

**DIVIDED INFRINGEMENT CLAIMS**

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## I. INTRODUCTION

Patent law is territorial. It is also designed to deal with the circumstance of unified infringement by a single actor. But modern commerce is not limited by national boundaries or by corporate forms. Patents written to cover modern technologies, particularly network computing technologies, are attempting to bring the distributed acts of different users around the globe into the ambit of a territorial legal system that looks for a single infringer. Not surprisingly, the effort to do so has created significant problems for patent cases.

This article focuses on two examples of what we call "divided" or "distributed" claims: multi-user and multi-jurisdictional claims, respectively. These claims exist where patents are infringed only by aggregating the conduct of more than one actor or conduct that occurs in more than one country, respectively. Patent law doesn't deal well with either class of divided patent claim. Prosecutors and litigators need to be aware of these problems in order to most effectively represent their clients.

## II. MULTI-USER CLAIMS

A person may invent a new and useful process that requires steps (a) and (b) of a claimed process to be performed by one person and step (c) to be performed by another person. These distributed or divided patent claims are surprisingly common, particularly in the field of computer networking, where a patented process may involve some steps performed on the client side and others performed on the server side.<sup>1</sup> If the claim is not drafted carefully, the invention may fulfill every requirement for patentability but, given the statutory scheme of infringement, the patent may leave its owner without a remedy.

Liability for infringement is governed by the text of the patent statute.<sup>2</sup> The statute creates a cause of action for both direct and indirect infringement.

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<sup>1</sup> See, e.g., U.S. Patent No. 6,421,726 (issued July 16, 2002) (claiming a method that caches and serves a media file from a Web page in which the network attributes are selected by the caching provider, but a page linking to that media file is served by the Web-page provider. To the extent it is relevant, Kecker & Van Nest LLP was involved in the litigation of this patent on behalf of Speedera Networks.).

<sup>2</sup> N. Am. Philips Corp. v. Am. Vending Sales Inc., 35 F.3d 1576, 1579, 32 U.S.P.Q.2d (BNA) 1203, 1205 (Fed. Cir. 1994) ("[T]he cause of action for patent infringement is created and defined by statute.").

Section 271(a) governs direct infringement.<sup>3</sup> Indirect infringement is governed by §§ 271(b)<sup>4</sup> and (c),<sup>5</sup> which define inducement and contributory infringement, respectively.

Where one person does not perform each and every step of the claimed process, no person directly infringes the claim. Section 271(a) imposes liability on “whoever without authority makes, uses, offers to sell or sells any *patented invention . . .*” Accordingly, only the practice of each and every step of the claimed method constitutes direct infringement.<sup>6</sup> Similarly, a process or method claim is “directly infringed only when the process is performed.”<sup>7</sup>

Where a defendant participates in infringement but does not directly infringe the patent, the normal recourse under the law is to indirect infringement. But “indirect infringement, whether inducement to infringe or contributory infringement, can only arise in the presence of direct infringement.”<sup>8</sup> For example, in *Dynacore Holdings Corp. v. U.S. Philips Corp.*, the plaintiff had sued more than a dozen companies whose products, it alleged, could be used in a manner that indirectly infringed its patent. However, the Federal Circuit held that because the plaintiff could not show that either the named defendants or their customers directly infringed the patent in suit, it

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<sup>3</sup> 35 U.S.C. § 271(a) (2000) (providing that “whoever without authority makes, uses, offers to sell or sells any patented invention . . . infringes the patent”).

<sup>4</sup> *Id.* § 271(b) (providing that “[w]hoever actively induces infringement of a patent shall be liable as an infringer”).

<sup>5</sup> *Id.* § 271(c) (providing that, for parts relevant to patented processes, “within the United States . . . 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 non-infringing use, shall be liable as a contributory infringer”).

<sup>6</sup> See *Canton Bio-Medical, Inc. v. Integrated Liner Techs., Inc.*, 216 F.3d 1367, 1370, 55 U.S.P.Q.2d (BNA) 1378, 1379 (Fed. Cir. 2000); *Gen. Foods Corp. v. Studiengesellschaft Kohle mbH*, 972 F.2d 1272, 1274, 23 U.S.P.Q.2d (BNA) 1839, 1840 (Fed. Cir. 1992); *Roberts Dairy Co. v. United States*, 530 F.2d 1342, 1354, 182 U.S.P.Q. (BNA) 218, 225 (Ct. Cl. 1976).

<sup>7</sup> *Joy Techs., Inc. v. Flakt, Inc.*, 6 F.3d 770, 773, 28 U.S.P.Q.2d (BNA) 1378, 1381 (Fed. Cir. 1993).

<sup>8</sup> *Dynacore Holdings Corp. v. U.S. Philips Corp.*, 363 F.3d 1263, 1272, 70 U.S.P.Q.2d (BNA) 1369, 1375 (Fed. Cir. 2004).

could not “even reach the question of the defendants’ vicarious liability for indirect infringement.”<sup>9</sup>

The patent laws thus leave a hole in the statutory infringement scheme in the case of divided patent claims. No cause of action for infringement may lie unless some person performs each and every step of a claimed process. Yet, some patents claim new and useful inventions that cannot be performed by one person. Who, if anyone, is liable in such a case?

A few courts have sought to fill part of this statutory hole by permitting suits under a theory akin to inducement, where one party was responsible for directing others to perform the steps of the patented process.<sup>10</sup> Under this theory, courts have imposed liability for direct infringement where another person acts as an agent of the alleged infringer, in effect aggregating the conduct of defendants acting in concert for liability purposes. For example, in *Shields v. Halliburton Co.*, two defendants between them performed all of the steps of a claimed process, but no single defendant performed each and every claimed step.<sup>11</sup> Yet, because “[i]nfringement of a patented process or method *cannot be avoided by having another perform one step of the process or method*,” the court found the claims “singularly and jointly infringed by defendants” where one had

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<sup>9</sup> *Id.* at 1277, 70 U.S.P.Q.2d (BNA) at 1379.

<sup>10</sup> On inducement, see Mark A. Lemley, *Inducing Patent Infringement*, 39 U.C. DAVIS L. REV. (forthcoming 2005); Recent Cases, *Patent Law—Active Inducement of Infringement—District Court Holds That Inducement Liability Requires Proof of Intent to Induce Violation of the Law*, 115 HARV. L. REV. 1246 (2002).

<sup>11</sup> 493 F. Supp. 1376, 1389, 207 U.S.P.Q. (BNA) 304, 315 (W.D. La. 1980) (noting that: “[o]n Freeport, the actual grouting operation was conducted by Halliburton which was assisted by Brown and Root employees on the platform. On Marathon, Halliburton again performed the grouting operations and the employees of Brown and Root who were on the platform assisted by controlling and bleeding off the air pressure as Halliburton pumped grout. At least one of the legs of each platform was grouted successfully using the procedures of RE 28,232.”).

instructed the other to perform the infringing steps.<sup>12</sup> Likewise, in *Mobil Oil Corp. v. W. R. Grace & Co.*, the court held that the "defendant, in effect, made each of its customers *its agents* in completing the infringement step, *knowing full well that the infringement step would in fact be promptly and fully completed by those customers.*"<sup>13</sup>

These two district court cases are the exception rather than the rule, however. More typical are cases in which a single party does perform all the steps of the patent at the direction of another. Thus, in *Crowell v. Baker Oil Tools, Inc.*, the Ninth Circuit reasoned that:

It is obvious that one may infringe a patent if he employ [sic] an agent for that purpose or have [sic] the offending articles manufactured for him by an independent contractor. We do not agree that it is necessary that appellant himself be a manufacturer of the alleged infringing devices or that he have [sic] machinery or manufacturing facilities or employees to make them or a written or an oral contract for supplies for such manufacture.<sup>14</sup>

It is worth noting that *Crowell* did not actually involve a divided claim at all, but rather a single act of infringement by a contractor at the direction of the defendant. As the court noted in *E.I. DuPont De Nemours and Co. v. Monsanto Co.*, these cases establish that a person "cannot avoid liability for infringement of [a] process patent by paying [another] to practice step (a) of the patented process for

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<sup>12</sup> *Id.*, 207 U.S.P.Q. (BNA) at 316 (emphasis added); *see also* *Ralston Purina Co. v. Far-Mar-Co, Inc.*, 586 F. Supp. 1176, 1226, 222 U.S.P.Q. (BNA) 863, 902 (D. Kan. 1984), *aff'd in part*, 772 F.2d 1570, 227 U.S.P.Q. (BNA) 177 (Fed. Cir. 1985) ("It is well settled that a party cannot avoid infringement merely by having a third party practice one or more of the required steps. Defendant maintains or controls the pH of the soybean starting material used in its process within the meaning of the asserted claims."); *Metal Film Co. v. Milton Corp.*, 316 F. Supp. 96, 110 n.12, 167 U.S.P.Q. (BNA) 267, 278 n.12 (S.D.N.Y. 1970) ("That defendants choose to have the vacuum metallizing, which was a conventional step . . . done by outside suppliers does not mitigate their infringement of the overall process.").

<sup>13</sup> 367 F. Supp. 207, 253, 180 U.S.P.Q. (BNA) 418, 450 (D. Conn. 1973) (emphasis added).

<sup>14</sup> *Crowell v. Baker Oil Tools, Inc.*, 143 F.2d 1003, 1004, 62 U.S.P.Q. (BNA) 176, 177 (9th Cir. 1944).

it.”<sup>15</sup> They are thus consistent with the policy behind § 271(f), which seeks to prevent a defendant from inducing infringement while avoiding liability by having portions of a device made overseas and then combined into an infringing product.<sup>16</sup> The courts themselves don’t generally distinguish between direct infringement and inducement, finding that the parties are part of a collaborative scheme directed by one of them to cause infringement.<sup>17</sup>

But these cases do not resolve the issue of truly divided claims, because they deal only with the relatively straightforward case in which a single defendant seeks to avoid liability for an infringing act by employing agents to perform the steps of the patented process. Where there is no agency relationship or similar coordination—for example where the different actors do not know each other at all, or are in an arm’s-length business transaction—courts have not been willing to apply the law of inducement to aggregate the disparate acts of unrelated parties. Courts require proof of a sufficient connection between the coordinator and the entity performing the steps so that the coordinator, “through its connection with the entity performing only part of the process, is in actuality performing the combination of each and every step of the claimed method.”<sup>18</sup> This is a rather strict standard, contemplating almost an alter ego and certainly not a mere customer relationship. This reluctance stems from the language of

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<sup>15</sup> 903 F. Supp. 680, 735 (D. Del. 1995).

<sup>16</sup> 35 U.S.C. § 271(f) (2004). We discuss this section in more detail in our analysis of international infringement issues, *infra* Part IV.A.

<sup>17</sup> Courts periodically speak of “joint and several liability” for patent infringement. *See, e.g.*, Thomson-Houston Elec. Co. v. Ohio Brass Co., 80 F. 712, 721 (6th Cir. 1897). But in context it seems clear that they are not creating a new theory of joint infringement but making the familiar point from tort law that once infringement has been proven, all those liable for that infringement must share their liability jointly and severally, rather than apportioning fault.

<sup>18</sup> Marley Mouldings Ltd. v. Mikron Indus., Inc., No. 02C 2855, 2003 WL 1989640, at \* 3, 66 U.S.P.Q.2d (BNA) 1701, 1703 (N.D. Ill. Apr. 29, 2003); *see also* Int’l Rectifier Corp. v. Samsung Elecs. Co., 361 F.3d 1355, 1361, 70 U.S.P.Q.2d (BNA) 1124, 1128 (Fed. Cir. 2004) (rejecting liability for “conspiracy to infringe” where there was no evidence that Samsung exercised control over IXYS, the importer of the infringing goods).

§ 271(b),<sup>19</sup> which requires an act of direct infringement and permits liability only where “specific intent and action to induce infringement” are found.<sup>20</sup>

For example, in *Faroudja Laboratories, Inc. v. Dwin Electronics, Inc.*,<sup>21</sup> the patent covered a method for improving television image quality by converting films to TV signals and then doubling the number of scan lines.<sup>22</sup> The defendant sold a line-doubler that worked with televisions.<sup>23</sup> Movie studios converted films into television signals before broadcasting those films; home viewers doubled the number of scan lines when they viewed a movie.<sup>24</sup> But while all the steps of the patented method were performed, no one entity performed them. Nor was it the case that the defendant sold its line-doubler with instructions teaching buyers how to make infringing use. The problem was that the claim was divided—three different actors had to come together to perform the method, and there was no central entity coordinating their actions. The court concluded that no one was liable for direct infringement because no one actually performed all the steps of the patented method.<sup>25</sup> The court in *E. I. DuPont De Neumours and Co. v. Monsanto Co.* similarly found no direct infringement in such a divided claim situation.<sup>26</sup> And the Ninth Circuit in dictum has expressed doubts about whether anyone can be held liable in such a situation.<sup>27</sup>

While these decisions seem unfair at first glance because they create a right without a remedy, they in fact serve an important policy purpose. Direct infringement is a strict-liability offense, but it is limited to actually performing all the steps of a patented process. By contrast, indirect liability requires evidence of

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<sup>19</sup> 35 U.S.C. § 271(b) (2000) (punishing only a person who “actively induces infringement”).

<sup>20</sup> *Warner-Lambert Co. v. Apotex Corp.*, 316 F.3d 1348, 1364, 65 U.S.P.Q.2d (BNA) 1481, 1491 (Fed. Cir. 2003).

<sup>21</sup> No. 97-20010 SW, 1999 WL 111788 (N.D. Cal. Feb. 24, 1999).

<sup>22</sup> *Id.* at \*1.

<sup>23</sup> *Id.* at \*2.

<sup>24</sup> *Id.* at \*1.

<sup>25</sup> *Id.* at \*7; see *Cordis Corp. v. Medtronic Ave, Inc.*, 194 F. Supp. 2d 323, 349 n.19 (D. Del. 2002) (reading *Faroudja* as requiring “some connection” between the parties, but not specifying the strength of the connection).

<sup>26</sup> 903 F. Supp. 680, 734-35 (D. Del. 1995).

<sup>27</sup> *Mobil Oil Corp. v. Filtrol Corp.*, 501 F.2d 282, 291-92, 182 U.S.P.Q. (BNA) 641, 648 (9th Cir. 1974).

