

**Keywords: Joint infringement, claim interpretation**

**General: This case raises the prospect of joint infringement when separate companies work together to perform all the steps of a claim of a patent. The Federal Circuit posits that this joint infringement may occur even if no single company performs all the steps of a patent claim.**

*On Demand Machine Corp. v. Ingram Industries, Inc.*  
No. 05-1074 (Fed. Cir. 2006)

**I. Facts**

On Demand Machine Corp. (ODMC) owns the Ross patent, which is directed to a system and method of manufacturing a single book copy. According to the Ross patent, a retail seller of books provides a computer console for customer use. The computer stores information about the book, such as a synopsis, book reviews, price, and its complete text, as well as the design of its cover. The customer can browse through its stored information and select a book for purchase. Once selected, the book is printed and bound, preferably at the same site.

One of the defendants, Lightning Source, Inc., is a book printing company with a factory in Tennessee, and Lightning Source is owned by the other defendant, Ingram Industries. Lightning Source prints and sells books ordered by publishers, wholesalers, and retailers, such as Amazon.com, but does not sell directly to the public. Purchasers may order books from Lightning Source through its website identifying the book by its title and author or by its international standard book number (ISBN). Lightning Source usually prints books in batches, often as large as several hundred books, but may also print single copies if ordered. Another defendant, Amazon.com, sells books to the public via the internet, and its website provides promotional and sales information on individual books and receives orders from customers. Amazon.com does not print books, but may order single or multiple copies from Lightning Source to fill orders from its customers.

While the Ross patent application was pending, Mr. Ross offered to license his invention to Ingram, and they entered into a one-year confidentiality agreement under which Mr. Ross disclosed his patent application and business plans to Ingram. Once the Ross patent issued, Ingram's counsel advised that Ingram could practice "on-demand printing" in a non-infringing manner. Thereafter, Ingram informed Mr. Ross that Ingram was not interested in obtaining a license, and Ingram created Lightning Source to print books to order for resellers but not for the general public. After a re-examination, Mr. Ross informed Ingram that Lightning Source was infringing the Ross patent and again offered a license. Ingram and Lightning Source were again advised by counsel that the present method of operation would not infringe the Ross patent. However, counsel also advised that infringement could possibly be found if the claim language were interpreted in isolation from the specification, but that such a broad interpretation of the claims could well invalidate them.

Thereafter, ODMC filed suit against Ingram, Lightning Source, and Amazon.com. The District Court construed various claim terms broadly and the jury found infringement and awarded 15 million dollars in damages, and determined that the infringement was willful. The district court rejected ODMC's request for an immediate injunction, and instead authorized continued operation by the Defendants at a given royalty rate. Consequently, the defendants filed an appeal relating to the Court's claim construction and the jury's determinations, and ODMC filed a cross-appeal arguing that the district court's determination amounted to a compulsory license.

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## II. Issues

1. Did the district court properly construe the claims of the Ross patent?
2. Are the defendants jointly liable for direct infringement under 271(a) even though no single defendant performed all the claimed acts?

## III. Discussion

1. No. For ease of discussion, claim 8 of the Ross patent is reproduced below with the terms at issue set forth in italics.

8. A method of *high-speed manufacture of a single copy of a book* comprising the steps of:  
storing the text of a plurality of books in a computer,  
storing sales information related to said plurality of books in a computer,  
*providing means for a customer to visually review said sales information*,  
commanding a computer to print the text of selection one of said books in response to a *customer's* selection,  
retrieving the text of said selected one of said computer,  
*printing* the text of said selected one of said books *on paper pages*,  
binding said paper pages to form said one of said books,  
storing graphical information corresponding to the cover of each of said books,  
commanding a printer to reproduce said graphical information on a book cover,  
and  
binding said paper pages with said cover there around.

Regarding the term “sales information,” the district court found that it meant “stored in a computer which is involved in the promoting and selling of a book,” and that the term is not limited to the promotion information, but that it includes descriptive information as well, such as price. Defendants argued that the specification and prosecution history require that “sales information” always include promotional information, such as information related to the content of the book, that may be used by a customer to determine which book to purchase. Based on statements in the specification and prosecution history, the Federal Circuit found that “sales information” must include more than information that merely identifies a book, such as its title, author, or ISBN. “Sales Information” must include other descriptive information, such as a synopsis, plot outline, author’s biographical summary, or text of the book. Accordingly, the Federal Circuit concluded that the claim limitation could not be met by Lightning Source’s activities, because books were ordered by Lightning Source based solely on identifying data, without any type of promotional or descriptive information. ODMC argued that Amazon.com provides such promotional information, thereby producing joint infringement as to the 10% of Lightning Source’s production that is ordered by Amazon, as will be discussed with regard to Issue 2.

In regard to the term “customer,” the district court found that it means “one who buys goods or services” and is not limited to a retail customer. The defendants argued, on the other hand, the entire focus of the Ross patent relates to the “customer” as the person who orders and immediately receives the printed-to-order book, in other words, the ultimate consumer. The defendants further argued that their orders only come from resellers, not from individual purchasers, and that printing takes place at a remote factory, and not at the customer’s retail site. The Federal Circuit looked to the specification and determined that it repeatedly

reinforces the usage of the term “customer” as the final retail consumer. Therefore, the Federal Circuit found that the district court’s definition of the term “customer” cannot eliminate such constraints to embrace the remote, large-scale production of books for publishers and retailers.

With regard to the term “providing means for a customer to visually review,” the district court, construing the term under Section 112, paragraph six, interpreted the term to include a customer computer module as described in the specification. The district court further found that equivalents could include any computer monitor that gives a customer access to sales information that has been stored in a computer and any user input device for a customer to perform this function. The defendants argued that the district court improperly invaded the province of the jury when it identified the equivalents of the means specifically identified in the specification. However, the Federal Circuit instead focused upon the question of whether the defendants “provide” a computer means to customers. The Federal Circuit found it to be undisputed that none of the defendants provide a computer to the customer; rather, the customers use their own private computers to order books from Amazon or to place orders with Lightning Source.

With regard to the term “printing on paper pages,” the district court found that the term does not require that the book must be printed on previously separated paper pages, but that it could include the printing on paper webs, such as those used by Lightning Source, which were ultimately cut into individual pages. Defendants argued that this interpretation is incorrect because the Ross patent is directed to an immediate production automatic printing process – not one that requires commercial scale equipment for paper cutting. The Federal Circuit looked to the specification and determined that it relates to the printing of individual copies of books at a customer site rather than in a factory setting and that it repeatedly referred to printing on a stack of paper text pages. Therefore, the Federal Circuit found that the district court erred in its construction of this clause and that no reasonable jury could find that this clause reads on the process of printing on paper webs.

Finally, with regard to the term “high speed manufacture of a single copy of a book,” the district court found that this preamble term did not limit the claim to immediate printing or require that only one copy be printed. Not surprisingly, in reliance to both statements in the specification and recitations in the body of the claim, the Federal Circuit found that the preamble necessarily limits the scope of the claim.

2. No. ODMC argued that the jury could reasonably have found that Lightning Source and Amazon were liable for joint infringement, because the district court instructed the jury as to joint infringement 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 one or more entity, they’re 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 infringement 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.

The Federal Circuit could “discern no flaw in this instruction as a statement of law.” However, the Federal Circuit found that the combined actions of the various defendants do not reasonably constitute infringement given the proper claim construction. Therefore, the Federal Circuit reversed the district court’s judgment of infringement.

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#### IV. Other Discussion of Joint Infringement

It is somewhat surprising that the Federal Circuit could “discern no flaw” in the district court’s jury instruction. To the best of our knowledge, neither the Federal Circuit nor its predecessor court, the CCPA, has ever found multiple entities liable for combining their actions to produce a direct infringement under Section 271(a). Prior to a more detailed discussion of the theory of “joint infringement,” is useful to distinguish this theory from a “similar sounding” theory relating to joint tortfeasors. It is axiomatic that multiple parties or entities may be liable for both direct infringement and for various forms of indirect infringement, such as contributory infringement and inducement of infringement. Regarding Section 271(a) direct infringement, for example, it is not unusual for multiple parties to be direct infringers. Such parties may include the manufacturer of a patented device, the reseller of the patent device, and the ultimate user of the patented device. Each of these entities may be found to directly infringe a patent’s claim, and, thus, are jointly and severally liable for such infringement. Courts have traditionally left the decision to the patent owner to determine which of the multiple infringers to sue, and generally speaking, courts have traditionally limited the patentee’s recovery to that which makes the patentee whole and have generally not required a joinder, or even allowed intervention, of other jointly liable infringers.

In contrast to the theory of joint tortfeasors discussed above, joint infringement is a different type of infringement. According to the theory of joint infringement, there are no individual entities that are directly infringing a patent’s claim. It is again axiomatic that in order for there to be indirect infringement, such as contributory infringement or inducement to infringement, there must be direct infringement. Courts typically allow patentee’s to sue an indirect infringer and merely prove-up direct infringement without actually joining a direct infringer in the suit, although many patentees choose to sue indirect infringers and direct infringers at the same time for various reasons. However, in situations where no direct infringers have been identified, courts have been quite reticent in adopting any theories of joint infringement or “substantial” infringement.

In relation to the former theory of joint infringement, it appears that the following opinions have dealt with this issue as set forth below:

*Double Oil Corp. v. Filtrrol Corp.*, 182 USPQ 641 (9<sup>th</sup> Cir. 1974) (questioning whether a method claim can be infringed when separate entities perform separate operations and neither have control of the other’s activities); *Metal Film Co. v. Metlon Corp.*, 67 USPQ 267 (S.D.N.Y. 1970) (holding that the defendant infringed the patented process even though it had “a conventional step ... done by outside suppliers); *Williams Gold Refining Co. v. Semi-Alloys, Inc.*, 198 USPQ 37 (W.D.N.Y. 1977) (stating that infringement of the method patent does not require that the alleged infringer personally duplicate every step, as one who actively induces or knowingly contributes to the infringement is liable); *Idacon Inc. v. Central Forest Products, Inc.*, 3 USPQ2d 1079 (E.D.Ok. 1986) (stating that infringement of the patented method can not be avoided by having another person perform one step of the method); *Ralston Purina v. Far-Mar Co. Inc.*, 222 USPQ 863 (D.Kan. 1984) (stating that a party can not avoid infringement by having a third party practice one or more of the required steps); *Shield v. Halliburton Co.*, 207 USPQ 304 (W.D. La. 1980) (aff’d. 216 USPQ 1066) (5<sup>th</sup> Cir.) (stating that infringement of a process or method can not be avoided by having another perform one step of the process or method); *E.I. DuPont d’Nemours & Co. v. Monsanto Co.*, 903 F.Supp. 680 (D.Del. 1995) (unpublished) (declining to find the accused infringement liable as a direct infringer although finding the patentee’s theory of joint infringement interesting, and, further, distinguishing several other cases relating to joint infringement).

The theory of joint infringement will likely be addressed by the Federal Circuit in *Freedom Wireless, Inc. v. Boston Communications Group, Inc.* (Federal Circuit Case No. 06-1020, -1078, -1079, -1098, -1099), in which Freedom Wireless brought a “joint infringement” claim against various defendants. At the district court level, the jury was instructed that:

If separate companies worked together to perform all of the steps of a claim of a patent, the companies are jointly responsible, that is, responsible as a group for the infringement of a patent. If no single company performs all the steps of a claim, the companies are jointly responsible.

Based on this instruction, the jury returned verdicts finding that four pairings of defendants jointly infringed the patents in suit. Defendants appealed the judgment and sought to stay an injunction issued by the district court arguing that:

Judgment of infringement in this cases rests entirely on Freedom’s theory, adopted by the district court in its jury instructions, that there could be joint direct infringement even without a showing that BCGI controlled the actions of a carrier defendant (or vice versa). That is, it is enough (following Freedom’s joint infringement theory) if one party performs some of the claim’s steps, and a second party performs the remaining claims. This court, however, has never directly addressed whether such a “joint infringement” theory exists, much less adopted the theory.

The Federal Circuit found this argument to be persuasive and requested that the theory of joint infringement be fully briefed by the parties in this appeal based on the fact that “there is relatively little precedent on that issue.”

In regard to the latter theory of substantial infringement, the Supreme Court in *Deep South Packing v. Laitram Corp.*, 406 U.S. 518 (1972) found that a defendant that merely manufactured parts of a patented device and shipped the parts to customers in foreign countries to assemble did not directly infringe the patent. In 1984, Section 271(f) was added to make this type of act an infringement. Thereafter, the Federal Circuit in *Paper Converting Machines v. Magna Graphics Corp.*, 23 USPQ 591 (Fed. Cir. 1984), determined that where significant unpatented assemblies of a patented device has been tested and shipped to another in the U.S. for assembly, the testing of the assemblies can be held.