

United States District Court,
N.D. Illinois, Eastern Division.

HEIDELBERG HARRIS, INC,
Plaintiff.

v.

MITSUBISHI HEAVY INDUSTRIES, LTD. and MLP U.S.A., Inc,
Defendants.

Jan. 9, 1996.

Alan N. Salpeter, Javier H. Rubinstein, Mayer, Brown & Platt, Chicago, IL, Richard L. Mayer, Richard L. Delucia, Richard S. Gresalfi, Michael D. Loughnane, Kenyon & Kenyon, New York, City, for Plaintiff

Harry J. Roper, William P. Oberhardt, John E. Titus, Roper & Quigg, 200 South Chicago, IL, for Defendants.

REPORT AND RECOMMENDATION

ASHMAN, United States Magistrate Judge.

Three motions are presently before the Court: 1) Plaintiff's, Heidelberg Harris, Inc. ("Harris"), motion for a preliminary injunction; 2) Defendants', Mitsubishi Heavy Industries, Ltd. and MLP U.S.A., Inc. (collectively referred to as "Mitsubishi"), motion to strike Harris' patent law expert's declaration; and 3) Mitsubishi's motion to supplement the record. On February 2, 1995, Harris filed suit against a competitor, Mitsubishi, for infringement of three patents relating to blankets used in gapless printing presses. On July 4, 1995, the United States Patent Office granted United States patent number 5,429,048 entitled "Offset Lithographic Printing Press" ("the '048 patent"). On July 18, 1995 Harris amended its complaint to add a count for infringement of the '048 patent; subsequently, on August 8, 1995, Harris filed its motion for a preliminary injunction which is now before the Court.

I. Factual Background

The following facts are relevant and undisputed:

Harris is the assignee of the '048 patent. As the title would indicate, the '048 patent relates to offset printing presses. Offset printing presses differ from direct printing presses in the manner in which the image is transferred onto paper. In both presses, the flat printing plate is mounted onto a cylinder called a "plate cylinder" and inked. In the direct press, the image is transferred directly onto the paper as it passes between the "plate cylinder" and the "impression cylinder." However, in offset presses the image is first transferred onto a rubber "printing blanket" and then transferred onto the paper as it passes between the "blanket cylinder" and the "impression cylinder." In direct printing, the point at which the image is transferred onto paper is called the "nip;" whereas in offset printing the point at which the image is transferred from the plate

to the blanket is the nip.

Offset printing, *i.e.*, transferring the image from the printing plate to the printing blanket and then onto paper, dates back to the early 1900's and its fundamental elements are therefore not new technology. Conventional offset printing presses employ printing plates and printing blankets manufactured in flat sheets. These flat sheets are wrapped onto respective cylinders (the plate cylinder and the blanket cylinder) and secured onto the cylinder by tucking the ends of the sheet into a gap that runs the length of the cylinder. The gap in the plate cylinder and the gap in the blanket cylinder causes vibrations which constrain the speed at which a press can operate and results in reduced print quality. Printing blankets are periodically removed when they become worn or damaged. The removal and mounting of these flat blankets is time consuming. Flat printing plates also suffer the same disadvantages; however, they provide quick and flexible means of changing the text of the printed matter at the printer's place of business.

The '048 patent purports to teach an "improved printing press" which combines an axially removable, gapless, tubular printing blanket with a gapped printing cylinder. In other words, the printing blanket in the '048 patent is tubular in shape - not flat, and it is intended to slide on and off the end of the blanket cylinder. The result is a "gapless" blanket cylinder. This blanket includes a rigid inner layer, a compressible intermediate layer and a rubber printing layer. Combining the use of this gapless blanket cylinder with conventional flat printing plates allegedly permits increased printing speed without loss of print quality. This blanket is at the center of the dispute between Harris and Mitsubishi.

In 1992, Harris introduced an offset printing press embodying the '048 patent technology which is referred to as either the "Sunday Press" or the "M3000." This press is mammoth in size; an eight unit press typically extends 180 feet in length, and each press sells for about \$10,000,000. From its introduction, the M3000 has received much critical acclaim in the printing industry for the speed and quality of print; and, to date, Harris has sold over thirty presses worldwide.

Mitsubishi produces and sells offset printing presses which employ a tubular, gapless blanket and gapless blanket cylinder with a gapped plate cylinder referred to as "the GCX" press or "the GPX" press. Mitsubishi has sold and delivered two presses, and has contracted to supply a third, to customers in the United States.

II. Discussion

As a preliminary matter, the Court will briefly address the Mitsubishi's evidentiary motions prior to discussing the merits of the underlying motion for a preliminary injunction.

A. Mitsubishi's Motion To Strike The Declaration Of Harris' Patent Law Expert

Mitsubishi seeks to have the Declaration of John Goolkasian stricken and all references to it in Harris' reply brief stricken. Specifically, Mitsubishi argues 1) Goolkasian's testimony on pure issues of law, *i.e.*, claim construction, invalidity based on obviousness and case law interpretation, is improper; and 2) Goolkasian is not a person skilled in the art of printing press development or construction and thus his opinion as to the interpretation of technical disclosures of prior art are not proper. In response, Harris argues that Goolkasian's Declaration is fully within the parameters of FED. R. EVID. 702 - Expert Witnesses and that it will assist the Court.

Harris has presented the 12-page declaration of Goolkasian in support of its motion for preliminary injunction. In the 33-paragraph declaration, Goolkasian, a patent attorney, asserts that he had ten years of

experience as a member of the Board of Patent Appeals and another 11 years experience as a Patent Examiner and Supervisory Patent Examiner prior to entering private practice. Goolkasian avers that he has been retained to render an opinion as to the likelihood of success of Harris' infringement suit against Mitsubishi. In brief, Goolkasian opines that Harris will be successful in its suit based on his analysis of various pieces of evidence including the '048 patent and prosecution history and discovery deposition testimony.

FED. R. EVID. 702 directs in pertinent part:

If ... other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training or education may testify thereto in the form of an opinion or otherwise.

In addition, federal courts have long recognized the trial court's discretion to receive extrinsic evidence in order to "aid the court in coming to the correct conclusion" as to "the true meaning of the language employed" in the patent. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995), *cert. granted*, 116 S. Ct. 40 (1995), quoting *Seymour v. Osborne*, 78 U.S. (11 Wall) 516, 546 (1870). Extrinsic evidence includes expert testimony and may be used to "explain scientific principles, the meaning of technical terms, and terms of art that appear in the prosecution history," and for "understanding the patent, not for purposes of contradicting the terms of the claims." *Markman*, 52 F.3d at 980, 981. Testimony regarding claim construction "amounts to no more than legal opinion" which a court has "complete discretion to adopt ... as its own, to find guidance from it, or to ignore it entirely, or even to exclude it." *Markman*, 52 F.3d at 983.

Therefore, under *Markman* and the Rule 702, the Court clearly has discretion to consider Goolkasian's declaration to the extent that it aids in the analysis of the preliminary injunction. Goolkasian's declaration concerns issues related to claim construction which necessarily impacts the issue of Harris' likelihood of success. For this reason, the Court finds that Goolkasian's Declaration is admissible as expert opinion. However, it is only admissible to the extent that the Court finds it helpful to the preliminary injunction analysis; and, as discussed below the Court has chosen to exclude certain portions relating to the issue of obviousness.

B. Mitsubishi's Motion To Supplement The Record Regarding The Motion For Preliminary Injunction

Mitsubishi seeks to supplement the record in connection With Harris' motion for preliminary injunction. Specifically, Mitsubishi wants to provide the Court with four types of materials: 1) full deposition transcripts of those individuals upon whose testimony has been relied by the parties; 2) certain documents produced by Harris and Mitsubishi during discovery; 3) a videotape of testing supervised by Mitsubishi's expert regarding the issue of speed difference; 4) reduced sized examples of the Mitsubishi and Harris gapless blankets.

At preliminary injunction hearings, the Court has broad discretion and the evidentiary requirements are less formal than a trial. *Sierra Club, Lone Star Chapter v. F.D.I.C.*, 992 F.2d 545, 551 (5th Cir.), *reh. denied*, 3 F.3d 441 (1993) ("although the district court may employ informal procedures and rely on generally inadmissible evidence, the record must nonetheless support the district court's decision."). Harris has not objected to this motion, and this Court finds that such motion should be granted.

C. Harris' Motion For Preliminary Injunction

Harris seeks to enjoin Mitsubishi *pendente lite* FN1 from infringing on the '048 patent. 35 U.S.C. s. 283 provides for injunctive relief in patent cases. FN2 Such relief is intended to preserve the legal interests of a patent holder against future infringement which may have a market effect not fully compensable in money. *Reebok Intern. Ltd. v. J. Baker, Inc.*, 32 F.3d 1552, 1557 (Fed. Cir. 1994). Generally, preliminary injunctions are drastic and extraordinary remedies that are not routinely granted. *Nutritron 21 v. U.S.*, 930 F.2d 867, 869 (Fed. Cir. 1991). In fact, Courts have "developed a reluctance to resort to preliminary injunctions in patent infringement cases, and have constructed a rather strict standard for the granting of this form of equitable relief. *Smith Intern., Inc. v. Hughes Tool Co.*, 718 F.2d 1573, 1578 (Fed. Cir. 1983).

Four factors must be considered in deciding a motion for preliminary injunction: 1) the movant's reasonable likelihood of success; 2) the irreparable harm the movant will suffer if preliminary relief is not granted; 3) the balance of hardships tipping in the movant's favor; and 4) the impact of the injunction on the public interest. *New England Braiding Co., Inc. v. A.W. Chesterton Co.*, 970 F.2d 878, 882 (Fed. Cir. 1992); *Hybridtech Inc. v. Abbott Laboratories*, 849 F.2d 1446, 1451 (Fed. Cir. 1988). No one factor is necessarily dispositive, and a court should consider and assess each of the four factors and balance each against the other and against the magnitude of relief requested. *Chrysler Motors Corp. v. Auto Body Panels of Ohio, Inc.*, 908 F.2d 951, 953 (Fed. Cir. 1990). The burden is always upon the movant to show entitlement to a preliminary injunction. *Chrysler Motors*, 908 F.2d at 952.

1. Likelihood Of Success

The first factor required to be established by a party seeking a preliminary injunction is a reasonable likelihood of success on the merits when the trial court finally adjudicates the dispute. *Hybridtech*, 849 F.2d at 1451. The patent holder must establish a reasonable likelihood of success on the merits on the issue of validity as well as on the issue of infringement. *Hybridtech*, 849 F.2d at 1451.

The very nature of a preliminary injunction presupposes that the court must necessarily rely on an incomplete evidentiary record as it is not a trial of the issues. As such, substantive issues, for example, validity and infringement, are not raised for final resolution in motions for preliminary injunctions and findings of fact relate only to the propriety of granting or denying the preliminary injunction. *Roper Corp. v. Litton Systems, Inc.*, 757 F.2d 1266, 1271 (Fed. Cir. 1985). Neither party need prove its case in full at a preliminary injunction stage and any decision on substantive issues is not binding at trial; thus, a denial of a preliminary injunction does not require that noninfringement be clear beyond all question. *Illinois Tool Works, Inc. v. Grip-Pak, Inc.*, 906 F.2d 679, 681 (Fed. Cir. 1990).

a. Validity

Under 35 U.S.C. s. 282, a patent is presumed valid and the burden of establishing invalidity of a patent or any claim is on the party asserting such invalidity. FN3 However, at the preliminary injunction stage, the patent holder has the burden of showing a likelihood of success on the merits on the issue of validity and enforceability of the patent. *Nutritron 21*, 930 F.2d at 869. Thus, the statutory presumption of validity does not apply for a preliminary injunction. *New England Braiding Co.*, 970 F.2d at 882. Where the alleged infringer presents evidence challenging the validity of the patent, the patent holder must show that the alleged infringer's defense lacks substantial merit. *Id.* Ultimately, the patentee seeking a preliminary injunction must "clearly show" that his patent is valid and infringed. *Nutritron 21*, 930 F.2d at 870 (quoting *Atlas Powder Co. v. Ireco Chemicals*, 773 F.2d 1230, 1233 (Fed. Cir. 1985)).

Therefore, Mitsubishi must produce evidence sufficient to raise a substantial question regarding validity of Harris' patent. In support of its invalidity argument, Mitsubishi contends that the claimed invention of the '048 patent is obvious.

i. Obviousness

Under 35 U.S.C. s. 103, a patent may be found invalid if:

the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

The issue is not whether the invention is obvious now but whether it was obvious at the time the invention was made. A claimed invention is obvious if it is made up of a combination of known elements performing known functions and where the prior art suggests the desirability of making the combination. In *Re Raynes*, 7 F.3d 1037, 1039 (Fed. Cir. 1993).

Ultimately, the question of obviousness is one of law based upon a consideration of four relevant factors. *Miles Laboratories, Inc. v. Shandon Inc.*, 997 F.2d 870, 877 (Fed. Cir.), *cert. denied*, 114 S. Ct. 943 (1994). These factors include: 1) the level of ordinary skill in the pertinent art at the time of the invention; 2) the scope and content of the prior art; 3) the difference between the prior art and the claims at issue; and 4) objective evidence of nonobviousness. *FN4 Miles Laboratories*, 997 F.2d at 877 (citing *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17-18, 86 S. Ct. 684, 693-94 (1966)). An analysis of obviousness must take the entire invention as a whole into consideration; therefore small differences between the claims and the prior art can give rise to patentability. *See Timely Products Corp. v. Arron*, 523 F.2d 288 (2d Cir. 1975) ("Test of obviousness is not substantiality of differences but obviousness of invention as a whole.").

Before addressing the substantive criteria, the Court must determine the relevant level of art against which obviousness must be measured. In this case, the parties have not agreed to an appropriate level of ordinary skill, but they have submitted expert declarations which discuss the patents and prior art in issue.

The determination of whether the invention is obvious depends upon the opinion of experts based on their knowledge and experience in that particular art. Mitsubishi provides the declaration of Louis Tyma ("Tyma") in support of its obviousness argument; while Harris relies on the declarations of John Peters ("Peters") and John Goolkasian ("Goolkasian") to show nonobviousness. As discussed above, Goolkasian is an attorney with an engineering background who specializes in patent law. Courts have allowed such individuals to testify as patent law experts; but only to explain scientific principles or the meanings of technical terms or terms of art in the prosecution history. In short, such expert testimony is permissible to help the court come to the correct meaning of the language employed in the patent. *See Markman*, 52 F.3d at 980-83.

At this stage, expert testimony as to obviousness depends on the expert's knowledge and experience in that particular art. Undeniably, the relevant art in this case concerns lithographic offset printing presses. The only expert witnesses with an appropriate level of skill in this art would be Tyma, with approximately 40 years experience in engineering and manufacture of offset printing presses (Tyma Decl., para. 1), and Peters, with 35 years experience in the graphic arts industry including printing presses (Peters 8-5-95 Decl., para. 1).

Goolkasian has some experience with rubber and plastic but has no background in the pertinent art of this case: offset lithographic printing presses. For this reason, the Court will not consider Goolkasian's testimony as it relates to the prior art and the issue of obviousness.

Tyma testified that in his opinion, the technology contained in the '048 patent was obvious given the prior art available. On the other hand, Peters provides no testimony in either his August 5, 1995 or October 29, 1995 declaration relating to the issue of obviousness. Peters' entire testimony concerns infringement and does not address validity. Therefore, as to the opinions of the experts in the pertinent art, Mitsubishi has made a sufficient showing that the '048 invention was obvious.

Next, the Court must determine the scope and content of the prior art to which a person skilled in the art would use in attempting to improve the subject matter of the claimed invention. In this case, the scope and content of the prior art are closely related to the claims of the patent in suit, and thus the differences between the claims in suit and the prior art will be also be considered.

Mitsubishi argues that the central improvement on offset printing presses claimed in the '048 patent is the combination of mechanical elements that was obvious in light of the prior art. In support, Mitsubishi cites four relevant sources of prior art: the Vanguard Press (as expressed in U.S. patent numbers 2,949,851; 2,975,708; and 3,002,451), U.S. patent number 3,146,709 ("the Bass patent"), U.S. patent number 3,700,541 ("the Shrimpton patent"), and U.S. patent number 4,913,048 ("the Tittgemeyer patent"). Specifically, Mitsubishi contends that combining the teachings of these four sources of prior art results in the claimed innovation of the '048 patent.

In response, Harris argues that the prior art relied upon by Mitsubishi was either presented to the patent examiner or was less relevant than the prior art that was referred to in the application. Regardless, Harris asserts that Bass, Shrimpton and Tittgemeyer patents cannot be combined with the Vanguard Press to create the invention claimed in the '048 patent.

The Vanguard Press was an offset printing press which included a gapless printing blanket combined with a gapped printing blanket, and was commercially sold to small newspapers in the late 1950's and early 1960's. In 1962, Harris purchased the Vanguard technology, and the press was later discontinued.

Mitsubishi argues that every element of the '048 patent, except two, FN5 was disclosed by the Vanguard Press. Specifically, the Vanguard Press involved a gapless blanket cylinder and a conventional gapped printing blanket and a conventional drive which rotated the cylinders at the same speed.

The scope and content of the prior art contained in the Bass and Shrimpton patents is largely undisputed as these patents were cited by Harris in their patent application and considered by the patent examiner. Specifically, the Bass patent disclosed as early as 1964 the concept of axial mounting and removal of printing elements. Further, the Shrimpton patent disclosed in 1972 the invention of a multi-layered compressible printing blanket. Both inventions were disclosed to and considered by the patent examiner prior to the issuance of the '048 patent. However, Mitsubishi contends that the Tittgemeyer patent should have been cited as prior art in the '048 patent application. According to Mitsubishi, the Tittgemeyer patent taught the use of a replaceable rubber sleeve in offset printing presses.

Harris argues that while the Vanguard Press was not cited to the patent examiner, the technology it taught, *i.e.*, a gapless rubber blanket, was included in at least two prior art references presented to the patent

examiner: the Adsit patent and the Casto patent.FN6 Harris asserts that these references are more relevant because they describe removable gapless blankets (Adsit) and the use of gapless blankets with flat printing plates (Casto).

Further, Harris, relying on the testimony of Goolkasian, argues that there is no suggestion in the Bass, Shrimpton or Tittgemeyer patents to combine either with the Vanguard Press. According to Goolkasian, the Bass patent involved a gapless printing plate in a direct press which does not incorporate a printing blanket and thus does not suggest the use of a gapless tubular printing blanket. In addition, Goolkasian opines that, the Shrimpton patent describes a flat printing blanket which does not suggest either a tubular blanket or an axially removable blanket which is present in the '048 patent. The Court finds Goolkasian's opinions unpersuasive as he has not been shown to have ordinary skill in the art of printing presses.

Obviousness under Section 103 turns on whether the prior art, including the knowledge available to one of ordinary skill in the art, provides some suggestion or motivation to combine known elements. *Fromson v. Advance Offset Plate, Inc.*, 755 F.2d 1549 (Fed. Cir. 1985). Therefore, it is insufficient that the prior art merely discloses components of the patented device - there must be some motivation to make the combination. *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 934 (Fed. Cir.), *cert. denied*, 498 U.S. 920, 111 S. Ct. 296 (Oct. 15, 1990). The motivation to combine can arise from the knowledge that the prior art elements will perform their expected functions to achieve their expected results when combined for their common known purpose. *See Miles Laboratories*, 997 F.2d at 878.

As discussed above, the only expert with knowledge of the pertinent art is Tyma and in his deposition he opined that the most critical teachings of the '048 patent: a tubular, gapless compressible blanket which is axially removable, were anticipated by prior art. (Tyma Dep., pp. 235, 236). Based on this testimony, Mitsubishi appears to have raised a substantial question of obviousness by providing clear and convincing expert testimony. In response, Harris fails to demonstrate a reasonable likelihood of success because it relies on the testimony of Goolkasian who is not an expert in the art of printing presses.

Finally, the Court must consider the objective evidence of nonobviousness. These secondary considerations: commercial success; long felt but unresolved need; failure of others; and copying of invention unexpected results, are particularly appropriate when trying to determine the obviousness of an invention that combines conventional elements in a new way. *See Continental Can Co. U.S.A., Inc. v. Monsanto Co.*, 948 F.2d 1264, 1273 (Fed. Cir.), *reh. denied* (1991).

The parties address two of these factors: commercial success and copying. The Federal Circuit has held that for commercial success of a product embodying a claimed invention to have true relevance to the issue of nonobviousness, that success must be shown to have in some way been due to the nature of the claimed invention, as opposed to other economic and commercial factors unrelated to the technical quality of the patented subject matter.

Cable Elec. Products, Inc. v. Genmark, Inc., 770 F.2d 1015, 1027 (Fed. Cir. 1985). In other words, there must be some nexus between the patented feature and the commercial success. *Hughes Tool Co. v. Dresser Industries, Inc.*, 816 F.2d 1549, 1556 (Fed. Cir.), *cert. denied*, 484 U.S. 914, 108 S. Ct. 261 (1987). In addition, courts have held that "when the product that is commercially successful is not coextensive with the patented invention, for example, if the patented invention is only a component of a commercially successful machine, the patentee must show *prima facie* a legally sufficient relationship between that which is patented

and that which is sold." *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir.), *cert. denied*, 488 U.S. 956, 109 S. Ct. 395 (1988).

Harris contends that its product - the Sunday Press - was produced using inventions in the '048 patent and has met with great commercial success since its unveiling in 1992. In support of its claim of commercial success, Harris cites numerous publications which praise the speed and print quality of the Sunday Press and the fact that the Sunday Press received the Graphic Arts Technical Foundation ("GATF") Intertech Technology Award for excellence in new printing technology. (*See* Harris Brief in Support, Exh. 5 and Peters' 8-5-95 Decl., para. 11, 12). In addition, Harris asserts that its sale of thirty Sunday Presses around the world at \$10,000,000 is further evidence of commercial success and nonobviousness.

Mitsubishi does not refute the industry tribute or the number of sales. Instead, Mitsubishi asserts that Harris fails to show a nexus between the claimed invention and sales of the product. Mitsubishi argues that Harris' combination of gapless blanket and gapped printing plate has been tried before. Further, it argues that the Sunday Press is the combination of numerous patented technologies, and there is no showing that the '048 patent invention is the source of the success.

The Court finds that the industry tribute and accolades are indicia of nonobviousness; however, Harris has not shown a strong nexus between the commercial success^{FN7} and the patented invention. While the tributes mention gapless technology, they also cite other innovations such as the reduced printing plate gap, the shaftless drive and other auxiliary equipment which are not taught in the '048 patent. (*See* Harris Brief, Exh. 5, pp. HH 1183-84).

As other objective evidence of nonobviousness, Harris argues that Mitsubishi copied the basic design of the Sunday press which was ultimately described and claimed in the '048 patent. Mitsubishi counters that it has not copied but gathered publicly available information and developed its own gapless blanket technology. The Court finds that the evidence supports a finding that Mitsubishi did in fact copy at least the basic design of the Sunday Press. Internal memoranda of Mitsubishi demonstrate a knowledge of the basic design of the Sunday Press as well as an intent to mimic that design. The mere fact that Harris has not shown violation of trade secrets does not preclude a finding of copying. Copying, in itself is not necessarily illegal, especially if it relates to unpatented technology; however, it is evidence that Harris' claimed invention was not obvious at the time.

However, the fact that there is some evidence of copying does not tilt the obviousness issue in favor of Harris. The Court finds that Mitsubishi had presented a substantial question on the issue of validity of the '048 patent. Furthermore, Harris has not provided, at this time, sufficient evidence to refute Mitsubishi's obviousness challenge and therefore does not support a finding of a reasonable likelihood of Harris' success.

b. Infringement^{FN8}

35 U.S.C. s. 271, entitled "Infringement of Patent," provides in pertinent part:

(a) ... [W]hoever without authority makes, uses or sells any patented invention, within the United States during the term of the patent therefor, infringes the patent.

To establish infringement of a patent, a plaintiff must show by a preponderance of the evidence that every limitation set forth in a claim is found in the accused product or process exactly or by a substantial

equivalent. *Johnston v. IVAC Corp.*, 885 F.2d 1574, 1577 (Fed. Cir. 1989). "Infringement, literal or by equivalence, is determined by comparing the accused product not with a preferred embodiment described in the specification, or with a commercialized embodiment of the patentee, but with the properly and previously construed claims in suit." *SRI Intern. v. Matsushita Elec. Corp. of America*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (*en banc*), citing *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1578 (Fed. Cir. 1984).

Therefore, patent infringement analysis requires a two-step inquiry: a threshold question of claim interpretation followed by a determination of whether the properly interpreted claim encompasses the accused product or process. *Texas Instruments Inc. v. United States Intern. Trade Com'n*, 988 F.2d 1165, 1171 (Fed. Cir. 1993).

1) Claim Interpretation

A patent is a government grant of rights which allows the patentee to exclude others from making, using, or selling the invention as claimed. 35 U.S.C. s. 154. Claims are the metes and bounds of a patent and must be interpreted in light of the claim language and specification. *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251 (Fed. Cir. 1989). In construing a claim, the court essentially defines the federal legal rights created by the patent document. *Markman*, 52 F.3d at 978. Courts must neither narrow nor broaden the scope of a claim to give the patentee something different than what he has set forth. *E.I. du Pont de Nemours & Co. v. Phillips Petroleum Co.*, 849 F.2d 1430, 1433 (Fed. Cir.), *cert. denied*, 488 U.S. 986, 109 S. Ct. 542 (1988). Claim interpretation requires consideration of the claims, the specification, and the prosecution history as well as testimony from experts or those skilled in the art as to their interpretations. *Markman*, 52 F.3d at 979.

2) Literal Infringement

Literal infringement requires that every limitation of the patented claim must be found in the accused device. *Pall Corp. v. Micron Separations, Inc.*, 66 F.3d 1211, 1217 (Fed. Cir.), *reh. denied* (1995). Where a claim does not "read on" an accused device exactly, there can be no literal infringement. *Johnston*, 885 F.2d at 1580. All elements of the claim are material and essential, and must be considered, to determine whether a patent has been literally infringed. *Perkin-Elmer Corp. v. Westinghouse Elec. Corp.*, 822 F.2d 1528, 1533 (Fed. Cir. 1987).

Harris contends that Mitsubishi's GPX and GCX presses literally infringe because they contain every element of Claim 1 of the '048 patent. FN9 According to Harris, Mike Takahashi ("Takahashi"), Mitsubishi's representative, admitted this infringement in his 30(b)(6) deposition. Mitsubishi denies infringement and cites three specific elements which are required in the '048 patent but which it claims are absent from the GPX and GCX presses.FN10 For the following reasons, the Court finds that Harris has presented sufficient evidence to support a reasonable likelihood of success on the issue of patent infringement.

First, Mitsubishi asserts that its presses do not meet the requirement found in the preamble to Claim 1. Specifically, the preamble to Claim 1 reads as follows:

An offset lithographic printing press for reducing vibrations and slippage of a printing surface in the printing press to reduce smearing comprising:

('048 Patent, Col. 12, Ins. 40-42). Mitsubishi contends that the plain meaning of this language directs that

the press reduce slippage of a printing surface. Mitsubishi argues that, by contrast, their presses have been deliberately designed to include slippage of the printing surface to reduce doubling. (Tyma Decl. p. 2, para. 8). Harris counters that the preamble language merely sets forth the object or purpose of the invention and is not a limitation of the '048 patent because it does not define a structure and is not necessary to understand the invention.FN11

Generally, the preamble does not limit the claims of a patent, unless the preamble limitations are "necessary to give meaning to the claim and properly define the invention." *DeGeorge v. Bernier*, 768 F.2d 1318, 1322 n.3 (Fed. Cir. 1985) (quoting *Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 896 (Fed. Cir.), *cert. denied*, 469 U.S. 857, 105 S. Ct. 187 (1984)). The cases cited by Mitsubishi are factually dissimilar from this case because, in those cases, the preambles contained language which defined a structure essential to the invention claimed. Namely, in *Diversitech Corp v. Century Steps, Inc.*, 850 F.2d 675, 678 (Fed. Cir. 1988), the preamble specified "a base for the support of equipment;" and, in *London v. Carson Pirie Scott & Co.*, 946 F.2d 1534 (Fed. Cir. 1991), the preamble articulated "an upstanding shank between the supporting hook for the hanger and the support for the garment." In contrast, the preamble of the '048 patent is a statement of purpose and contains no structure other than the printing press which is defined by the following claims. For this reason, the Court finds that the preamble of Claim 1 does not provide a limitation on the claimed invention of the '048 patent; and, thus cannot serve as a basis for Mitsubishi's noninfringement argument.

Second, Mitsubishi argues that the blanket used in its presses is not the same as that taught in Claim 1. Claim 1 directs in pertinent part:

... the blanket comprising an outer layer of material, an inner layer of material and an intermediate layer of material, the outer layer of material being a continuous tubular layer of incompressible material indented by the printing plate at the nip ... and the intermediate layer of material being a layer of compressible material;

('048 Patent, Col. 12, Ins. 61-70). Mitsubishi interprets this language to mean that the outermost layer of the printing blanket must be an incompressible material, and contends that the blanket used in its presses does not have such a layer. Mitsubishi relies on testing performed by its expert, Tyma, which purports to show that while Mitsubishi's blanket (manufactured by Sumitomo) has multiple layers, the outer layer actually accommodates most of the compression - thereby placing it outside the purview of Claim 1. Harris agrees with the claim interpretation, but disagrees with Mitsubishi's application of the term incompressible and disputes the validity of Tyma's testing.

It is axiomatic that claims must be interpreted in the light of the specifications and that both claims and specifications must be read with the purpose of understanding the invention. The '048 patent teaches the use of a multi-layer printing blanket with at least three layers: a rigid inner layer, a compressible intermediate layer and an incompressible outer layer. The specifications of the '048 patent direct that the outer layer is "formed of a resiliently deflectable and incompressible polymeric material, such as natural or artificial rubber," while the intermediate layer is "formed of a resiliently compressible polymeric material such as a natural or artificial rubber." ('048 Patent, Col. 9, Ins. 54-65). The specification further requires that the intermediate, "compressible," layer contain a "plurality of voids which are relatively large before the layer is compressed and which are relatively small in the portion of the compressible layer which is compressed by the deflection of the outer layer." ('048 Patent, Col. 4, Ins. 11-16). Thus, while deflection of the outer layer results in the entire printing blanket occupying a volume less than the original or undeflected volume, the volume of the outer layer remains constant and the outer layer does not bulge outwardly adjacent to the sides

of the nip. ('048 Patent, Col 11, Ins. 66-70, Col. 12, Ins. 1-5).

There is no dispute that the Sumitomo blanket incorporates a rigid inner layer, an intermediate layer of rubber with voids, a thread layer and an outer layer of voidless raw rubber.FN12 Mitsubishi's argument rests entirely upon testing performed by its expert, Tyma. In his testing, Tyma subjected cross sections of Sumitomo blankets to pressure at certain points on the outer layer and measured the effect.

The results purportedly showed that the outer layer of the Sumitomo blanket actually accounted for most of the "compression." (Mitsubishi Exh. A202). At oral argument, Mitsubishi provided photos which allegedly demonstrated the results of Tyma's testing which clearly show that the outer layer of the Sumitomo blanket did indent under pressure. Mitsubishi argues that this is compression. The parties engage in a detailed analysis on the issue of whether or not rubber is compressible.FN13 Although scientifically stimulating, the Court need not resolve that issue at this time. Instead the Court will adopt the definition presented in WEBSTER'S NEW RIVERSIDE UNIVERSITY DICTIONARY wherein 'compress' is defined as "to make smaller as if by squeezing." (p. 292), which is in accord with Tyma's testimony that compressible relates to a change in volume whereas deformable relates to change in shape. (Tyma Dep., p. 136).

With this understanding, there are several problems with Tyma's testing which undermine Mitsubishi's noninfringement argument. First, Tyma acknowledged that in his tests he "deformed the blankets," rather than compressed the blanket. (Tyma Dep., p. 209). Given Tyma's recognized difference between deformability and compressibility, Tyma's ultimate conclusions as to compressibility are not supported. In other words, Tyma does not explain how, if deform and compress are two different concepts, his deforming test can measure the amount of compression.

Second, Tyma's tests show that the outer layer of the Sumitomo blanket dents under pressure, which is exactly what Claim 1 requires an outer layer with an "... incompressible material indented by the printing plate ..." ('048 Patent, Col. 12, Ins. 64-65) (emphasis added). Mitsubishi provides no evidence that this outer layer as a whole gets smaller (*i.e.*, compresses) - just that it dents or deforms at the point of pressure. Such indentation is taught by the '048 patent.FN14

Takahashi's testimony relating to the composition of the layers of the blanket appears to read directly onto the '048 patent and Tyma's test results as to "compressibility" do not refute this.

In its third noninfringement argument, Mitsubishi argues that its presses use a different type of drive for rotating the cylinders. Claim 1 provides, in pertinent part, for "a drive for rotating the plate cylinder and the blanket cylinder at the same speed." ('048 Patent, Col. 13, Ins. 1-2). Mitsubishi contends that the plain meaning of the word speed pertains to "surface speed," and relies on Tyma's test results which purportedly show that since the surface speeds differ, it cannot be using the same drive. Harris disagrees with Mitsubishi's claim interpretation, and argues that, in offset printing, the only location where speed is important is at the nip because that is where the actual printing takes place.

Considering the plain language of the claim in conjunction with the specifications, the Court finds that this element of Claim 1 requires the use of a conventional drive, as opposed to a harmonic drive, which rotates the cylinders such that the surface speed at the nip is the same. Mitsubishi argues that tests performed by Tyma demonstrate that the surface speeds of the plate cylinder and the blanket cylinder are not the same and in fact they are designed to be different. For the following reasons the Court finds that Harris has provided evidence that shows that it will have a reasonable likelihood of success on the issue of

infringement.

First, Mitsubishi acknowledges that its presses are 1:1, that is the plate cylinder and blanket cylinder are in a one to one ratio. Mitsubishi argues that its cylinders are not perfectly equal; however, it has not refuted Peters' testimony as one skilled in the art of printing presses that slight differences in diameter do not alter a 1:1 ratio. Second, Mitsubishi admits that it uses a conventional drive rather than a harmonic drive which rotates cylinders at intentionally different speeds to account for differences in diameter in, for example, 2:1 presses. The purpose of a conventional drive in an offset presses is to rotate the cylinders at the same speed. Third, Mitsubishi asserts that its presses produce high quality printing. As Tyma agrees, distortions in printing, such as slurs, occur when the blanket and plate surfaces do not meet at the same speed. (Tyma Dep., pp. 29-30).

Mitsubishi's only argument relies on results from Tyma's tests of the drive and cylinders of Mitsubishi's press. Tyma constructed a small scale mock-up representing Mitsubishi's press and measured the surface speed of the blanket and plate cylinders when rotated at the same speed. Tyma found that there was a small difference in the surface speed of the cylinders. However, Tyma's test is irrelevant in that it measured the surface speed of the cylinders in general and not at the critical point: the nip. Furthermore, Tyma's test did not consider the slight difference in the diameter of the cylinders. Finally, Peters' testimony that surface speed at the nip is best determined by looking at the print quality has not been refuted by Mitsubishi.

For the aforementioned reasons, the Court finds that Harris has presented evidence which supports a reasonable likelihood of success on the issue of infringement.

2. Irreparable Harm

The movant for preliminary injunction must show not only a reasonable likelihood of success on the merits, but also a lack of adequate remedy at law or other irreparable harm. *H.H. Robertson Co. v. United Steel Deck, Inc.*, 820 F.2d at 384, 390 (Fed. Cir. 1987). Irreparable injuries are those that are impossible to measure. *Atlas Powder*, 773 F.2d 1233. Monetary relief is often the sole remedy for past infringement; however, injunctive relief is intended to preserve legal interests against future infringement whose effects may never be fully compensable in money. *Atlas Powder*, 773 F.2d at 1233. In patent rights cases, irreparable harm is presumed when the patentee makes a clear showing of validity and infringement.

Harris argues that it is entitled to such a presumption; but, even if not, it contends that it suffers real and irreparable harm to its reputation, good will and market share as a result of Mitsubishi's sales. The Court finds that Harris has not made a strong, clear showing of success on the issue of validity, and thus it is not entitled to the presumption of irreparable harm. *Smith Intern.*, 718 F.2d at 1581. Furthermore, the Court finds that Harris has not made an independent showing of irreparable harm.

Harris claims that it will lose its reputation, good will, right to foothold in the market and market share if Mitsubishi is not enjoined from marketing and selling its GPX and GCX presses in the United States. The Federal Circuit has consistently rejected the concept that every patentee is irreparably harmed by an alleged infringer's pretrial sales, and has rejected the argument that potential lost sales alone could demonstrate 'manifest irreparable harm,' because such a position would require a finding of irreparable harm to every patentee regardless of the circumstances. *Illinois Tool Works*, 906 F.2d at 683. On the other hand, courts have also rejected the concept that no patentee could ever be irreparably harmed when an alleged infringer is capable of responding in damages. *Roper Corp.*, 757 F.2d at 1269 n.2 ("To so hold would be to encourage

infringement by the rich ...").

The Court will address each alleged loss in turn. Harris claims that it has suffered damage to its good will and reputation by Mitsubishi's sale of gapless presses to three of its own customers: Perry Printing, John Roberts and Lithographix. The Court finds two reasons why Harris has not made a showing of irreparable harm to its good will or reputation. First, Harris asserts it has been harmed and will be harmed by Mitsubishi's sale of three presses to Harris' past customers. Yet, Mitsubishi demonstrates that each of these sales agreements were executed prior to the granting of the '048 patent on July 4, 1995 and thus cannot constitute infringement. *See State Industries, Inc. v. A.O. Smith Corp.*, 751 F.2d 1226, 1236 (Fed. Cir. 1985) ("To willfully infringe *a patent*, the patent must exist and one must have knowledge of it.").

Second, in support of its claim of irreparable harm, Harris cites letters written by Perry and John Roberts for support of its position that it has lost good will. Courts have held that a patentee must show that any damage to commercial reputation or good will resulted from infringing acts, not merely competition. *Binney & Smith v. Rose Art Industries, Inc.*, 1995 WL 103532 (N.D. Ill. March 3, 1995). Mitsubishi argues that its non-infringing activities prior to issuance of the '048 patent constitute nothing more than competition which cannot provide the basis for a preliminary injunction. The Court agrees and further finds from the tenor of the letters that any loss of good will or reputation would be caused by Harris' enforcement of patent rights rather than Mitsubishi's alleged infringement of patent rights.FN15 For these reasons, the Court finds that Harris fails to show an independent basis for irreparable harm.

Harris further alleges irreparable harm consisting of a loss of market share and loss of right to foothold in the market. Harris complains that each sale by Mitsubishi encroaches on customers and potential customers of Harris, and that Mitsubishi's activity has caused confusion in the market. There is no doubt that the market for \$10,000,000 printing presses is limited; however, while Harris has sold thirty of its Sunday presses worldwide, Mitsubishi has sold just three. The evidence shows that Harris remains the dominant world leader in the industry.

The Court also must consider the ability of Mitsubishi to fully compensate any harm with monetary damages. Courts have consistently held that an alleged infringer's ability to pay money damages for infringement occurring during litigation is strong evidence against a finding of irreparable harm. *Nutritron 21*, 930 F.2d at 871; *Illinois Tool Works*, 906 F.2d at 679. The evidence in the record indicates that Mitsubishi, an enormous multinational corporation with sales over \$175,000,000,000 (July 29, 1995 Kyodo News Service), could satisfy a money damage award in the event it is found liable for infringement of the '048 patent. Therefore, Harris' likelihood of suffering irreparable harm is lessened.

For these reasons, the Court finds that Harris' possible injuries are not the type of harm that support the issuance of a preliminary injunction. Although Harris may suffer irreparable harm due to competition, the Court should not impose an injunction to preclude legitimate competition until there is a reasonable showing of validity, infringement and irreparable harm.

3. Balance of Hardships

The third factor to be considered at the preliminary injunction phase is the balance of hardships. Specifically, the Court must weigh the harm that will occur to Harris, the movant, from a denial of the injunction with the harm that Mitsubishi, as non-movant, will suffer if the injunction is granted. *H.H. Robertson*, 820 F.2d at 388 ("the Court must weigh the magnitude of the threatened injury to the patent

owner ... in the light of the strength of the showing of the likelihood of success on the merits, against the injury to the accused infringer if the preliminary decision is in error.").

The drastic remedy afforded by a preliminary injunction can cause hardship to both parties. If granted, the alleged infringer must remove its product from the market; if denied, the patentee is not permitted to exercise its time-limited right to exclude. The Court must consider the hardships in light of the circumstances. The Court finds that, in this case, Harris has neither shown a reasonable likelihood of success on the merits, nor established irreparable injury; thus, the balance of hardships does not tilt toward Harris even though its potential injury could be significant.

On the other hand, it appears that Mitsubishi will be greatly harmed should a preliminary injunction be issued in error. While they are a huge multinational corporation, Mitsubishi is a new entrant in this area of the United States printing press market, a market in which Harris is the acknowledged leader. In fact, even in the face of Mitsubishi's challenge, Harris has announced that its sales are "on plan," FN16 further debunking the argument that Harris has been severely damaged by Mitsubishi's entry. The granting of a preliminary injunction would effectively bar Mitsubishi from the United States market and have a greater adverse effect than denying Harris' request. For these reasons, the Court finds that the balance of hardships tilts toward Mitsubishi and favors denial of Harris' motion for preliminary injunction.

4. The Public Interest

The final consideration is the public interest. Harris argues that the strong public interest in encouraging invention and research favors protection of patentee's rights and compels issuance of a preliminary injunction in this case. Mitsubishi counters that such an injunction would only preserve a monopoly which suppresses competition in the quality and price of printing presses. Harris asserts that cheaper printing presses are not in the public interest.

The primary purpose of a patent is to promote the progress of science by granting exclusive rights to those who create new inventions. The public interest is served by noninfringing improvement of inventions and improved technology. In this case, Harris' right to the protections of the '048 patent are tempered by Mitsubishi's right to compete and the public interest in encouraging competition and product availability. The Court finds that at this stage, Harris has not shown that the granting of a preliminary injunction will serve the public interest.

III. Conclusion

Considering and weighing the four relevant factors, the Court finds that Harris has not satisfied its burden of proving entitlement to a preliminary injunction. Most significantly, the Court finds that Harris has not shown a reasonable likelihood of success on the issue of patent validity. For the aforementioned reasons, the Court recommends denial of Harris' motion for a preliminary injunction.

FN1. According to BLACK'S LAW DICTIONARY matters *pendente lite* "are contingent on the outcome of litigation." BLACK'S LAW DICTIONARY, Sixth ed., p. 1134.

FN2. 35 U.S.C. s. 283 provides:

The several courts having jurisdiction under this title may grant injunctions in accordance with the principles of equity to prevent the violation of any right secured by patent, on such terms as the court deems

reasonable.

FN3. 35 U.S.C. s. 282 directs in pertinent part:

A patent shall be presumed valid. Each claim of a patent ... shall be presumed valid independently of the validity of other claims ... The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.

FN4. Objective indicia of nonobviousness include: commercial success due to the invention; failure of others; long felt need; movement of the skilled in a different direction; skepticism of experts; copying the invention in preference to the prior art; and examining the state of the art before and after the invention. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1569 (Fed. Cir.), *cert. denied*, 481 U.S. 1052, 107 S. Ct. 2187 (1987). Another indicia of nonobviousness is whether the development achieved unexpected results. *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1461 (Fed. Cir. 1984).

FN5. Mitsubishi argues that those two elements, *i.e.*, a tubular axially removable blanket cylinders and blanket compression, were taught by the Bass, Shrimpton and Tittgemeyer patents.

FN6. In fact, Harris argues that since the inventor of Vanguard eventually moved to a design incorporating flat printing blankets, the Vanguard press actually teaches away from the gapless blankets found in the '048 patent.

FN7. Harris' commercial success argument is somewhat undermined by evidence that on at least one occasion, Harris has brokered a large settlement with a customer unsatisfied with the Sunday Press' performance. (*See Perry Settlement Exh. 13 of Mitsubishi's Brief in Opposition*).

FN8. Since the Court has found the existence of a substantial question related to the obviousness of the patent at issue, the issue of infringement of that patent need not be addressed at this time. *See Inteltron Inc. v. Heath Company, Inc.*, 1995 WL 594870 (N.D. Cal. Oct. 4, 1995). However, for the sake of completeness, the Court has analyzed Harris' likelihood of success on the issue of infringement. The Court, therefore, will assume the patent's validity for purposes of this analysis only.

FN9. The Court notes that Harris has not asserted, and neither party has argued the relevance of the doctrine of equivalents. The Court, therefore, will confine its analysis to literal infringement.

FN10. In presenting these specific arguments for noninfringement, the Court presumes that Mitsubishi does not dispute that its presses embody the remaining elements of Claim 1.

FN11. In the alternative, even if this language were a limitation, Harris contends that Mitsubishi's presses do meet this requirement. Harris argues that the advertised high print quality, increased efficiency and speed of Mitsubishi's presses could only be achieved by reducing vibrations and slippage. In fact, Mitsubishi's expert, Tyma, even acknowledged that gapless, compressible blankets reduce vibration and slippage in offset printing presses. (Tyma Dep., pp. 43, 46, 87).

FN12. In discussing the Sumitomo blanket at his deposition, Takahashi stated that the innermost layer was a rigid nickel sleeve, the intermediate layer is comprised of raw rubber which had been mixed with NaCl, leached and dried to produce a compressible layer, and the outer layer is comprised of raw rubber. (Takahashi Dep., pp. 44, 153, 154, 156). Furthermore, Mitsubishi's expert, Tyma, testified that he understood the '048 patent to mean that rubber without voids is the incompressible layer. (Tyma Dep., p. 149).

FN13. Mitsubishi argues that rubber can be compressible, while Harris contends that raw rubber can be deformable but not compressible.

FN14. Tyma further performed tests on cross sections of Harris' blanket which purportedly show greater compression in the compressible layer. Aside from the aforementioned problems with the test methodology, the Court notes that such a comparison is improper in the infringement analysis. Infringement is determined based on an examination of the patent claims and the accused device - not a comparison of the patentee's commercially produced product and the accused device. *See* Markman, 52 F.3d at 976 ("the second step is comparing the properly construed claims to the device accused of infringing.").

FN15. In a letter dated January 26, 1995, Craig Hutchison, President/CEO of Perry Printing wrote to Robert Brown, the President of Harris:

The intent behind you sending the patent documents to me, though subtle is quite clear. Coupled with the actions of Heidelberg Harris has taken to restrict the supply of gapless blankets to Perry Printing from sources with whom we have talked for over the last year, this indicates a lack of concern on your part for Perry's ability to meet its customers needs at reasonable costs. It also indicates a clear objective to prevent Perry from operating its new press.

(Harris Brief, Exh. 9).

Further, in a letter dated June 5, 1995, Michael Keane, President of John Roberts, wrote to Brown: The pending litigation between Heidelberg Harris and Mitsubishi is causing us great concern.

* * *

I do not think it is possible for John Roberts to continue to purchase any equipment from Heidelberg USA or Heidelberg Harris with threat of being enjoined in the lawsuit.

(Harris Brief, Exh. 10).

FN16. At the deposition of Mark Levin, Harris executive and designated 30(b)(6) deponent, the following question and answer took place:

Q. Have sales been what Harris would consider slow for the M-3000 type presses [Sunday Press] in the last year?

A. No. Sales have been on the plan.

(Levin Dep., pp. 101-102).

N.D.Ill.,1996.

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