conduct, including any awareness or indifference with respect to the risks created by the conduct and any intent with respect to the harm created by the conduct; and
- (b) the strength of the causal connection between the person's risk-creating conduct and the harm.

Comment c to §8 of the Restatement further elaborates on the factors for assigning shares of responsibility:

c. Factors in assigning shares of responsibility. . . . The nature of each person's risk-creating conduct

includes such things as how unreasonable the conduct was under the circumstances, the extent to which the conduct failed to meet the applicable legal standard, the circumstances surrounding the conduct, each person's abilities and disabilities, and each person's awareness, intent, or indifference with respect to risks. The comparative strength of the causal connection between the conduct and the harm depends on how attenuated the causal connection is, the timing of each person's conduct in causing the harm, and a comparison of the risks created by the conduct and the actual harm suffered by the plaintiff.

One or more of these factors may be relevant for assigning percentages of responsibility, even though they may not be a necessary element proving a particular claim or defense. However, these factors are irrelevant even to apportionment if there is no causal connection between the referenced conduct and the plaintiff's injuries. See Comment b. It should be noted that the mental-state factors in this Section may be considered for apportioning responsibility even if they are not themselves causally connected to the plaintiff's injury, as long as the risk-creating conduct to which they refer is causally connected to the injury.

Apportionment of remedy for shared infringement permits consideration of the actual situation, and is particularly suitable in cases of divided infringement. See Birdsell v. Shaliol, 112 U.S. 485, 488 (1884) ("In the case of infringement, the liability of infringers arises out of their own wrongful invasion of his rights."); Aro, 377 U.S. at 500 ("[A] contributory infringer is a species of joint-tortfeasor, who is held liable because he has contributed

with another to the causing of a single harm to the plaintiff.").

Whether the infringement is direct or indirect, the allocation of remedy is a case-specific determination. Grokster, 545 U.S. at 930 n.9, the Court observed that "the lines between direct infringement, contributory infringement and vicarious liability are not clearly drawn," quoting Sony, 464 U.S. at 435 n.17. Grokster accommodates the realities of today's technology without departing from the principles of precedent, by identifying when "it is just to hold one individual accountable for the actions of another." Sony, 464 U.S. at 435. When the several steps of a process claim are performed by more than one entity, whether the entities operate under common direction or control, or jointly or independently or interactively, remedy for infringement is appropriately allocated based on established criteria of culpability, benefit, and the like.

The law has always permitted allocation of remedy when multiple parties are responsible for civil wrongs. The example in Judge Linn's dissent at page 28, that the person who provides the nuts, bolts, or gears that hold together an infringing machine would be responsible for full damages for infringement by the machine, does not pass the chuckle test. I must also remark that according to the dissenters' thesis the manufacturer of the infringing machine would not be liable at all unless the purveyor of the nuts, bolts, or gears is in an agency relationship with a mastermind.

Although *Grokster* is mentioned in the majority's opinion, it is undercut by the majority's insistence that there is no need to establish direct infringement "[b]ecause the reasoning of our decision today is not predicated on the doctrine of direct infringement." Maj.

op. 13. However, in *Grokster* it was not disputed that the users of the defendants' systems were liable for direct infringement, and the Court held that the defendants could be liable for inducing the infringement.

When there is combined participation in direct infringement, there is a fair concern for imposing damages on minor participants. Law and precedent do not so require, and experience makes clear that the target is the deep-pocket commercial participant, not the occasional customer. For example, in the *McKesson* case neither the patient who accesses his medical records, nor the health-care provider who assembles and provides the records, was sued. Only the licensor of the system software was sued, for the injury to the patentee was in the commercial profit from the license of the software. Neither the single-entity rule nor the inducement-only rule is needed to protect the innocent patient who turns on his computer to access the system containing his medical records.

Potential for abuse

The majority states that "nothing in the text of either subsection [§271(a) or (b)] suggests that the act of 'infringement' required for inducement under section 271(b) must qualify as an act that would make a person liable as an infringer under section 271(a)," maj. op. 26–27, and holds that liability for inducement arises simply on "advis[ing]." *Id.* at 14. Now that this untenable theory is the law of this *en banc* court, potential for abuse looms large, for the majority does not require proof of direct infringement, but holds that the entity that advises or enables or recommends the divided infringement is fully responsible for the consequences of the direct infringement.

Many of the *amici curiae* pointed to ongoing abuses of the system of patents, and the ensuing disincentive to innovative commerce. The majority ignores these cautions, as it creates new potential problems. And while many innovative industries explained how they may be affected by possible rulings on divided infringement, not one of the many *amici* suspected the inducement-only theory that is here adopted.

IV

THE TWO CASES ON APPEAL

The majority remands for application of the inducement-only rule to the now-vacated panel decisions of Akamai and McKesson. In its remand instructions the majority declines guidance on direct infringement, instead stating at maj. op. 36: "While we do not hold that Akamai is entitled to prevail on its theory of direct infringement, the evidence could support a judgment in its favor on a theory of induced infringement." The panels had held that without direct infringement there cannot be induced infringement. That simple rule was confirmed over and over at the hearings leading to the 1952 Patent Act, for the legislative history plainly states the understanding that there must be direct infringement before there can be liability for inducement to infringe.

Brief review of the facts of the cases on appeal demonstrates that these cases are readily decided under the present law, with no need for creative revision of history.

Akamai Technologies, Inc. v. Limelight Networks, Inc., Appeal No. 2009-1372, -1380, -1416, -1417

The district court in *Akamai* held a full trial, on jury instructions that included the single-entity rule as established in *BMC Resources*. The jury found infringement, the district court granted JMOL after *Muniauction* was decided, and a panel of this court affirmed that there could be no infringement, based on failure to meet the

single-entity rule. The court today holds that there can be liability, but only for inducement.

The patent at issue, assigned to the Massachusetts Institute of Technology and licensed to Akamai, is entitled "Global Hosting System," a system for providing content delivery of website information. In brief, the text of a web page is stored on and served from the content provider's server, and other content such as images, video, and sound, called embedded objects, are stored on the hosting servers of a content delivery network. The defendant Limelight Networks provides such a content delivery system. Claims 19 and 34 of U.S. Patent No. 6,108,703 are representative of the claims asserted at trial, with Limelight providing the service but with the customer conducting the step of tagging of embedded objects (the boldface step):

19. A content delivery service, comprising:

replicating a set of page objects across a wide area network of content servers managed by a domain other than a content provider domain;

for a given page normally served from the content provider domain, **tagging the embedded objects** of the page so that requests for the page objects resolve to the domain instead of the content provider domain;

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

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

34. A content delivery method, comprising:

distributing a set of page objects across a network of content servers managed by a domain other than a content provider domain, wherein the network of content servers are organized into a set of regions;

for a given page normally served from the content provider domain, **tagging at least some of the embedded objects** of the page so that requests for the objects resolve to the domain instead of the content provider domain;

in response to a client request for an embedded object of the page:

resolving the client request as a function of a location of the client machine making the request and current Internet traffic conditions to identify a given region; and

returning to the client an IP address of a given one of the content servers within the given region that is likely to host the embedded object and that is not overloaded.

The single-entity issue turned on the tagging step performed by the customer. Akamai pursued the charge of direct infringement, recognizing precedent and thus arguing that the single-entity rule is satisfied because the customer tags the embedded objects in accordance with instructions provided by Limelight, within the context of a contractual relationship. The issue of "direction or control" was extensively explored at trial, and the jury was instructed in accordance with *BMC Resources*:

If Limelight did not direct and control this action, then this substitution cannot be attributed to Limelight. And Limelight cannot, therefore, infringe. . . .

Again, the first [question] again is whether this method of getting to the Defendant content delivery network infringes any claim, and the second question, again, is whether the content provider acted under the direction and control of Limelight. And again, if Limelight directed and controlled this action, it was effectively the action of Limelight, and then it may be found responsible. But if Limelight did not direct and control, both are necessary, the modification at the content provider, then it cannot be deemed to infringe.

. . .

So, you should review the evidence, decide how the Limelight systems work, how does the interaction with the content provider work, and, specifically, does Limelight direct and control the modifications or does the content provider carry out these tasks entirely independently. Then compare each of the mechanisms with what is claimed in the certain claims and, specifically, does either of the Defendant's content delivery methods practice each element of whichever claim you are considering.

Trial Tr. 20:20 to 22:4 (Feb. 28, 2008), J.A. 818–19. The district court further instructed the jury, after discussion with counsel, that "[i]t is either direct or control, control or direct; it doesn't have to be both." *Id.* at 53:3–5, J.A. 826.

The jury found that Limelight infringed the claims. Limelight moved for judgment as a matter of law, and the district court denied the motion, explaining that "unlike in *BMC Resources*, here 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." *Akamai Techs.*, *Inc. v. Limelight Networks*, *Inc.*, 614 F. Supp. 2d 90, 119 (D. Mass. 2009).

Two weeks later this court decided *Muniauction*, and the district court received Limelight's request for reconsideration on the ground that *Muniauction* established the additional requirement that direct infringement "requires a showing that the accused direct infringer is vicariously liable for the acts committed by any others required to complete performance of the claimed method," a more rigorous standard than had been presented to the jury based on *BMC Resources*. Dkt. No. 377, at 2 (July 25, 2008). The district court found that there was "no material difference between Limelight's interaction with its customers and that of Thompson [sic] in *Muniauction*." *Akamai*, 614 F. Supp. 2d at 122. The district court held that on the law established in *Muniauction*, the jury verdict of infringement could not be sustained.

The majority now remands for application of its inducement-only rule. However, on the jury instruction that was given, the majority's criteria for infringement are met. And this endless litigation is further prolonged, for the majority gives no appellate review to the other issues on appeal, including claim construction, the measure of damages, and other decisions of the district court presented for appellate review. They are ignored.

McKesson Technologies Inc. v. Epic Systems Corp., Appeal No. 2010-1291

McKesson's action was for inducement of infringement by Epic Systems, who licenses a software system that is designed for interactive use by healthcare providers and their patients. The patent, entitled "Electronic Provider—Patient Interface System," is for "a communication system for providing automated, electronic communications between at least one health-care provider and a plurality of users of the health-care provider." U.S. Patent No. 6,757,898, abstract. The patent states that

"once the patient has logged into his/her own Web page," the patient can access a variety of healthcare records and services including "appointment requests and updates, prescription refills, online triage, health search information and the like." *Id.* at col.4 ll.52–56. Epic has a system called MyChart, and licenses the system software to health-care providers.

The district court applied *Muniauction*, and granted summary judgment that the patent cannot be directly infringed, and thus that there cannot be inducement to infringe. The district court held that because the patient performs some steps of the claim, direct infringement is precluded because neither the healthcare provider nor the provider of the overall system directs or controls the actions of the patient. Application of the majority's theory of inducement could help to clarify today's rulings, with their uncertainties and contradictions.

As claimed in the '898 patent, the patient initiates a communication as the first step of the method, which includes interactive steps:

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

initiating a communication by one of the plurality of users to the provider for information, wherein the provider has established a preexisting medical record for each user;

enabling communication by transporting the communication through a provider/patient interface over an electronic communication network to a Web site which is unique to the provider, whereupon the communication is automatically reformatted and processed or stored on a central server, said Web site supported by or in communication with the central server through a providerpatient interface service center;

electronically comparing content of the communication with mapped content, which has been previously provided by the provider to the central server, to formulate a response as a static or dynamic object, or a combined static and dynamic object; and

returning the response to the communication automatically to the user's computer, whereupon the response is read by the user or stored on the user's computers

said provider/patient interface providing a fully automated mechanism for generating a personalized page or area within the provider's Web site for each user serviced by the provider; and

said patient-provider interface service center for dynamically assembling and delivering custom content to said user.

McKesson charged Epic with inducing infringement of the '898 patent. Epic argued in defense that in accordance with *BMC Resources* the claims cannot be directly infringed because no single entity performs or directs or controls every step of the claimed method. McKesson responded that the requirements of *BMC Resources* are met, in that the healthcare provider controls the patient's access to the MyChart system, for the healthcare provider requires the user to accept a "cookie" in order to use the system and the system requires login information to restrict the user's access to information.

The district court at first denied summary judgment, finding genuine issues of material fact as to the question of direction or control. This court then decided *Muniauc*-

tion, and the district court concluded that summary judgment of noninfringement was "compel[ed]." *McKesson*, 2009 WL 2915778, at *5. The district court drew analogy to the facts and result in *Muniauction* to conclude that there could not be direct infringement as a matter of law. The majority is silent on the provisions embodied in *Muniauction*, although the district court held them to be controlling.

CONCLUSION

The issues that were presented for *en banc* review can be simply resolved on the present law. The court should acknowledge that an all-purpose single-entity requirement is flawed, and restore direct infringement to its status as occurring when all of the claimed steps are conducted, whether by a single entity or in interaction or collaboration. Remedy is then allocated as appropriate to the particular case, whether for direct or induced or contributory infringement, in accordance with statute and the experience of precedent.

The court has fractured into two flawed positions, each a departure from established precedent, each poorly suited to the issues and technologies that dominate to-day's commerce. Today's new rule of inducement-only liability serves no public interest, no innovation need. The consequences for the technology communities are uncertainty, disincentive, and new potential for abuse.

United States Court of Appeals for the Federal Circuit

AKAMAI TECHNOLOGIES, INC.,

Plaintiff-Appellant,

AND

THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY,

Plaintiff-Appellant,

v.

LIMELIGHT NETWORKS, INC.,

Defendant-Cross Appellant.

2009-1372, -1380, -1416, -1417

Appeal from the United States District Court for the District of Massachusetts in Nos. 06-CV-11109 and 06-CV-11585, Judge Rya W. Zobel.

AND

MCKESSON TECHNOLOGIES, INC. (formerly McKesson Information Solutions, LLC),

Plaintiff-Appellant,

v.

EPIC SYSTEMS CORPORATION,

Defendant-Appellee.

2010-1291

Appeal from the United States District Court for the Northern District of Georgia in No. 06-CV-2965, Judge Jack T. Camp.

LINN, Circuit Judge, dissenting, with whom Circuit Judges DYK, PROST, and O'MALLEY join.

I. Introduction

In its opinion today, this court assumes the mantle of policy maker. It has decided that the plain text of §§ 271(a) and (b) fails to accord patentees certain extended rights that a majority of this court's judges would prefer that the statute covered. To correct this situation, the majority effectively rewrites these sections, telling us that the term "infringement" was not, as was previously thought, defined by Congress in § 271(a), but instead can mean different things in different contexts.

The majority's approach is contrary to both the Patent Act and to the Supreme Court's longstanding precedent that "if there is no direct infringement of a patent there can be no contributory infringement." Aro Mfg. Co. v. Convertible Top Replacement Co., 365 U.S. 336, 341 (1961); Deepsouth Packing Co. v. Laitram Corp., 406 U.S. 518, 526 (1972) (quoting Mercoid Corp. v. Mid-Continent Co. (Mercoid I), 320 U.S. 661, 677 (1944) (Frankfurter, J., dissenting on other grounds); see also Joy Techs., Inc. v. Flakt, Inc., 6 F.3d 771, 774 (Fed. Cir. 1993) ("Liability for either active inducement of infringement or for contribu-

tory infringement is dependent upon the existence of direct infringement."); C.R. Bard v. Advanced Cardiovascular Sys., Inc., 911 F.2d 670, 673 (Fed. Cir. 1990) (same). In 1952, Congress removed joint-actor patent infringement liability from the discretion of the courts, defining "infringement" in § 271(a) and expressly defining the *only* situations in which a party could be liable for something less than an infringement in §§ 271(b) and (c)—clearing away the morass of multi-actor infringement theories that were the unpredictable creature of common law. Since that time, Congress has on three occasions made policy choices to treat certain special circumstances as tantamount to "infringement." See 35 U.S.C. §§ 271(e)(2), (f), and (g). In doing so, Congress did not give the courts blanket authority to take it upon themselves to make further policy choices or define "infringement."

The majority opinion is rooted in its conception of what Congress ought to have done rather than what it did. It is also an abdication of this court's obligation to interpret Congressional policy rather than alter it. When this court convenes en banc, it frees itself of the obligation to follow its own prior precedential decisions. But it is beyond our power to rewrite Congress's laws. Similarly, we are obliged to follow the pronouncements of the Supreme Court concerning the proper interpretation of those acts. Rivers v. Roadway Express, Inc., 511 U.S. 298, 312–313 (1994); Rodriguez de Quijas v. Shearson/Am. Express, Inc., 490 U.S. 477, 484 (1989).

On this unsound foundation, the majority holds that in the present appeals there has been predicate "infringement" even though § 271(a)'s requirements are not satisfied. On that basis, the majority vacates the contrary judgments of the district courts and remands for further proceedings concerning liability under § 271(b). In my view, the plain language of the statute and the unambiguous holdings of the Supreme Court militate for adoption

en banc of the prior decisions of the court in *BMC Resources, Inc. v. Paymentech, L.P.*, 498 F.3d 1373, 1378-79 (Fed. Cir. 2007) and *Muniauction, Inc. v. Thomson Corp.*, 532 F.3d 1318, 1329 (Fed. Cir. 2008), which hold that liability under § 271(b) requires the existence of an act of direct infringement under § 271(a), meaning that all steps of a claimed method be practiced, alone or vicariously, by a single entity or joint enterprise. For these reasons, I respectfully dissent.

II. DISCUSSION

A. Direct Infringement Liability is a *Sine Qua Non* of Indirect Infringement Liability

The majority essentially skirts the en banc question in the *Akamai* case by holding that "[b]ecause the reasoning of our decision today is not predicated on the doctrine of direct infringement, we have no occasion at this time to revisit any of those principles regarding the law of divided infringement as it applies to liability for direct infringement under 35 U.S.C. § 271(a)." Maj. Op. 13. With all due respect to my colleagues in the majority, the question of "joint infringement" liability under § 271(a) is essential to the resolution of these appeals. Divorcing liability under § 271(a) from liability under § 271(b) is unsupported by the statute, subverts the statutory scheme, and ignores binding Supreme Court precedent.

1. The Statutory Scheme

Patent infringement is not a creation of common law. It is a statutorily-defined tort. See 3D Sys., Inc. v. Aarotech Labs., Inc., 160 F.3d 1373, 1379 (Fed. Cir. 1998) ("[T]he tort of infringement . . . exists solely by virtue of federal statute."); N. Am. Philips Corp. v. Am. Vending Sales, Inc., 35 F.3d 1576, 1579 (Fed. Cir. 1994). "Defining the contours of the tort of infringement . . . [thus] entails

the construction of the federal statute." 3D Sys., 160 F.3d at 1379.

35 U.S.C. § 271(a) provides that:

Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.

Section 271(a) defines infringement. H.R. Rep. No. 82-1923, at 9 (1952) ("Section 271, paragraph (a), is a *declaration of what constitutes infringement.*") (emphasis added)). 35 U.S.C. §§ 271(b) and (c), in turn, codify the doctrines of inducement and contributory infringement respectively:

- (b) Whoever actively induces infringement of a patent shall be liable as an infringer.
- (c) Whoever offers to sell or sells within the United States or imports into the United States a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, 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.

Congress carefully crafted subsections (b) and (c) to expressly define the *only* ways in which individuals not completing an infringing act under § 271(a) could nevertheless be liable, rejecting myriad other possibilities that existed in the common law at the time, such as, for exam-

ple, Peerless Equipment Co. v. W.H. Miner, Inc., 93 F.2d 98, 105 (7th Cir. 1938) and Solva Waterproof Glue Co. v. Perkins Glue Co., 251 F. 64, 73-74 (7th Cir. 1918). In creating §§ 271(b) and (c), Congress intended to codify "contributory" infringement liability in a limited manner:

The doctrine of contributory infringement has been a part of our law for about 80 years. . . . Considerable doubt and confusion as to the scope of contributory infringement has resulted from a number of decisions of the courts in recent years. The purpose of [section 271] is to codify in statutory form principles of contributory infringement and at the same time eliminate this doubt and confusion. Paragraph (b) recites in broad terms that one who aids and abets an infringement is likewise an infringer. The principle of contributory infringement is set forth in ... paragraph [(c)] which is concerned with the usual situation in which contributory infringement arises. graph (c) is much more restricted than many proponents of contributory infringement should be the case.

H.R. Rep. No. 82-1923, at 9 (1952) (emphasis added). While subsections (b) and (c) are not mutually exclusive, they each address a particular type of multi-party conduct.

Reading subsection (b) in light of subsection (a) is a straightforward exercise. Section 271(a) defines infringement, and, in turn, §§ 271(b) and (c) establish indirect infringement liability for one who "actively induces *infringement*" or sells a component part "especially adapted for use in an *infringement*" (emphases added). A person who practices the entire invention is an infringer, liable under subsection (a); a person who actively induces such practice is an inducer, liable under subsection (b)

("positive articulation"). The negative inference is equally straightforward: A person who does not practice the entire invention is not liable under subsection (a); a person who actively induces such partial practice is not liable under subsection (b) ("negative articulation"). Such has been the consistent reasoning of this court (and of the Supreme Court, see infra) for years. Joy Techs., 6 F.3d at 774 (citing Supreme Court and Federal Circuit precedent).

The majority rejects this reasoning. It is satisfied with the positive articulation but not the negative articulation because the latter means that some claims (e.g., the claims on appeal) are unenforceable in the absence of a direct infringer. The majority attempts to avoid the result of some patentees having technically valid but valueless claims by essentially rewriting subsection (b) so that it reads: "Whoever actively induces infringement of [or induces two or more separate parties to take actions that, had they been performed by one person, would infringe] a patent shall be liable as an infringer."

2. It is Impermissible to Redefine "Infringement" for the Purposes of Establishing Liability Under § 271(b)

To support its tenuous position, the majority impermissibly bends the statute to define direct infringement differently for the purposes of establishing liability under §§ 271(a) and (b). The majority asserts that "[s]ection 271(a) does not define the term 'infringement.' Instead, it simply sets forth a type of conduct that qualifies as infringing." Maj. Op. 26. Contrary to the majority's statement, however, both the House and Senate reports from the statute's adoption confirm that § 271(a) is, in fact, "a declaration of what constitutes infringement in the present statute." S. Rep. No. 82-1979, at 8 (1952) (emphasis added); accord H.R. Rep. No. 82-1923, at 9 (1952). In Aro, the Supreme Court unequivocally stated the same: "And § 271(a) of the new Patent Code, which defines 'infringe-

ment,' left in tact the entire body of case law on direct infringement." 365 U.S. at 342 (emphasis added).

The idea of defining infringement separately in the context of §§ 271(a) and (b) is simply unsupported by the text itself. See 35 U.S.C. §§ 271(a) and (b). The majority essentially asserts that the word "infringement" in § 271(b)—and presumptively § 271(c) as well—can be defined however this court wants without reference to any statutory provision. Such a bold move from settled principles is unsupported and unwarranted. Congress is presumed to have intended the word "infringement" in §§ 271(b) and (c) to target the same conduct as "infringes" in § 271(a); it is the same word, simply used as a verb in paragraph (a) to define the act. See Taniguchi v. Kan Pac. Saipan, Ltd., 132 S. Ct. 1997, 2004-05 (2012) ("[I]t is a normal rule of statutory construction that identical words used in different parts of the same act are intended to have the same meaning.") (internal quotations omitted)); Hall v. United States, 132 S. Ct. 1882, 1891 (2012) ("At bottom, identical words and phrases within the same statute should normally be given the same meaning. . . . Absent any indication that Congress intended a conflict between two closely related chapters, we decline to create one." (internal quotation omitted)). As the Supreme Court has held, when the relevant language "was inserted into [the statutory provisions] at the same time," as is the case with §§ 271(a)-(c), "[t]hat maxim is doubly appropriate." Powerex Corp. v. Reliant Energy Servs., Inc., 551 U.S. 224, 232 (2007) (emphasis added). "The interrelationship and close proximity of these provisions of the statute presents a classic case for application of the normal rule of statutory construction that identical words used in different parts of the same act are intended to have the same meaning." Comm'r v. Lundy, 516 U.S. 235, 250 (1996) (internal quotations omitted).

The limited doctrines of indirect infringement are explicitly premised on an underlying "infringement." See 35 U.S.C. §§ 271(a)-(c); Aro, 365 U.S. at 341. The Supreme Court has expressly rejected interpreting the 1952 Act to divorce indirect infringement from direct infringement. In Aro, the Supreme Court unequivocally held: "[I]t is settled that if there is no direct infringement of a patent there can be no contributory infringement." Aro, 365 U.S. at 341. The majority argues that Aro does not stand for the proposition that "liability for inducement requires that a single party be liable for direct infringement" because the issue in Aro was limited to whether there was any underlying act of direct infringement based on the defense of permissible repair. Maj. Op. 30-31. The majority's attempt to distance Aro from this case is unconvinc-There is no indication in the Supreme Court's statement in Aro that it was intended to have such a limited meaning. The question of whether or not there was *liability* for an underlying act of direct infringement was squarely at issue in Aro, and the Court held that without "direct infringement under § 271(a)," i.e., liability, there can be no indirect infringement. 365 U.S. at 341 ("[Defendant's] manufacture and sale [of a component part] with . . . knowledge might well constitute contributory infringement under § 271(c), if, but only if, such a replacement by the purchaser himself would in itself constitute a direct infringement under § 271(a)." (emphasis added)). Not being liable under § 271(a) based on the doctrine of permissible repair is indistinguishable from not being liable under § 271(a) based on the fact that no one has made, used, offered for sale, or sold the patented invention, i.e., no one has performed a complete act of direct infringement. In Aro, the Supreme Court meant exactly what it said: "In a word, if there is no infringement of a patent there can be no contributory infringer,' ... and ... 'if the purchaser and user could not be amerced as an infringer certainly one who sold to him . . . cannot be amerced for contributing to a non-existent

infringement." *Id.* (quoting *Mercoid I*, 320 U.S. at 674, 677). The word "amerced" is directly tied to *liability*. The Supreme Court was not just talking about underlying conduct, but liability. Unless someone is liable as a direct infringer, no one is liable for indirect infringement.

The majority cites portions of congressional testimony by Giles S. Rich (later "Judge Rich") to support its interpretation of the statute. But Judge Rich's testimony is inconclusive and raises as many questions as it answers. First, it is not at all apparent that the statement relied on by the majority at pages 19-20 of its opinion is actually directed to inducement and not contributory infringement. As the majority itself recognizes, "[p]rior to the 1952 Act, inducement and contributory infringement were both referred to under the rubric of contributory infringement." Maj. Op. 17 (citing Giles S. Rich, Infringement Under Section 271, 21 Geo. Wash. L. Rev. 521, 537 Moreover, Judge Rich later took a seemingly different position before Congress at the 1951 hearings, stating: "I should state at the outset that wherever there is contributory infringement there is somewhere something called direct infringement, and to that direct infringement someone has contributed. It is a very different thing from a concept like contributory negligence." Aro, 365 U.S. at 347 n.1 (quoting Hearings before Subcomm. of House Judiciary Comm. On H.R. 3760, 82d Cong. 151 (1951).

However the testimony may be read, the Supreme Court has repeatedly admonished that Congressional hearing testimony, not from a member of Congress, is not entitled to any weight or significance in statutory interpretation. See, e.g., Kelly v. Robinson, 479 U.S. 36, 51 n.13 (1986) (Even when "comments in the hearings . . . may suggest that the language bears the interpretation [in question b]ut none of those statements was made by a Member of Congress, nor were they included in the official

Senate and House Reports[, w]e decline to accord any significance to these statements."); *McCaughn v. Hershey Chocolate Co.*, 283 U.S. 488, 493 (1931) (The same principle applies to "statements . . . made to committees of Congress or in discussions on the floor of the Senate by senators who were not in charge of the bill."). "For reasons which need not be restated, such individual expressions are with out weight in the interpretation of a statute." *McCaughn*, 283 U.S. at 494 (citations omitted). With the upmost respect for Judge Rich, his testimony at the Congressional hearings does not and cannot justify extending by judicial fiat the scope of § 271 beyond the words chosen by Congress to reflect *its* intent.

Under the majority's approach, if two or more parties independently practice the elements of a claim, an act of "infringement" to support a charge of induced infringement under § 271(b) has occurred. See Maj. Op. 16-17. The problem with that approach is that there is no statutory basis for concluding that such independent acts constitute infringement and no basis for asserting a cause of action for infringement against any of those independent parties. This runs directly afoul of 35 U.S.C. § 281, which provides that when there is an "infringement," "[a] patentee shall have remedy by civil action " § 281 (emphasis added). As the majority points out, "[s]ection 281... was designed to serve as a 'preamble' for the sections on remedies and to ensure that an action for infringement (a 'civil action') would be triable to a jury." Maj. Op. 27 (citing H.R. Rep. No. 82-1923, at 10, 29 (1952) ("[T]he modern term civil action is used, [so] there would be, of course, a right to a jury trial."). While the majority looks to the legislative history as evincing that § 281 does "not declare that any practicing of a patented invention necessarily brought with it the right of the patent owner to recover in a civil action for infringement," Maj. Op. 28 (emphasis added), whether there is a recovery or not is beside the point. The fact remains that, under § 281,

where patent "infringement" exists, a patentee has a right to plead a cause of action in civil court, i.e., the patentee has a right *not* to have his claim dismissed under Fed. Rule of Civ. P. 12(b)(6) for "failure to state a claim upon which relief *can* be granted" (emphasis added).

The Majority's reliance on Fromson v. Advance Offset Plate, Inc., 720 F.2d 1565, 1567 (Fed. Cir. 1983), is misplaced and misleading. First, Fromson merely vacates an incorrect claim construction. Id. at 1571. Contrary to the majority's reading, there was no holding in Fromson that a party could contributorily infringe a method claim by performing some but not all of the steps thereof. Second, Fromson never identified the claims that were potentially contributorily infringed. As the Majority notes, the case involved both product and process claims. Maj. Op. 34. A product claim is directly infringed by making the product. Thus, the statement in Fromson can be read to relate only to the product claims. Third, in the sentences immediately after the portion quoted by the Majority, the court in Fromson explained that even though some products were not completed by the accused infringer (but by the customer), other products were. Thus, the claim construction issue actually decided in that case did not depend on the resolution of the doctrinal question at issue here. Finally, Fromson contains no doctrinal analysis on this issue. Rather it contains little more than a recitation of hornbook law in explaining the background of the appeal.

Broadening the doctrine of inducement, such that no predicate act of direct infringement is required, is a sweeping change to the nation's patent policy that is not for this court to make. See Mayo Collaborative Servs. v. Prometheus, 132 S. Ct. 1289, 1305 (2012) ("[W]e must hesitate before departing from established general legal rules lest a new protective rule that seems to suit the needs of one field produce unforeseen results in another. And we must recognize the role of Congress in crafting

more finely tailored rules where necessary."). This is not a case where Congress has given us a statute of unclear meaning and it falls to the court to interpret the statute. This is the opposite case, where the meaning of Congress's enactments is clear. That a majority of this court dislikes the policy that results from the statute as Congress wrote it is not a valid foundation for the action taken today. *See id.* (declining to determine "whether, from a policy perspective, increased protection for discoveries of diagnostic laws of nature is desirable").

3. Congress's Addition of §§ 271(e)(2), (f), and (g) Exemplify that Defining Infringement is not the Province of This Court

The majority points to the more recent additions of 35 U.S.C. §§ 271(e)(2), (f), and (g) as evidence that "the statute uses the term 'infringement' in a way that is not limited to the circumstances that give rise to liability under section 271(a)." Maj. Op. 27. From this, the majority justifies its new definition of "infringement" under § 271(b). Maj. Op. 16 (defining "infringement" for the purposes of inducement liability as "acts that collectively practice the steps of the patented method"). But these newer additions do not support the majority; indeed they contradict it. Section 271(b) does not define infringement at all. Section 271(a) does. Aro, 365 U.S. at 342. Section 271(b) was added with knowledge of the definition of infringement in § 271(a). See id.

Congress enacted §§ 271(e) and (f) in 1984 and § 271(g) in 1987 to satisfy specific policy goals. The fact that §§ 271(e), (f), and (g) identify acts not falling under § 271(a) that are to be treated as infringement confirms that, when Congress intended to cover acts not encompassed within the traditional definition of infringement, it knew how to create an alternative definition thereof. For example, Congress enacted § 271(e)(2) to create "an act of

patent infringement [when a party] submit[s] an ANDA for a drug (1) which is claimed in a valid product patent, or (2) a use of which is claimed in a valid use patent . . . " H.R. Rep. No. 98-857, at 26 (1984). Section 271(e)(2), is "a highly artificial act of infringement," Eli Lilly & Co. v. Medtronic, Inc., 496 U.S. 661, 678 (1990), which Congress created to satisfy "a very limited and technical purpose that relates only to certain drug applications," id. at 676. Similarly, Congress enacted § 271(f) to create "an [act of] infringement [when an entity] suppl[ies] components of a patented invention . . . that are to be combined *outside the* United States." H.R. Rep. No. 1984 U.S.C.C.A.N. 5827, 5828 (emphasis added). In passing that section, Congress responded to the Supreme Court's decision in Deepsouth Packing Co. v. Laitram Corp., 406 U.S. 518 (1972), interpreting § 271(a) to exclude such extraterritorial acts. This was "a legislative solution to close a loophole in patent law." H.R. Rep. No. 1984 U.S.C.C.A.N. 5827, 5828 (emphasis added); see also S. Rep. No. 98-663, at 3 (1984) (explaining the policy goal of preventing entities from "circumvent[ing] a patent" by supplying components for assembly abroad). Finally, Congress enacted § 271(g) to create an act of infringement when an entity "without authority imports in the United States or sells or uses within the United States a product which is made by a process patented in the United States." S. Rep. No. 100-83, at 48 (1987). The House Report explains that "[t]here [wa]s no policy justification for encouraging such overseas production and concurrent violation of United States intellectual property rights. The courts cannot solve this defect. The Congress can. The compelling nature of this policy deficiency has been evident to leaders in both the legislative and executive branches." H.R. Rep. No. 100-60, at 6 (1987) (emphasis added).

Congress knows how to create alternative forms of infringement. Congress, however, apparently does not take issue with this court's interpretation of §§ 271(a), (b), and

(c) in *BMC* and *Muniauction*. If it did, Congress recently had the chance to amend the statute in the Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011), signed into law on September 16, 2011. The fact that Congress was aware of *BMC* and *Muniauction* when it reformed the 1952 Patent Act indicates that Congress did not intend to abrogate the single entity rule for direct infringement, or broaden indirect infringement liability beyond its intentionally limited scope.

4. The Majority's Analogies to Criminal and Tort Law are Flawed

In an attempt to justify its statutory revision, the majority overstates and improperly analogizes to fundamental principles of criminal and tort law. The majority asserts that 18 U.S.C. § 2 "has been construed to permit the conviction of an accessory who induces or causes a criminal offense even when the principal is found not liable for the unlawful conduct." Maj. Op. 22 (citing Standefer v. United States, 447 U.S. 10, 19 (1980). This proposition is unremarkable, however, as illustrated by Standefer. In Standefer, while the principal was acquitted on the relevant charges in a separate trial, the Supreme Court found that, in the trial at bar, the "petitioner received a fair trial at which the Government . . . prov[ed] beyond reasonable doubt that [the principal] violated [the statute and that petitioner aided and abetted him in that venture." 447 U.S. at 26. The Supreme Court held: "In denying preclusive effect to the [principal's] acquittal [in the previous trial], . . . [t]his case does no more than manifest the simple, if discomforting reality that different juries may reach different results under any criminal statute." Id. at 25 (internal quotations omitted). Standefer, the Supreme Court required proof of the underlying statutory violation, the Government met its burden to prove the underlying statutory violation in the case at bar, and thus the case does not stand for the broad proposition that the majority has quoted it for.

Moreover, the Majority's statutory analogy to 18 U.S.C. § 2 is facially incorrect. Each of the cases upon which the majority relies to assert that "the inducer's liability does not turn on whether the intermediary is factually guilty or even capable of committing the charged offense," Maj. Op. 22, was decided under 18 U.S.C. § 2(b), which imposes liability on a defendant who causes an "act," which "would be an offense," to be done through an intermediary (who may be innocent). 18 U.S.C. § 2(b) ("Whoever willfully causes an act to be done which, if directly performed by him or another would be an offense against the United States, is punishable as a principal."); Maj. Op. 22 (citing United States v. Tobon-Builes, 706 F.2d 1092, 1099 (11th Cir. 1983), United States v. Gleason, 616 F.2d 2, 20 (2d Cir. 1979), and United States v. Rapoport, 545 F.2d 802, 806 (2d Cir. 1976)). The appropriate analogy, however, is between 35 U.S.C. § 271(b) and 18 U.S.C. § 2(a), not § 2(b). Section 2(a) provides that anyone who "aids, abets, counsels, commands, induces or procures [the] commission [of a crime], is punishable as a principal." Compare with 35 U.S.C. § 271(b) ("Whoever actively induces infringement of a patent shall be liable as an infringer."). In United States v. Concepcion, 983 F.2d 369 (2d Cir. 1992), the second circuit explained:

The requirements of § 2(a) [Federal criminal aiding and abetting or "inducement"], however, are somewhat different [than § 2(b)]. Whereas § 2(a) speaks in terms of procuring or aiding and abetting the commission of an "offense," and hence requires proof that the primary actor had criminal intent, § 2(b) speaks in terms of causing the actor to perform only an "act."

Id. at 383. When a defendant is charged with aiding and abetting under § 2(a)—unlike for a defendant who is a cause in fact of a "would be" offense under § 2(b)—the guilt of the principal must be proven. Id. at 383-84. "It is hornbook law that a defendant charged with aiding and abetting the commission of a crime by another [under § 2(a)] cannot be convicted in the absence of proof that the crime was actually committed" (although the principal need not be prosecuted or may have been acquitted by a separate jury in a different trial, been granted immunity from liability, or pleaded to a lesser offense). United States v. Ruffin, 613 F.2d 408, 412-13 (2d Cir. 1979) (holding that "the acquittal of [the principal] by the same jury which convicted [the appellant] precludes a finding under 18 U.S.C. § 2(a) that [the appellant] aided and abetted . . . the alleged crime"); accord Standefer, 447 U.S. at 25-26 (1980).

Like 18 U.S.C. § 2(a), which requires an actual "offense," 35 U.S.C. § 271(b) requires an actual "infringement." Congress's specific addition of subsection (b) to 18 U.S.C. § 2 in 1948 to capture situations that did not qualify as aiding and abetting in the criminal context discredits the majority's position that we can reach an analogous result in the context of inducement under 35 U.S.C. § 271, absent a similar statutory revision by Congress. See Concepcion, 983 F.2d at 383-84 (explaining that Congress added subsection 2(b) in 1948 to reach situations where the primary actor did not "have . . . the 'essential criminal intent" to "secure a conviction on a theory of aiding and abetting in violation of subsection (a)" (citations omitted)). The majority does not even attempt to explain its reliance on 18 U.S.C. § 2(b) despite the fact that the operative language of 18 U.S.C. § 2(b)— "would be an offense"—is not found in 35 U.S.C. § 271(b). If Congress wished for inducement under 35 U.S.C. § 271(b) to reach the inducement of acts that "would be" an infringement, Congress would have had to use similar language to that in 18 U.S.C. § 2(b), such as it did in 35 U.S.C. § 271(f), which says "would infringe." The majority's "liability-free direct infringement to support inducement" theory is, thus, contrary to the "generally recognized" principle that "there can be no conviction for aiding and abetting someone to do an innocent act." Shuttlesworth v. City of Birmingham, 373 U.S. 262, 265 (1963).

Even if 18 U.S.C. § 2(b) "causation" liability could be compared to inducement under 35 U.S.C. § 271(b)—which as explained *supra*, it cannot—to be liable under § 2(b) the actor must nevertheless cause "prohibited conduct." Ruffin, 613 F.2d at 413; accord Tobon-Builes, 706 F.2d 1092, 1099 ("[I]t is well established that § 2(b) was designed to impose criminal liability on one who causes an intermediary to commit a criminal act " (emphasis added); Gleason, 616 F.2d at 20 ("Under 18 U.S.C. § 2(b) a person who causes an innocent party to commit an act which, if done with the requisite intent, would constitute an offense may be found guilty as a principal " (emphasis added)); Rapoport, 545 F.2d at 806 (same). In contrast here, the tort of patent infringement is statutorily defined in § 271(a) as the unauthorized "mak[ing], us[ing], offer[ing] to sell, or sell[ing] any patented invention." § 271(a) (emphasis added). Practicing less than all elements of a claim is not patent infringement under § 271(a). Warner-Jenkinson Co. v Hilton Davis Corp., 520 U.S. 17, 40 (1997); Aro, 365 U.S. at 340 ("The patent is for a combination only. Since none of the separate elements of the combination is claimed as the invention, none of them when dealt with separately is protected by the patent monopoly." (quoting Mercoid I, 320 U.S. at 667)). When a person induces one or more entities to perform acts that do not constitute the statutorily defined act of patent infringement—i.e., induces some form of partial or "contributory" action—that person does not induce any

prohibited conduct under the statute, and thus cannot be said to aid and abet any prohibited conduct. See Shuttlesworth, 373 U.S. at 265.

The majority also errs in stating that "liability for inducement of a tort applies even if the person being induced is unaware that his act is injurious and is not liable for that reason." Maj. Op. 24 (emphasis added). The majority cites the Restatement of Torts ("1st Restatement") § 876 cmt. b (1938), but that comment merely states that a defendant may be liable for assisting or encouraging the tortious conduct of another "whether or not the other knows his act to be tortious." The premise of the 1st Restatement is that an encouraged person is liable for "tortious conduct." The 1st Restatement does not suggest that the "encouraged party" would not be liable. See 1st Restatement § 876 cmt. b, illus. 4-5. Nor do the cited cases support the majority's proposition that inducement can be based upon liability-free acts. In each of these cases, the alleged liability is based on the defendant's breach of a direct duty to the plaintiffs; the cases are thus direct liability cases—analogous to direct or vicarious liability situations in the patent law context under § 271(a)—and are not dependent upon the commission of a separate statutorily defined tortious act by some innocent or otherwise immune party. Pelster v. Ray, 987 F.2d 514, 523-24 (8th Cir. 1993) (rejecting a directed verdict for defendants where defendants allegedly sold the plaintiff a car knowing that the vendor had rolled back the odometer); Hoyt v. Clancey, 180 F.2d 152, 158 (8th Cir. 1950) (not reaching liability, but rather remanding because "the court's ruling on evidence were [sic] unreasonably restrictive"); Learjet Corp. v. Spenlinhauer, 901 F.2d 198, 203 (1st Cir. 1990) (plaintiff stated a claim for fraudulent misrepresentation based on defendant's intentional false misrepresentations to the FAA); Davis v. Louisville Trust Co., 181 F. 10, 20 (6th Cir. 1910) (fraudu-

lent misrepresentation based on false representations to a publishing agency "with knowledge . . . that their substance would be published to all who might wish to deal with the companies "); Hawkins v. Upjohn Co., 890 F. Supp. 609, 611 (E.D. Tex. 1994) (plaintiff stated a claim for conspiracy to commit fraud based on "defendants' repeated and concerted efforts to manufacture and withhold evidence regarding the drugs at issue from the Food and Drug Administration"); Graham v. Ellmore, 26 P.2d 696, 697 (Cal. App. 1933) (salesman not liable for fraudulent inducement of a real estate transaction where he made a false statement to purchasers which he "believed ... to have been true" based on the landowner's misrepresentation; and not addressing the liability of the landowner on appeal); Moyer v. Lederer, 50 Ill. App. 94, 94-96 (Ill. App. Ct. 1893) (upholding a jury instruction that "if a merchant furnishes to a mercantile agency . . . a willfully false statement . . . with intent to obtain a standing and credit to which he knows that he is not justly entitled, and thus to defraud whoever may refer to the agency, . . . his liability to any party defrauded by these means is the same as if he had made the false representation directly to the party injured" (emphasis added)); Kuehl v. Parmenter, 192 N.W. 429, 431 (Iowa 1923) (affirming a directed verdict for defendants in a fraud case in which the plaintiff failed to prove damages); Laun v. Union Elec. Co. of Mo., 350 Mo. 572, 583 (Mo. 1943) ("The perjured witness and the one who suborns him are joint tortfeasors, acting in conspiracy or combination to injure the party defamed. The fact that one of them is protected from a civil suit by a personal privilege does not exempt the other joint tortfeasor from such suit." (quotation omitted)); Midford v. Kann, 32 A.D. 228 (N.Y. App. Div. 1989) (upholding a trial judge's charge of false imprisonment against defendant where the defendant caused police officers to illegally arrest the plaintiffs on his property; and not addressing the officers' liability). As shown, in each cited case, although intermediate actors may have directly caused an injury, the party held liable also was held to have *directly* caused an injury.

The 1st Restatement only provides for inducement liability in the presence of an underlying wrongful or "tortious" act or "breach of duty." 1st Restatement § 876; see also Maj. Op. 24. The "tortious conduct" or "breach of duty" in this case is the act statutorily defined in § 271(a). There is no tort for inducing an act that is something less than an infringement, and thus not itself wrongful, tortious, or a breach of duty. See First Restatement § 876.

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

Direct infringement liability requires that one actor performs each and every element or step of a claim. See Aro, 365 U.S. at 340 ("The patent is for a combination only. Since none of the separate elements of the combination is claimed as the invention, none of them when dealt with separately is protected by the patent monopoly." (quoting Mercoid I, 320 U.S. at 667)). Unlike indirect infringement under §§ 271(b) and (c), which both require a certain mens rea, Global-Tech Appliances, Inc. v. SEB S.A., 131 S. Ct. 2060, 2068 (2011), under § 271(a), direct infringement is a strict-liability offense, id. at 2065 n.2 "Direct infringement has long been understood to require no more than the unauthorized use of a patented invention. . . [A] direct infringer's knowledge or intent is irrelevant." (emphasis added)). Because of the strictliability nature of direct infringement, this court has limited direct infringement liability "to those who practice each and every element of the claimed invention," BMC, 498 F.3d at 1381, i.e., the "single entity rule." See Cross Med. Prods. v. Medtronic Sofamor Danek, 424 F.3d 1293, 1311-12 (Fed. Cir. 2005) (applying the single entity rule). The single entity rule, consistent with the statute, protects an actor who practices less than all elements of a claim—i.e., does not practice the "patented invention"—from direct patent infringement liability.

The legislative history supports the single entity rule for direct infringement. Congress enacted § 271 to clarify the scope of *indirect infringement*, and in so doing, "left in tact the entire body of case law on direct infringement." Aro, 365 U.S. at 342. When the Supreme Court held in Aro that § 271(a) did not change the law of direct infringement, the Court was referring to the single entity, all elements rule of direct infringement that was "well settled" in 1952. See Wallace v. Holmes, 29 F. Cas. 74, 80 (C.C. Conn. 1871) ("The rule of law invoked by the defendants is this—that, where a patent is for a combination merely, it is not infringed by one who uses one or more of the parts, but not all, to produce the same results This rule is well settled, and is not questioned on this trial." (emphasis added)).

Today, just as in 1952, where a single entity does not perform each and every claim limitation, that entity may not be characterized as or held liable as a direct infringer. See Aro, 365 U.S. at 340; Cross Med., 424 F.3d at 1311-14 (Fed. Cir. 2005) (holding that there can be no direct infringement of a product claim where surgeons, and not the defendant, made the claimed apparatus in the operating room, and remanding to determine whether the surgeons directly infringed such that Medtronic could be held liable for indirect infringement). Contributory actions—such as the performance of some, but not all, steps of a method claim—do not meet the all elements test, and thus must be analyzed exclusively under the doctrines of indirect infringement. BMC, 498 F.3d at 1381 ("[E]xpanding the rules governing direct infringement to reach independent conduct of multiple actors would subvert the statutory scheme for indirect infringement.").

Limelight and many *amici* argue that the word "whoever" in § 271(a) ("whoever . . . uses . . . any patented invention") undermines the single entity rule. U.S.C. § 1 ("In determining the meaning of any Act of Congress, unless the context indicates otherwise—words importing the singular include and apply to several persons, parties, or things " (emphasis added)). This argument fails for two reasons. First, if one interprets "whoever" to include the plural, the statute simply states the obvious: More than one entity can be independently liable for direct patent infringement if each entity practices every element of the claim. Second, the statutory context, with §§ 271(b) and (c) extending liability to actors who do not independently infringe in limited, specifically defined circumstances, indicates that § 271(a) excludes joint liability. See City of Columbus v. Ours Garage & Wrecker Serv., Inc., 536 U.S. 424, 445 (2002) ("It is a wellestablished principle of statutory construction (and of common sense) that when . . . 'two words or expressions are coupled together, one of which generally includes the other, it is obvious that the more general term is used in a meaning excluding the specific one." (quoting J. Sutherland, Statutes and Statutory Construction § 266 p. 349 (1891)).

C. Traditional Principles of Vicarious Liability Still Apply to § 271(a)

Our "divided infringement" case law is rooted in traditional principles of vicarious liability. *BMC* held that, where the actions of one party can be legally imputed to another such that a single entity can be said to have performed each and every element of the claim, that single entity is liable as a direct infringer. 498 F.3d at 1380-81. Before *BMC*, the judiciary and the patent law

community generally recognized that multiple actors could together infringe a patent only if one somehow controlled the other(s). See Mobil Oil Corp. v. Filtrol Corp., 501 F.2d 282, 291-92 (9th Cir. 1974) ("Mobil contends that Filtrol and Texaco split between them the performance of the four steps of the claim. . . . We question whether a method claim can be infringed when two separate entities perform different operations and neither has control of the other's activities. No case in point has been cited." (emphasis added)); Mark Lemley et al., Divided Infringement Claims, 33 AIPLA Q.J. 255, 258 (2005) ("[C]ourts have imposed liability for direct infringement where another person acts as an agent of the alleged infringer." (emphasis added)). Applying traditional principles of vicarious liability to direct infringement under § 271(a) protects patentees from a situation where a party attempts to "avoid infringement . . . simply by contracting out steps of a patented process to another entity. . . . It would be unfair indeed for the mastermind in such situations to escape liability." BMC, 498 F.3d at 1381.

BMC's holding that direct infringement liability under § 271(a)—in the context of joint actors—exists only where one party was shown to "control or direct each step of the patented process," 498 F.3d at 1380, is properly rooted in the doctrine of vicarious liability. See also Muniauction, 532 F.3d at 1329. Both tort and agency law guide BMC's test. See Restatement (Second) of Torts § 877 (1979) ("For harm resulting to a third person from the tortious conduct of another, one is subject to liability if he . . . orders or induces the conduct . . . , [or] controls, or has a duty to use care to control, the conduct of the other ... and fails to exercise care in the control " (emphases added)); Restatement (Third) of Agency § 1.01 (2006) "Agency is the fiduciary relationship that arises when one person (a 'principal') manifests assent to another person (an 'agent') that the agent shall act on the principal's behalf and subject to the principal's control, and the agent manifests assent or otherwise consents so to act."); Restatement (Second) of Torts § 315 (1965) ("There is no duty so to control to the conduct of a third person as to prevent him from causing physical harm to another unless . . . a special relation exists between the actor and the third person which imposes a duty upon the actor to control the third person's conduct . . . " (emphasis added)).

The vicarious liability test also reaches joint enterprises acting together to infringe a patent. The acts of each participant in a joint enterprise are, by definition, imputed to every member.

All members of a joint venture may be jointly and severally liable to third persons for wrongful acts committed in furtherance of the joint enterprise. Thus, the negligence of one participant in the enterprise or venture, while acting within the scope of agency created by the enterprise, may be imputed to another participant so as to render the latter liable for the injuries sustained by third persons as a result of the negligence.

48A C.J.S. Joint Ventures § 60; see also Restatement (Second) of Torts § 491 (1965) ("Any one of several persons engaged in a joint enterprise, such as to make each member of the group responsible for physical harm to other persons caused by the negligence of any member, is barred from recovery against such other persons by the negligence of any member of the group.").

A joint enterprise exists for the purposes of imposing vicarious liability when there is:

(1) an agreement, express or implied, among the members of the group; (2) a common purpose to be carried out by the group; (3) a community of pecu-

niary interest in that purpose, among the members; and (4) an equal right to a voice in the direction of the enterprise, which gives an equal right of control. Whether these elements exist is frequently a question for the jury, under proper direction from the court.

Restatement (Second) Torts § 491 cmt. c.; see also 57B Am. Jur. 2d Negligence § 1138. In Golden Hour Data Sys., Inc. v. emsCharts, Inc., 614 F.3d 1367 (Fed. Cir. 2010), this court, relying on BMC and Muniauction, affirmed the district court's grant of JMOL that there could be no direct infringement because there was insufficient evidence of direction or control, id. at 1380-81, even though the two accused entities "formed a strategic partnership, enabled their programs to work together, and collaborated to sell the two programs as a unit," id. at 1371. Because the parties in that case would have satisfied the test for joint enterprise based on common purpose and an equal right of mutual control, see id., the en banc court should expressly overrule the holding in that case. This case, as well as the other "joint infringement" cases decided under § 271(a), however, cannot be addressed under the majority's analysis, which purports to limit itself to § 271(b).

The well established doctrine of vicarious liability is the proper test for establishing direct infringement liability in the multi-actor context. Absent direct infringement, the patentee has not suffered a compensable harm. See, e.g., BMC, 498 F.3d at 1379. In patent law, unlike in other areas of tort law—where the victim has no ability to define the injurious conduct upfront—the patentee specifically defines the boundaries of his or her exclusive rights in the claims appended to the patent and provides notice thereby to the public to permit avoidance of infringement. As this court correctly recognized in BMC, "[t]he concerns over a party avoiding infringement by

arms-length cooperation can usually be offset by proper claim drafting. A patentee can usually structure a claim to capture infringement by single party." 498 F.3d at 1381. As many *amici* have pointed out, the claim drafter is the least cost avoider of the problem of unenforceable patents due to joint infringement, and this court is unwise to overrule decades of precedent in an attempt to enforce poorly-drafted patents.

Accordingly, I would hold that direct infringement is required to support infringement under § 271(b) or § 271(c) and properly exists only where one party performs each and every claim limitation or is vicariously liable for the acts of others in completing any steps of a method claim, such as when one party directs or controls another in a principal-agent relationship or like contractual relationship, or participates in a joint enterprise to practice each and every limitation of the claim.

D. Judge Newman's Dissent Errs by Resuscitating the Common Law of Joint Tortfeasor

Judge Newman's opinion, which would permit joint actor infringement liability whenever independent parties collectively infringe a patent, is no more satisfactory as a matter of either statutory interpretation or legal analysis. Judge Newman attempts to justify this loose approach to direct infringement liability under § 271(a) by asserting that § 271(a) is not a strict liability provision after all, with the apparent consequence that innocent participants are in fact not liable. This assertion is fallacious. Global-Tech, the Supreme Court held that "[d]irect infringement has long been understood to require no more than the unauthorized use of a patented invention. . . . [A] direct infringer's knowledge or intent is irrelevant." 131 S. Ct. at 2065 n.2 (emphasis added). The fact that the statutory tort of infringement has no mental state reguirement, actual or constructive, by definition, renders it a strict liability offense. See Black's Law Dictionary 998 (9th ed. 2009) (defining "strict liability" as "[l]iability that does not depend on actual negligence or intent to harm, but that is based on the breach of an absolute duty to make something safe"); XVI Oxford English Dictionary 899 (2d ed. 1989) (defining "strict liability" as "a liability which does not depend upon intent to commit an offence"). Judge Newman's reliance on § 287's notice provisions for damages as evidence of a requisite mental state conflates preconditions of suit with elements of the tort, treating the marking requirement as tantamount to a "knew or should have known" element of infringement proper.

Judge Newman's joint actor liability approach under § 271(a) would also disrupt well-settled law with respect to system and apparatus claims by permitting multi-party infringement liability in the context of an apparatus or system claim—an absurd and unworkable result. For example, if a patentee, P, has an apparatus claim to a new and improved machine; and parties N, B, and G are manufactures who make the nuts, bolts, and gears that comprise the machine; and N, B, and G sell to party A, who assembles and sells or uses the machine; under Judge Newman's test, all are now joint infringers of P's patent. Under such an approach, the need for contributory infringement and inducement, as Congress envisioned, is essentially eviscerated.

III. APPLICATION TO THE CASES ON APPEAL

A. Akamai

In the *Akamai* case, the asserted claims were drafted so as to require the activities of both Limelight and its customers for a finding of infringement. Thus, Akamai put itself in a position of having to show that the allegedly infringing activities of Limelight's customers were attributable to Limelight. Akamai did not meet this burden

because it did not show that Limelight's customers were acting as agents of or otherwise contractually obligated to Limelight or that they were acting in a joint enterprise when performing the tagging and serving steps. Accordingly, I would affirm the district court's grant of Limelight's motion for JMOL of non-infringement under § 271(a).

I would also reinstate the portion of the panel's opinion addressing Limelight's alternative ground for affirmance and conditional cross-appeal of the damages award, as well as the portion dealing with the '645 and '413 Patents.

B. McKesson

In the *McKesson* case, the doctor-client relationships of the MyChart health care providers and their patients do not by themselves give rise to an agency relationship or impose on patients a contractual obligation such that the voluntary actions of the patients can be said to represent the vicarious actions of their doctors. Nor is there anything to indicate that the MyChart health care providers act in any joint enterprise with their patients. Accordingly, I would affirm the district court's grant of Epic's renewed motion for summary judgment of noninfringement.