United States District Court,
N.D. Illinois.

HEIDELBERG HARRIS, INC,
Plaintiff.
v.
MITSUBISHI HEAVY INDUSTRIES, LTD. and MLP U.S.A., INC,
Defendants.

Jan. 29, 1998.

Alan N. Salpeter, Javier H. Rubinstein, Mayer, Brown & Platt, Chicago, IL, Richard L. Mayer, Richard L. Delucia, Richard S. Gresalfi, Suzanne M. Parker, Jaime A. Siegel, Kenyon & Kenyon, New York City, for plaintiff.

Harry J. Roper, William P. Oberhardt, Joseph M. Kuo, Roper & Quigg, Chicago, IL, for defendants.

MEMORANDUM ORDER AND OPINION

ASHMAN**, Magistrate J.**

Two motions are presently before the Court: 1) Heidelberg Harris' (hereinafter "Harris") motion for partial summary judgment on the infringement of United States patents 5,429,048 (hereinafter referred to as the '048 patent) and 5,440,981 (hereinafter referred to as the '981 patent) and 2) Mitsubishi Heavy Industries' and MLP U .S.A.'s (hereinafter collectively referred to as "Mitsubishi") cross motion for summary judgment on the infringement of the aforementioned patents.

On October 17, 1997, the parties consented to have this Court conduct any and all proceedings, including the entry of final judgement. The case was officially reassigned to this Court by order of the executive committee dated October 27, 1997.

I. *Factual Background*

Rather than restating the nature and historical development of the invention taught by the '048 and '981 patents, we refer the reader to our earlier opinions in this case. In the interest of brevity, we dispense with a recitation of the above background and instead, limit ourselves to a discussion of those facts relevant to the resolution of the instant motions, facts which will be addressed throughout the body of this opinion. With this caveat, we move to the resolution of the motions now before us.

II. *Standard of Law*

Summary judgment is proper only when "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material

fact and that the moving party is entitled to judgment as a matter of law." FED.R.CIV.P. 56(c); Celotex Corp. v. Catrett, 477 U.S. 317, 322, 106 S.Ct. 2548, 91 L.Ed.2d 265 (1986). In ascertaining whether summary judgment is appropriate, the Court must view the evidence, and draw all reasonable inferences therefrom, in the light most favorable to the non-moving party. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 247, 106 S.Ct. 2505, 91 L.Ed.2d 202 (1986); Kennedy v. United States, 965 F.2d 413, 417 (7th Cir.1992). When considering cross-motions for summary judgment, the Court must extend the required inferences to each party in considering the other's motion. Allensworth v. General Motors Corp., 945 F.2d 174, 178 (7th Cir.1991); Thomas v. Sullivan, 801 F.Supp. 65, 67 (N.D.Ill.1992). If the non-movant bears the burden of proof on an issue, however, he or she may not simply rest on the pleadings, but rather, must affirmatively set forth specific facts establishing the existence of a genuine issue of material fact. Celotex, 477 U.S. at 322-26.

Summary judgment is appropriate where the non-moving party "fails to make a showing sufficient to establish the existence of an element essential to that party's case, and on which that party will bear the burden of proof at trial." Celotex, 477 U.S. at 322. Consequently, motions for summary judgment must be analyzed in light of both the applicable substantive law and the question of whether a reasonable jury could return a verdict in the non-movant's favor. Checkers, Simon, & Rosner v. Lurie Corp., 864 F.2d 1338, 1344 (7th Cir.1988). "Where the record taken as a whole could not lead a rational trier of fact to find for the non-movant party, there is no genuine issue for trial" and summary judgment must be granted. Matsushita Electric Industrial Co. v. Zenith Radio Corp., 475 U.S. 574, 587, 106 S.Ct. 1348, 1356, 89 L.Ed.2d 538 (1986).

III. *Discussion*

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).

Accordingly, infringement analysis involves a two-step process: first, the court must determine the meaning and scope of the patent claims allegedly infringed and second, the court must compare the properly construed claims to the device accused of infringing. Markman v. Westview Instruments Inc., 52 F.3d 967, 976 (Fed.Cir.1995). 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 the claims, the court may 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, 102 L.Ed.2d 572 (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.

In moving for summary judgment, both parties acknowledge the existence four disputed claim terms. The disputed terms are 1) the alleged "preamble" which appears in the asserted claims of both the '048 and the '981 patents; 2) the "incompressible" element which is present in each of the asserted claims of the '048 patent; 3) the "embedded" element which appears in all of the asserted claims arising out of the '981 patent and 4) the "drive" element which appears in the asserted claims of the '048 patent.

A. Interpretation and Infringement Analysis of the Preamble Contained in the '048 and '981 Patents.

The relevant preamble language is identical in each of asserted claims 1 through 4 of the '048 patent and reads as follows:

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

The preamble language presented in claims 1, 2, 6, 18 and 19 of the 1981 patent is essentially identical to that set forth above. FN1

FN1. Specifically, the preamble language contained in claims 1, 2, 6, and 19 of the '981 patent states:
An offset lithographic printing press for reducing vibrations and slippage of a printing surface in the printing press to reduce smearing of a printed image printed on a printed product....

The preamble language in claim 18 states:
An offset lithographic printing press for reducing vibrations and slippage of a printing surface in the printing press to reduce smearing of a printed image printed on a web...

As we acknowledged in our January 6, 1996 opinion in this case, a preamble generally does not act as a limitation on the patent's claims. DeGeorge v. Bernier, 768 F.2d 1318, 1322 n. 3 (Fed.Cir.1985). A preamble may only be considered a claim limitation where it is "necessary to give meaning to the claim and properly define the invention." DeGeorge, 768 F.2d at 1322 n. 3 (quoting Perkin-Elmer Corp. v. Computervision Corp., 732 F.2d 888, 896 (Fed.Cir.), *cert. denied,* 469 U.S. 857, 105 S.Ct. 187, 83 L.Ed.2d 120 (1984)). Thus:

where a patentee uses the claim preamble to recite structural limitations of his claimed invention, the PTO and courts give effect to that usage. Conversely, where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention the preamble is not a claim limitation.

Rowe v. Dror, 112 F.3d 473, 1997 WL 189825 at (Fed.Cir. April 21, 1997).

In ruling on Harris' earlier motion for a preliminary injunction, this Court found the preamble of the '048 patent to be a statement of purpose or intended use and function which contained no structure other than the

printing press which was defined by the claims that followed the preamble. Heidelberg Harris, Inc. v. Mitsubishi Heavy Industries, Ltd., 1996 WL 189398, (N.D.Ill.1996). For this reason, the Court found that the preamble of claim 1 did not provide a limitation on the claimed invention of the '048 patent; and, thus did not serve as a basis for Mitsubishi's noninfringement argument. Heidelberg Harris, 1996 WL 189389 at *10.

In the instant motion, Mitsubishi does not present any evidence or argument which would merit a change in the Court's original holding. Mitsubishi argues that the preamble is a claim limitation because the claim drafter added the language by way of amendment to distinguish the invention over prior art. Under such circumstances, Mitsubishi contends that the preamble constitutes a limitation.

We disagree. After reviewing the evidence submitted on this point, we conclude that the preamble language was not added to distinguish the claimed invention over prior art, specifically, over the Gaffney invention. Indeed, we note that the preamble language could not have been used to distinguish over the prior art. As we have already held, the preamble language is a statement of intended use which is devoid of any structural elements. Such a statement may not be relied upon to distinguish over prior art. In re Lechene, 47 C.C.P.A. 923, 277 F.2d 173, 175 (C.C.P.A.1960). In light of the foregoing, we reiterate our earlier conclusion that the preamble of the '048 patent is merely a statement of purpose and therefore, does not act as a limitation on the claimed invention. Furthermore, because the '981 patent's preamble language is substantially identical to that used in the '048 patent, the above holding applies with equal force to the '981 patent.

As we have concluded that the preamble does not act as a limitation on the invention claimed in the '048 or '981 patents and, thus may not serve as a basis for Mitsubishi's noninfringement argument, we need not delve into an analysis of whether the preamble was infringed. Accordingly, Harris' motion for summary judgement is hereby granted with respect to the non-limiting effect of the preamble and Mitsubishi's cross-motion is denied.

B. Interpretation and Infringement Analysis of the Term "Incompressible" Contained in the '048 Patent.

In the context of the '048 patent, the term "incompressible" is used to refer to the material used to form the outer layer of the print blanket. The term appears throughout the body of the description, as well as in claims 1 and 3. Independent claim 1 states in relevant 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....

Dependent claim 3 states: "The offset printing press as recited in claim 1 wherein the outer layer comprises an incompressible polymeric material."

Mitsubishi contends that the term "incompressible", properly interpreted, refers to a material that retains its original thickness when subjected to vertical pressure, or, in this case, as it moves through the nip. In support of this interpretation, Mitsubishi points to the file history of the '048 patent; specifically, to a portion of a patent application that eventually evolved into the '048 patent and which states "the printing layer is incompressible, and thus retains its original thickness as it moves through the nip." ('668 patent

application, p. 16, Ins. 21-22). Mitsubishi contends that the above definition is consistent with that attributed to the term "incompressible" by those skilled in the art. Thus, Mitsubishi concludes that "incompressible" must refer to a material which does not change thickness as it passes through the nip.

This Court has already been called upon once before to interpret the term "incompressible" as it relates to the outermost layer of the printing blanket described in the '048 patent. After considering evidence similar to that now before the Court, we adopted the definition presented in WEBSTER'S NEW RIVERSIDE UNIVERSITY DICTIONARY, and concluded that a material is "incompressible" if it is not made smaller when subjected to squeezing. Heidelberg Harris, 1996 WL 189398 at *11. We now refine that definition.

It is axiomatic that, in construing terms contained in a claim, the court looks primarily to the intrinsic evidence before it, including the patent's claims, specifications and prosecution history. Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996). The court is directed to look first to the words of the claims themselves, keeping in mind that, "although words are generally given their ordinary and customary meaning, a patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the special definition of the term is clearly stated in the patent specification ." Vitronics, 90 F.3d at 1582. Thus, "the specification acts as a dictionary when it expressly defines terms used in the claims or defines terms by implication." *Id*. Consequently, the specification is, at a minimum, always extremely relevant to the construction analysis and, more often than not, actually dispositive. *Id*.

Guided by the above principles, we turn to the '048 patent in refining our earlier definition. Throughout the specification, the term "incompressible" is used to refer to a material whose volume does not change when deflected. Specifically, the patent specification states [s]ince the outer layer is formed of an incompressible material, the volume of the outer layer itself does not change when the outer layer is resiliently deflected by the plate cylinder...." FN2 ('048 patent, col. 11, Ins. 8-12). By contrast, the patent defines a "compressible" material to be one whose volume decreases when force is applied. ('048 patent, col. 8, lns 9-12).FN3 Nowhere in the specification of the '048 patent is "incompressible" used to refer to material which does not change thickness when subjected to force. In light of the clear definition set forth in the patent's specification, we will not look to extrinsic evidence, such as expert testimony, to modify the meaning of the term as defined, nor will we use one line excerpted from a patent application several generations removed to replace the definition explicitly provided in the instant patent. Thus, in keeping with the definition presented in the '048 patent, we hold that the term "incompressible" refers to a material that does not change volume when subjected to pressure or force.

FN2. Additionally, the patent states:
Deflection of the tubular outer layer results in the printing blanket occupying a volume which is less than its original or undeflected volume. However, the total volume of the outer layer remains constant....

('048 patent, col. 11, lns. 66-68; col. 12, lns. 1-2).
FN3. Specifically, the patent states: "When a force is applied to the compressible material of the printing blanket, the volume of the compressible material decreases."

Having resolved the issue of the proper interpretation of the term "incompressible," we now focus on the issue of whether the Mitsubishi press infringes with respect to this element. In support of the proposition that Mitsubishi's presses read on this element, Harris contends that the outer layer of Mitsubishi's presses are

made of voidless rubber and that such rubber is not volume reducible. Although Mitsubishi attempts to dispute that its printing layer is made of rubber without voids, the evidence submitted by Harris, FN4 in conjunction with this Court's earlier finding to that effect, FN5 convince us otherwise. What then remains to be resolved is whether the rubber used in Mitsubishi's blankets is volume incompressible. In attempting to resolve this question, Harris submits significant evidence to the effect that rubber is generally considered to be an "incompressible" material. However, this evidence is, for the most part, not helpful because it is unclear whether the term "incompressible" is being defined by the witnesses and documents in the same manner as defined above. Harris does submit the deposition testimony of Kazuyuki Kora, a Mitsubishi engineer, wherein Mr. Kora testifies that rubber is generally considered by the printing industry to an incompressible material-"incompressible" meaning volume incompressible. While this evidence is free from the definitional problems which plague Harris' other evidence, the Court concludes that it is nevertheless insufficient to provide a basis for summary judgment on this issue. We reach this conclusion on the grounds that neither Harris nor Mitsubishi has provided any test results, testimony or other evidence which demonstrates that the outer layer of Mitsubishi's print blankets was ever tested to determine if it is, in fact, volume incompressible. In the absence of such evidence, we conclude the genuine issues of material fact remain with respect to this element and the parties' cross-motions for summary judgment are therefore denied.

FN4. *See* Declaration of Dr. Levenson at p. 24, and L. 463, 557-58, 696-98, 813-14 and 1061.

FN5. *See* Heidelberg Harris, 1996 WL 189398 at *11.

C. Interpretation and Infringement Analysis of the Term "Embedded" As Used in the Asserted Claims of the '981 Patent.

Claims 1 and 6 of the '981 patent explicitly contain the disputed term "embedded." Specifically, claim 1 states:

a gapless and seamless cylindrical inextensible layer over said compressible layer, said inextensible layer including a circumferentially inextensible material embedded in a second gapless and seamless tubular body of elastomeric material ...

('981 patent, col. 12, lns. 25-29). Claim 6 states:

a gapless and seamless cylindrical inextensible layer over said compressible layer, said inextensible layer including a circumferentially inextensible material embedded in a gapless and seamless tubular body of elastomeric material ...

('981 patent, col. 13, lns. 36-40).

In interpreting the above phrase, Mitsubishi and Harris both turn to the dictionary definition of the term "embed." WEBSTER'S II NEW RIVERSIDE UNIVERSITY DICTIONARY defines "embed" as "to fix securely in a surrounding mass." Further, both parties rely on the same examples in illustrating the correct interpretation of the term, namely, "a knife embedded in wood" and "a brick firmly embedded in mortar." However, in explaining the practical effect of the above definition, the parties' positions diverge.

Specifically, Mitsubishi contends that an object is only "embedded" in a given material if the object is totally surrounded on all sides by that material.

We disagree. While it is true that one way to "embed" an object in a material is to totally surround the object in that material,FN6 a review of the patent in its entirety convinces us that this was not the definition intended by the patentee. Specifically, in setting forth the preferred embodiments of the invention, the patentee provided several different methods for forming the inextensible layer. One of the embodiments requires the inextensible thread to be "impregnated" with the elastomeric material ('981 patent, col. 7, lns. 9-13; col. 11, lns. 30-32), while another calls for the thread to be "encapsulated" in elastomeric material ('981 patent, col. 9, lns. 46-48). Turning once again to WEBSTER'S, we are left with the following definitions: to "encapsulate" is to enclose in a protective coating or membrane, and to "impregnate" is to fill throughout or to saturate. WEBSTER'S II NEW RIVERSIDE UNIVERSITY DICTIONARY. In light of these distinctions, it is clear that, when the patentee intended for the thread to be completely surrounded by elastomeric material, he specifically provided for such treatment in the patent's specification. Thus, acceptance of Mitsubishi's argument would render meaningless and redundant the distinctions explicitly provided in the patent.

FN6. This point is illustrated by referring to one of the alternative definitions provided by the dictionary: "to enclose in a matrix."

As a result of the forgoing, we adopt the dictionary definition advanced by the parties and hold that "embed" means "to fix securely in a surrounding mass." WEBSTER'S II NEW RIVERSIDE UNIVERSITY DICTIONARY. We further hold that an object is "embedded" in a material if the object is sufficiently surrounded by the material to be bonded to it.

Turning next to the infringement analysis relevant to this claim term, we conclude that genuine issues of material fact remain as to whether the inextensible thread used in Mitsubishi's blankets is securely fixed in a surrounding mass of elastomeric material such that the thread is bonded to that material. With respect to this point, Harris presents evidence on the manufacturing process Mitsubishi uses to make its blankets. While the processes used by Mitsubishi and Harris appear similar, there is no evidence which illustrates that the results are the same- *i.e.*, there is no evidence that shows that the inextensible threads in the Mitsubishi blankets are sufficiently bonded to the elastomeric material to read on the claims of the Harris patent.

Indeed, Mitsubishi contends that its threads are not embedded in the elastomeric material because they separate readily from the body of elastomeric material. (Appendix to Mitsubishi's Brief in Support of its Motion for Summary Judgement, Tab 1, para.para. 137-139). However, Harris refutes this contention with evidence that Mitsubishi used chloroform as a solvent for removing the threads from the print layer. (Appendix to Harris' Reply Brief in Support of its Motion For Summary Judgment, R529). In light of the conflicting evidence, the Court concludes that genuine issues of material fact remain as to whether Mitsubishi infringes with respect to this element. Consequently, the parties' motions for summary judgment on this issue are denied.

D. Interpretation and Infringement Analysis of the Drive Element Contained in the '048 Patent.

The language of the drive element contained in the '048 patent reads: "a drive for rotating the plate cylinder and the blanket cylinder at the same speed." ('048 patent, col. 13, lns. 1-2). The controversy surrounding this

phrase revolves around the proper interpretation of the words "same speed." Some definition has already been given to these words as a result of this Court's January 9, 1996 opinion wherein we concluded that:

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.

Heidelberg Harris, 1996 WL 189398 at *12.

While Harris is content to leave the definition reiterated above in place, FN7 Mitsubishi seeks an interpretation of the claim's "same speed" element which requires the described drive to rotate the plate cylinder and the blanket cylinder at precisely the same surface speed, a term which Mitsubishi defines as the measure of distance traveled per unit of time, as, for example, feet per minute.

FN7. Harris contends that the Court has already adequately defined the disputed element of the claims through the above holding in so much as a conventional drive operates to rotate the cylinders at the same surface speed while a harmonic drive rotates the cylinders different surface speeds. Thus, Harris contends that the term "conventional drive" is synonymous with the term "same speed" as it relates to the drive element of the patent.

In arguing that the speeds of the plate cylinder and blanket cylinder must be identical rather than substantially the same, Mitsubishi points to the prosecution history of the '048 patent, wherein Harris added the "same speed" limitation to allegedly overcome a prior art objection based on Harris' previous use of the phrase "substantially the same speed." FN8 Pointing to the maxim that aspects of an invention specifically disclaimed during prosecution in order to obtain a patent over a prior art objection cannot be reclaimed when suing for infringement, Mitsubishi contends that Harris cannot now argue that the "same speed" language means substantially the same speed. Thus, Mitsubishi seeks the finding that a drive only rotates the cylinders at the same surface speed if the cylinders both move precisely the same distance per unit of time.

FN8. Mitsubishi contends that the PTO initially rejected the '048 application as obvious in light of the Gaffney '461 patent on the grounds that the '461 patent had the same combination of elements (namely, a gapless blanket cylinder and gapped plate cylinder) that Harris claimed as its patentable invention. Mitsubishi asserts that, in response to this rejection, Harris distinguished its invention over the '461 patent on the grounds that the surface speeds of the plate cylinder and blanket cylinder differed from each other by as much as .0004 inches per revolution, thereby causing slippage, while the Harris invention drove the plate cylinder and blanket cylinder at "substantially the same speeds" with a resulting decrease in slippage. The PTO rejected Harris' attempt to use the phrase "substantially the same" in describing the speeds of the two cylinders as having no support in the specification, whereon Harris deleted the word "substantially" and relied instead on the phrase "same speed."

Applying the above interpretation to its invention, Mitsubishi asserts that, even though its presses admittedly use a conventional drive, they do not satisfy the '048 patent's "same speed" requirement. Specifically, Mitsubishi contends that, rather than driving the plate and blanket cylinder at the same surface speed as taught by '048 patent, the drive in its press is intentionally designed to rotate the plate cylinder and blanket cylinder at different surface speeds-a difference that arises from Mitsubishi's intentional use of plate

cylinders and blanket cylinders whose circumferences differ.FN9 Thus, Mitsubishi contends that its presses do not have a "drive for rotating the plate cylinder and blanket cylinder at the same speed" and consequently, do not infringe the '048 patent.

FN9. Physics dictates that two cylinders differing in circumference which are geared together, as in a conventional drive, to make the same number of revolutions per unit of time, must rotate at different surface speeds. This is so because a point on the surface of the cylinder with the greater circumference must travel a greater linear distance per revolution than a point on the cylinder of lesser circumference, and therefore, must travel farther in the same amount of time which may only occur if the point on the cylinder of greater circumference travels faster than that on the smaller cylinder.

In fully defining the contours of the phrase "same speed," we look to the intrinsic evidence before us, including the patent's claims, specifications and prosecution history. Vitronics Corp., 90 F.3d at 1582. Review of the patent claims and specification reveals multiple reference to the phrase "same speed" or "same surface speed," but no clear definition of what was intended by this phrase. Some of this confusion arises from the fact that the phrase "same speed" seems to be used in connection with two aspects of the press. In the first instance, it is used to describe the drive element of the '048 patent. Thus, the specification provides "a drive assembly ... is operable to rotate the blanket cylinders [ ] and plate cylinders [ ] at the same surface speed." ('048 patent, col. 5, lns. 22-25). In the second instance, the phrase is used to describe the absence of a speed differential attributable to the use of incompressible material in the manufacture of the printing blanket in its entirety. In this regard, the specification provides:

The present invention further provides that the printing blanket is at least partially formed of a compressible material which is compressed by the plate cylinder at a nip formed between the printing cylinder and the blanket cylinder. By compressing the compressible material at the nip, the outer surface of the printing blanket has a surface speed which is substantially the same at locations immediately before the nip, at the nip and immediately after the nip. This prevents slippage between the surfaces of the printing plate and printing blanket before, at, and after the nip to prevent smearing of the ink pattern.

('048 patent, col. 3, lns. 62-68; col. 4, lns. 1-5).

As resort to the patent does not provide a ready definition for the phrase at issue, the Court looks to the '048 patent's prosecution history. It is undisputed that the "same speed" language was added to the claims to overcome a prior art objection by the PTO based on the Gaffney patent. "Positions taken in order to obtain an allowance of an applicant's claims are pertinent to an understanding and interpretation of the claims that are granted by the PTO." Advance Transformer Co. v. Levinson, 837 F.2d 1081, 1082 (Fed.Cir.1988) (citing Loctite Corp. v. Ultraseal Ltd., 781 F.2d 861, 870-71 (Fed.Cir.1985)). Thus, in construing the disputed phrase, the Court examines the manner in which the patent applicants used the "same speed" language to distinguish their invention over Gaffney.

The drive in the Gaffney patent is expressly stated to be a drive for "rotating the blanket cylinder and plate cylinder at different surface speeds." ('461 patent, col. 4, lns. 59-62). The Gaffney patent refers to a drive which rotates the cylinders in this fashion as a "harmonic" or "differential" drive. ('461 patent, col. 5, lns. 10-18). The purpose of the Gaffney harmonic drive is to cause an "area on the blanket cylinder which engages a given portion of the surface on a plate cylinder [to] change on each revolution of the blanket cylinder." ('461 patent, col. 1, lns. 47-51). Thus, in order for a drive to rotate the cylinders at different

surface speeds within the meaning of the Gaffney patent, the area of the blanket which a given point on the plate strikes must continuously move or migrate along the blanket's surface on each cylinder rotation. This is often referred to as "image migration."

In distinguishing the '048 patent over the Gaffney patent, the Harris inventors specifically pointed to the fact that '048 drive rotates the cylinders at the same surface speed.FN10 In light of the Gaffney patent, this distinction only has meaning if the term "same speed" is read to mean that the '048 drive does not cause the image migration which arises from the speed differential present in the Gaffney patent. In other words, the critical attribute of the '048 drive's "same speed" limitation is that a given point on the plate will hit the same spot on the blanket during each revolution.

FN10. Specifically, the inventors stated:
Gaffney ... discloses a harmonic drive which rotates the plate cylinder and the blanket cylinder at different surface speeds to create slippage between these surfaces. The slippage causes the image being transferred from the printing plate to the printing blanket to appear in a different location on the printing blanket for each revolution of the blanket cylinder.... [Thus, Gaffney does not] disclose a drive means for rotating the plate cylinder and blanket cylinder at substantially the same speed as is required by amended claims 1 and 18.

(Appendix to Mitsubishi's Brief in Support of its Motion for Summary Judgement, A205-207).
In light of the above, we find that the "same speed" element of the claim requires the use of a conventional, rather than harmonic drive which rotates the cylinders such that the surface speed at the nip is the same and which consequently does not produce any image migration.

Focusing next on the infringement analysis relevant to the "same speed" element, it is undisputed that the Mitsubishi presses utilize a conventional drive as opposed to a harmonic drive. (Mitsubishi's 12(N)(3)(a) Statement, para. 17). It is also undisputed that a conventional drive causes a given point on the printing plate to contact the same point on the blanket during each rotation.FN11 (Mitsubishi's 12(N)(3)(a) Statement, para. 18). Thus, what remains to be established is whether the surface speed of the Mitsubishi press is the same at the nip. As evidence of this, Harris proffers the declaration of Dr. Levenson in support of the proposition that the acceptable print quality of the Mitsubishi presses indicate that the surface speeds of the plate and blanket are the same at the nip. (Levenson Declaration 24-25; L. 588-89, 859, 877, 892, 920). However, a careful reading of the cited pages of Dr. Levenson's declaration reveals no support for this proposition, nor did the Court find support in any of the other cited evidence. Furthermore, even if such support did exist, Mitsubishi submitted the deposition testimony of John Gaffney, one of the Harris inventors, to the effect that a press may produce acceptable print quality even if the surface speeds at the nip are different. (Appendix to Mitsubishi's Motion for Summary Judgement, A318-320). Thus, acceptable print quality may not be used as evidence that the cylinder's surface speeds are the same at the nip. As Harris has proffered no other evidence that the surface speed of the Mitsubishi press is the same at the nip, genuine issues of material fact remain on this issue and Harris' motion for summary judgment with respect to this element is denied.

FN11. Mitsubishi disputes this statement as vague on the grounds that it is only true when the plate cylinder and blanket cylinder are geared together. However, there is no evidence or argument in this case that Mitsubishi does not gear the plate cylinder and blanket cylinder together in the conventional drive it utilizes. Thus, it is irrelevant how such a drive may behave when not so geared.

Turning next to the evidence proffered by Mitsubishi in connection with its motion for summary judgment, Mitsubishi offers evidence of a general surface speed differential which arises from its use of cylinders with differing circumferences and evidence of some slippage at the nip. (Mitsubishi's 12(M) Statement, para.para. 30-34, 37-38, 44, 46). However, neither evidence is dispositive. With respect to the general surface speed differential arising from Mitsubishi's use of cylinders with differing circumferences, this Court earlier declined to adopt Mitsubishi's definition of "same speed," thereby making irrelevant the above evidence.FN12 Further, even if we had adopted such a definition, the evidence would still be irrelevant because it measures the surface speed of the presses in general, rather than at the critical point: the nip. Heidelberg Harris, 1996 WL 189398 at *13.

FN12. We declined to adopt Mitsubishi's suggested definition of "same speed" for several reasons. First, under Mitsubishi's definition, any competitor could duplicate Harris' invention exactly, but avoid an infringement charge by making the circumference of one cylinder slightly larger than the other (thereby creating a slight difference in surface speed), a clearly unacceptable result. Indeed, in this case, the difference in cylinder circumference relied upon by Mitsubishi to avoid the instant infringement charge is a mere .0129 inches or .327 millimeters. Furthermore, under Mitsubishi's definition, no press, including Harris', could satisfy the patent's specifications because all presses have cylinders whose circumferences vary slightly due to variability in the manufacturing process. (Appendix to Reply Brief in Support of Harris' Motion for Summary Judgment, R252).

Mitsubishi's evidence concerning the amount of slippage at the nip is also not dispositive. This evidence-attributed by Mitsubishi's expert, Dr. O'Rell, to the cylinder surface speed differential-appears to arise solely from the speed difference which flows from Mitsubishi's use of cylinders of slightly differing circumferences, rather from the use of a drive which actually rotates the cylinders at differing surface speeds such that image progression results. Thus, as this evidence does put to rest the genuine issue of material fact that remains regarding the existence of a surface speed differential at the nip, Mitsubishi's motion for summary judgement on this issue is also denied.

IV. *Conclusion*

For the reasons stated above, the Court concludes that genuine issues of material fact remain on the issue of infringement with respect to the "incompressible" element, the "embedded" element, and the "same speed" drive element. Consequently, the parties' cross motions for summary judgement are denied as to these three elements. With respect to the "preamble" language, the Court finds that the preamble does not operate as a claim limitation and, as such, may not serve as the basis for Mitsubishi's non-infringement argument. In light of this conclusion, Mitsubishi's motion for summary judgment on this issue is denied and Harris' motion is granted.

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