

United States District Court,  
D. Connecticut.

**PITNEY BOWES, INC., Plaintiff and Counterclaim,**  
Defendant.

v.

**HEWLETT-PACKARD COMPANY,**  
Defendant and Counter Claim Plaintiff.

No. Civ. 3:95CV01764(AVC)

**Feb. 9, 1998.**

Owner of patent describing method for generating printed images sued competitor for infringement. On defendant's motion for summary judgment, the District Court, Covello, Chief Judge, held that defendant's use of single laser did not preclude finding that it had literally infringed on claim calling for use of "plurality of beams of light."

Motion denied.

4,386,272. Cited.

Michael J. Dorney, Jacqueline D. Bucar, Tyler, Cooper & Alcorn, New Haven, Ct, Michael V. Ciresi, James L. Harlow, Jan M. Conlin, Thomas L. Hamlin, Robins, Kaplan, Miller & Ciresi, Minneapolis, MN, for Plaintiff.

Thomas J. Rechen, James G. Green, Jr., Pepe & Hazard, Hartford, CT, Jonathan A. Marshall, John J. Lauter, Jr., Steven I. Wallach, Pennie & Edmonds, New York City, for Defendant.

***RULING ON THE DEFENDANT'S MOTION FOR SUMMARY JUDGMENT AND THE  
PLAINTIFF'S CROSS MOTION FOR CLAIM CONSTRUCTION AND SUMMARY JUDGMENT***

**COVELLO, Chief Judge.**

This is an action for infringement and damages brought pursuant to 35 U.S.C. s. 271(a). It concerns the alleged infringement of a patent describing a method for generating printed images. The defendant has now filed the within motion for summary judgment, claiming that it does not infringe the plaintiff's patent since the accused devices do not employ a "plurality of beams of light." The plaintiff filed a cross motion for summary judgment, asking this court to ascertain the meaning of the phrase "a plurality of beams of light" and to find that the accused printers direct "a plurality of beams of light toward a photoreceptor" as recited in the claims of United States Patent 4,386,272 (the '272 patent).

The sole issue presented is whether the defendant's printers employ a "plurality of beams of light" as described in the '272 patent. For the reasons hereinafter set forth, the court concludes that the phrase "a plurality of beams of light" as used in the '272 patent means multiple beams of light generated sequentially from one or more light sources. Under this definition, the accused devices do employ "a plurality of beams of light" and therefore do not avoid infringement. Accordingly, the defendant's motion for summary

judgment (document no. 140) is denied and the plaintiff's motion for summary judgment (document no. 146) is granted.

### *FACTS*

Examination of the complaint, patent records, exhibits, Rule 9(c) statements, and supplemental materials accompanying the motions for summary judgment, and the responses thereto, discloses the following undisputed material facts.

The plaintiff, Pitney Bowes, Inc. (hereinafter "PB"), is a Delaware corporation. The defendant, Hewlett-Packard Company (hereinafter "HP"), is a California corporation.

On March 4, 1981, PB filed patent application Ser. No. 240,532 with the United States Patent and Trademark Office (PTO). Claims 15 and 16 of this application would eventually become claims 1 and 2 of the '272 patent.

On September 23, 1981, the patent examiner rejected claims 15 and 16 of the '532 application on the grounds that the specification was insufficient to enable one of ordinary skill in the art to practice the invention. FN1 Specifically, the examiner noted that it was unclear "how one photoreceptor would distinguish between the plural beams and how one or both beams would be controlled." PB responded that the application contained a rather extensive description of the apparatus which sufficiently described its operation. In January 1982, apparently unpersuaded by PB's arguments, the examiner issued a second office action which reiterated the rejection of claims 15 and 16 of the '532 application. On March 2, 1982, representatives from PB met with the examiner to discuss the application. As a result of the meeting, the examiner changed his position relating to the patentability of claims 15 and 16 and agreed with PB that the specification adequately described the invention. On April 12, 1982, the examiner issued a Notice of Allowance for claims 15 and 16.

FN1. *See* 35 U.S.C. s. 112. An apparatus claim is construed to cover the corresponding structure described in the specification. *Texas Instruments, Inc. v. U.S. Intern. Trade Com'n*, 805 F.2d 1558, 1562 (Fed.Cir.1986).

On June 22, 1982, PB filed application Ser. No. 391,029 (the '029 application), a continuation of the '532 application. The '029 application contained claims 15 and 16 from the '532 application in addition to five new claims. On March 7, 1983, a Notice of Allowance issued for all of the claims of the '029 application. On May 31, 1983, the PTO granted PB United States Patent 4,386,272 (the '272 patent).

As disclosed and claimed in the '272 patent, the invention describes an apparatus and a method for generating printed images by producing light spots of different sizes. Specifically, the technology is designed for application in a laser printing device.

Laser printers, such as the accused devices manufactured by HP in the instant case, convert electronic information into hard copy representations of words and pictures. They function by directing laser light onto a photoreceptor. A photoconductive surface, such as the surface of a drum, is evenly covered with an electrical charge. When the laser light strikes the drum, it dissipates a small area of the charge on the drum surface. These discharged areas attract toner, which is then transferred from the drum to the paper to create the final permanent image. Each image, whether it be a letter or a picture, is comprised of hundreds or thousands of these small spots.

Historically, spots of the same size were utilized to produce printed images. The result of this approach was that the corners and edges of many characters had a stair-stepped effect, which is commonly referred to in

the printing industry as the "jaggies" problem. The '272 patent describes a technique for creating light spots of different sizes. The specification of the '272 patent teaches that this approach can be used "to avoid roughened edges and improve character formation."

The PB inventors achieved this result by employing the device shown in Figure 1 of the '272 patent (see exhibit 1). A laser source [10] sends a beam of light through a modulator [16] and a series of optical elements [20, 22, and 24] toward a rotating multi-faceted polygon mirror [26]. As the mirror spins, multiple light beams [12] are reflected toward the photoreceptor [32]. Each beam strikes the photoreceptor at a different location, causing the formation of a small discharged area on the drum. Toner is attracted to each of these discharged areas and the image is transferred to paper.

The '272 patent teaches that spots of different sizes can be formed by one of two methods. In an embodiment which employs a single laser source, "the intensity modulator could be used for control of spot size by varying the intensity [of the beam of light]." Alternatively, the invention "can also employ two power sources using parallel laser beams with each of the beams being of a different diameter and corresponding spot size." These different applications are respectively referred to as the one laser and two laser embodiments of the '272 patent.

The contested phrase "a plurality of beams of light" appears in claims 1 and 3 of the '272 patent. They read

1. A method for producing on a photoreceptor an image of generated shapes made up of spots, comprising: directing *a plurality of beams of light* toward a photoreceptor, each beam of light generating a spot on the photoreceptor and controlling a parameter of the light beams to produce spots of different sizes whereby the appearance of smooth edges are given to the generated shapes.

3. Apparatus for producing on a photoreceptor an image of generated shapes made up of spots, comprising: means for directing *a plurality of beams of light* toward a photoreceptor to generating a plurality of spots on the photoreceptor and means for generating spots of different sizes whereby the appearance of smooth edges are given to the generated shapes. (emphasis added)

It is undisputed that the accused HP printers use the same prior art light scanning system as that shown in Figure 1 of the '272 patent. The HP printers employ light from a single laser source which is reflected off a polygonal mirror to a photoreceptor mounted on a drum. Instead of adjusting either the beam's intensity or diameter, as is described in the '272 patent, the accused printers solve the "jaggies" problem by modifying the duration of time the laser beam is on.

In 1990, PB notified HP that several of HP's marketed laser printers infringed the claims of the '272 patent. This action followed.

### **STANDARD**

Summary judgment is appropriately granted when the evidentiary record reveals that there are no genuine issues of material fact and the moving party is entitled to judgment as a matter of law. Fed.R.Civ.P. 56(c). In determining whether the record presents genuine issues for trial, the court must view all inferences and ambiguities in a light most favorable to the non-moving party. *See* Bryant v. Maffucci, 923 F.2d 979, 982 (2d Cir.1991), *cert. denied*, 502 U.S. 849, 112 S.Ct. 152, 116 L.Ed.2d 117 (1991). A plaintiff raises a genuine issue of material fact if "the jury could reasonably find for the plaintiff." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 252, 106 S.Ct. 2505, 91 L.Ed.2d 202 (1986). Rule 56(c) "provides that the mere existence of some alleged factual dispute between the parties will not defeat an otherwise properly supported motion for summary judgment; the requirement is that there be no genuine issue of material fact." *Liberty Lobby*, *supra*, at 247-48, 106 S.Ct. 2505. The Supreme Court noted that:

Rule 56 must be construed with due regard not only for the rights of persons asserting claims and defenses that are adequately based in fact to have those claims and defenses tried to a jury, but also for the rights of persons opposing such claims and defenses to demonstrate in the manner provided by the Rule, prior to trial, that the claims and defenses have no factual basis.

Celotex v. Catrett, 477 U.S. 317, 327, 106 S.Ct. 2548, 91 L.Ed.2d 265 (1986). "One of the principal purposes of the summary judgment rule is to isolate and dispose of factually unsupported claims ... [and] it should be interpreted in a way that allows it to accomplish this purpose." Celotex, supra, at 323-24, 106 S.Ct. 2548. In a case of patent infringement, summary judgment is appropriate when comparison of the accused device and the claim reveals that there is an absence of disputed material fact. Chemical Engineering Corp. v. Essef Indus. Inc., 795 F.2d 1565 (Fed.Cir.1986).

## ***DISCUSSION***

### **I**

#### **Claim Construction**

[1] "The construction of a patent, including the terms of art within its claim, is exclusively within the province of the court." Markman v. Westview Instruments, Inc., 517 U.S. 370, 116 S.Ct. 1384, 1386, 134 L.Ed.2d 577 (1996). In determining the meaning of a claim, the court first examines the intrinsic evidence of the record, including the claims, specification, and the prosecution history. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996). Intrinsic evidence is "the most significant source of the legally operative meaning of the disputed claim language." *Id.* at 1582. If the intrinsic evidence does not sufficiently resolve ambiguities, then the court may consider extrinsic evidence, including expert and inventor testimony, in order to arrive at a "proper understanding of the claims." *Id.* at 1583.

#### ***1. Intrinsic Evidence***

##### **a. Language of the Claims**

HP first argues that the term "a plurality of beams" plainly means that a device must direct "two or more beams of light originating from two or more separate light sources" toward a photoreceptor. Alternatively, they contend the "plurality of beams" limitation requires that a single light beam must be "split or divided into multiple beams." Since it is undisputed that the accused devices employ neither multiple light sources nor beam splitters, HP argues that they do not infringe the '272 patent.

PB responds that the plain meaning of a "plurality of beams" does not require a device to use either multiple light sources or beam splitters. They argue that there are no limitations in the claim which require that "each beam of light originate from a different power source or be divided into multiple beams." Rather, given the nature of the described invention, they propose that it is possible to generate a plurality of beams from a single laser source.

[2] [3] Interpreting the claim language is of primary importance. The "language of the claims frames and ultimately resolves all issues of claim interpretation." *Abtox, Inc. v. Exitron Corp.*, 122 F.3d 1019, 1023 (Fed.Cir.1997). Claim terms are to be given their ordinary and customary meaning, unless it is apparent that the inventor expressly intended a different meaning. *Hoechst Celanese Corp. v. BP Chemicals, Ltd.*, 78 F.3d 1575, 1578 (Fed.Cir.), *cert. denied*, 519 U.S. 911, 117 S.Ct. 275, 136 L.Ed.2d 198 (1996). When reviewing claim language, a court must apply "normal rules of syntax" and consider the context of the claim. *Eastman Kodak Co. v. The Goodyear Tire and Rubber Co.*, 114 F.3d 1547, 1553 (Fed.Cir.1997).

[4] Applying these principles to the instant case, the court concludes that the phrase "a plurality of beams of light" when used in the '272 patent means multiple beams of light generated sequentially from one or more light sources. The plain language of the '272 claims indicates that PB's invention operates by "directing a plurality of beams of light toward a photoreceptor, each beam of light generating a spot on the photoreceptor." The relevant dictionary definition for the word plurality is a "state or condition of being plural or numerous," with the word plural being defined as "containing, consisting of, or designating more than one." *See Funk and Wagnall, Standard College Dictionary, (1963).* FN2 Multiple beams of light can be generated sequentially over time by one laser source. The ordinary meaning of the word "plurality" contains no requirement that "a plurality of beams" be created simultaneously, as suggested by HP.

FN2. The conclusion that the ordinary meaning of plural is two or more also derives support from the Federal Circuit's decision in *York Products v. Central Tractor Farm & Family Center*, 99 F.3d 1568, 1575-76 (Fed.Cir.1996) (holding that the word plurality means at least two).

Applying the "normal rules of syntax" to the claims provides further support for the conclusion that "a plurality of beams" can be generated sequentially. *See Eastman Kodak Co. v. The Goodyear Tire and Rubber Co.*, 114 F.3d 1547, 1553 (Fed.Cir.1997). Claim 1 describes a method which operates by "directing a plurality of beams of light toward a photoreceptor, each beam of light generating a spot on the photoreceptor." The use of the phrase "each beam of light generating a spot" modifies the term "plurality of beams." The use of the term "each beam" implies that multiple beams can individually strike the photoreceptor in turn to create multiple spots. The preferred embodiment of the '272 patent describes a system in which beams of light are reflected off a rotating polygon mirror towards a photoreceptor. Sequential production of multiple light beams by one or more laser source produces a plurality of beams, which are individually directed toward the photoreceptor by the rotating mirror.

Further, if this court were to adopt HP's suggestion that multiple laser sources are required to produce a plurality of beams of light, the preferred embodiment of the '272 patent would fall outside of the claims. Figure 1 of the '272 patent depicts a device which employs a single laser source and does not discuss the use of beam splitters. To hold that a plurality of beams can only be generated either by the simultaneous operation of multiple laser sources or by the use of beam splitters would exclude coverage of the preferred embodiment from the claims of the '272 patent. "Such an interpretation is rarely, if ever, correct and would require highly persuasive evidentiary support." *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1583 (Fed.Cir.1996). Since such evidence is lacking in the instant case, it is logical to conclude that the preferred embodiment is covered by the patent claims. FN3

FN3. HP argues that Claims 4-7 of the '272 patent cover the preferred embodiment. However, the file history reveals that claims 4-7 were not prosecuted in the '532 application in which Claims 1 and 2 were allowed and in which Figure 1 was included. This fact reveals that Figure 1 must relate to Claims 1 and 2 of the '272 patent.

## **b. The Specification**

HP next argues that the specification of the '272 patent describes the apparatus in Figure 1 as a device which "directs a single beam of light toward a photoreceptor." They contend that the only instance where the specification refers to multiple beams of light is in the discussion of the two laser embodiment. "The use of the term 'beams' exclusively in connection with the embodiment of the alleged invention which employs two light sources ... is in stark contrast to the description of the first embodiment." They contend that "a plurality of beams" can only be produced by the multiple laser version of the '272 patent, not the single laser embodiment depicted in Figure 1.

PB replies that the specification reveals that Figure 1 is "the one and only preferred embodiment" of the '272 patent. "The teaching in the specification confirms that the invention applies to printers with one or two laser power sources." PB contends that either embodiment generates the required "plurality of beams."

[5] After reviewing the claim language, the court must review other parts of the patent document, including diagrams or figures, which are collectively referred to as the specification. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 116 S.Ct. 1384, 1387-88, 134 L.Ed.2d 577 (1996); *see also Al- Site Corp. v. Bonneau Co.*, 22 F.3d 1107 (Fed.Cir.1994). "The specification contains a written description of the invention that must enable one of ordinary skill in the art to make and use the invention. For claim construction purposes, the description may act as sort of a dictionary, which explains the invention and may define terms used in the claims." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed.Cir.1995) (internal citations omitted). A court reviews the patent specification to determine whether the patentee "used any terms in a manner inconsistent with their ordinary meaning." *Vitronics Corp. v. Conceptronc, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996). However, although a review of the specification may add context to the claim language, it may not be used to read limitations into the claims. *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed.Cir.), *cert. denied*, 488 U.S. 892, 109 S.Ct. 228, 102 L.Ed.2d 218 (1988).

In the instant case, the specification of the '272 patent provides, FN4 *inter alia*,

FN4. Numbered references refer to Figure 1 of the '272 patent, which is contained in Exhibit 1 of this decision.

The light source, such as the laser 10, which may be a three mw helium-neon laser, generates a collimated beam 12 of monochromatic light which is direct through a neutral density filter 14 to control the light intensity. The beam 12 then passes through a modulator 16, such as an acousto-optical modulator. The beam 12 is next directed through a first lens 20 and intercepted by a knife edge 22 placed at the focal point of the first lens 20. [...] It is desirable to use the first order beam to produce a spot because the position of the spot can be displaced in accordance with the frequency modulation applied to the modulator which will selectively deflect the beam 12 in a desired direction such as indicated by the arrows a, b. The first order beam 12 is then directed towards a second lens 24 which directs the converging beam onto a reflecting face of facet of a rotating polygonal mirror, herein referred to as polygon 28. The polygon 28 is continuously driven by a motor drive 30 and preferably is maintained at a constant velocity.... The beam 12 is thus reflected successively from each of the facets off the rotating polygon 28 and onto a photoreceptor 32. The specification supports the conclusion that the phrase "a plurality of beams" when used in the '272 patent means multiple beams of light generated sequentially from one or more light sources. It indicates that reflecting each beam of light "off the rotating polygon and onto a photoreceptor" creates a small discharged area on the photoreceptor. Each symbol or picture produced by this process is composed of hundreds or thousands of these small discharged areas. Since each discharged area is created by one beam of light, it takes many beams, or a plurality of beams of light, to create one image. The specification of the '272 patent teaches that that these beams can be produced sequentially by one or two laser sources. The meaning of the phrase a "plurality of beams of light" derived from the specification is consistent with the plain meaning of the claim language.

### **c. The Prosecution History**

HP further argues that the prosecution history of the '272 patent supports the assertion that a "plurality of beams of light" requires more than one laser source. Specifically, they direct this court's attention to the PTO office action of September 23, 1981, which rejected claims 15 and 16 of the '532 application. These claims, which eventually became claims 1 and 2 of the '272 patent, were initially rejected since the examiner believed the specification did not clearly describe how "one photoreceptor would distinguish between the plural beams and how one or both beams would be controlled." HP contends that this rejection is evidence

that the preferred embodiment of the '272 patent requires multiple laser sources to create a plurality of beams.

PB responds that the examiner's initial rejection was in reference to the two laser source embodiment of the application, not the "plurality of beams" language found in claim 1 and 3 of the '272 patent.

[6] The undisputed public record of the proceedings in the PTO is of primary importance in understanding the claims. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980-81 (Fed.Cir.1995). The file history can function to limit claim construction so as to exclude any interpretation which was disclaimed during prosecution. *Southwall Technologies, Inc. v. Cardinal IG Co.*, 54 F.3d 1570 (Fed.Cir.1995), *cert. denied*, 516 U.S. 987, 116 S.Ct. 515, 133 L.Ed.2d 424 (1995). The prosecution history must be read "in its full context, not on the basis of snippets lifted out of context." *J.T. Eaton & Co. v. Atlantic Paste and Glue Co.*, 106 F.3d 1563, 1576 (Fed.Cir.1997).

In the instant case, there is nothing in the prosecution history which indicates that multiple laser sources are required to create a plurality of beams. The text of the examiner's initial rejection of the '532 application indicates that he was referring to the two laser embodiment of the invention. For example, his concern that the initial application did not teach how "one or both beams" indicates that he was discussing the two laser embodiment. Interpreting this single comment to require that the PB patent covers only multiple laser source applications would improperly "diminish or vary the limitations of the claims." *Goodyear Dental Vulcanite Co. v. Davis*, 102 U.S. 222, 227, 26 L.Ed. 149 (1880); *see also Constant v. Advanced Micro-Devices Inc.*, 848 F.2d 1560, 1571 (Fed.Cir.), *cert. denied*, 488 U.S. 892, 109 S.Ct. 228, 102 L.Ed.2d 218 (1988) (holding that it is improper to read limitations from the specifications into the claims).

## ***2. Extrinsic Evidence***

The court concludes that the use of extrinsic evidence is unnecessary in this case. Extrinsic evidence may be evaluated "in order to aid the court in coming to a correct conclusion as to the true meaning of the language employed in the patent." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 981 (Fed.Cir.1995) (internal citations omitted). However, "reliance on such evidence is unnecessary, and indeed improper, when the disputed terms can be understood from a careful reading of the public record." *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1584 (Fed.Cir.1996).

In this case, the meaning of the phrase "a plurality of beams of light" can be understood from a careful reading of the claims, the specification, and the prosecution history. Accordingly, consideration of extrinsic evidence is unnecessary and improper.

## **II**

### **Infringement Analysis**

Once the meaning of the claims is determined, resolving an issue of patent infringement is a two step process. *See Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1562 (Fed.Cir.1991). First, the court must determine whether the accused device literally infringes the claims. *See Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931, 933 (Fed.Cir.1987). If the court finds that the standard for literal infringement is not met, it must then decide whether the accused device infringes the patent under the doctrine of equivalents. *See Graver Tank & Mfg. Co., Inc. v. Linde Air Products Co.*, 339 U.S. 605, 608, 70 S.Ct. 854, 94 L.Ed. 1097 (1950).

#### ***1. Literal Infringement***

HP argues that the accused printers do not literally infringe the '272 patent since they do not produce a plurality of beams of light. HP claims that multiple light sources are required to produce a plurality of

beams of light, and the single light source HP printers lack this required element.

PB contends that a plurality of beams of light can be produced by a single laser source. They point to the fact that the preferred embodiment of the '272 patent contains only one laser source.

[7] An accused device literally infringes a patent claim only when the device contains each and every element of the claim. *See Stewart-Warner Corp. v. City of Pontiac*, 767 F.2d 1563, 1570 (Fed.Cir.1985). This requirement, often called the All Elements Rule, mandates that if the accused device does not possess all of the elements of the claim, there can be no finding of literal infringement. *See London v. Carson Pirie Scott and Co.*, 946 F.2d 1534, 1539 (Fed.Cir.1991). "In the All Elements Rule, [the term] element is used in the sense of a limitation of a claim ... and an equivalent must be found for every limitation of the claim in an accused device." *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1259 (Fed.Cir.1989).

[8] The court concludes that the HP printers do not avoid literal infringement of the '272 patent by employing a single laser source. In constructing the claim language, this court finds that, as used in the '272 patent, a "plurality of beams of light" means multiple beams of light generated sequentially from one or more light sources. It is undisputed that "the accused HP printers use the same prior art light scanning system as that shown in Figure 1 of the '272 patent." The HP printers employ light from a single laser source which is reflected off a polygonal mirror to a photoreceptor mounted on a drum. Instead of adjusting beam intensity or diameter, as is described in the '272 patent, the accused printers solve the "jaggies" problem by modifying the duration of time the laser beam is on. By reflecting multiple beams of light off a polygonal mirror, the accused printers do create a plurality of beams of light as described in the '272 patent.

In today's decision, the court does not hold that the accused HP printers literally infringe the '272 patent. Even though the HP printers contain an element claimed in the '272 patent, literal infringement only occurs when the device contains "each and every element of the claim." FN5 *Stewart-Warner Corp. v. City of Pontiac*, 767 F.2d 1563, 1570 (Fed.Cir.1985). Rather, under the "plurality of beams" argument presented in the instant motion, this court finds that the accused printers do not avoid literal infringement under the All Elements Rule.

FN5. There is currently a defendant's motion for summary judgment before this court which claims that the accused devices do not infringe the '272 patent since they lack the element of producing light spots of different sizes. Additionally, the defendant claims that the '272 patent is invalid.

## ***2. Doctrine of Equivalents***

Since the HP printers do not avoid literal infringement of the '272 patent, the court does not reach the analysis of the doctrine of equivalents.

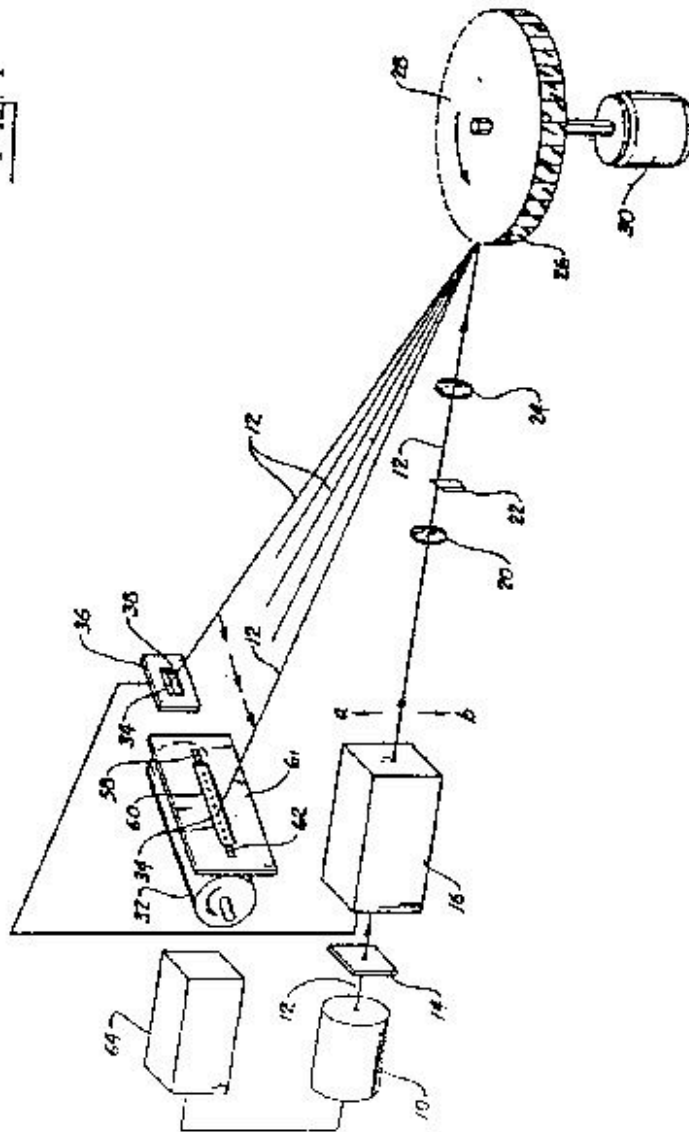
### ***CONCLUSION***

For the forgoing reasons, the court concludes that the phrase "a plurality of beams of light" as used in the '272 patent means multiple beams of light generated sequentially from one or more light sources. The accused single light source printers do employ a "plurality of beams of light" as defined in the '272 patent. The defendant's motion for summary judgment on the claim of noninfringement (document no. 140) is DENIED. The plaintiff's motion for summary judgment on the issue of claim construction (document. no. 146) is GRANTED.

### **EXHIBIT 1**



Fig. 1



D.Conn.,1998.  
Pitney Bowes, Inc. v. Hewlett-Packard Co.

Produced by Sans Paper, LLC.