

United States District Court,
S.D. New York.

U.S. PHILIPS CORPORATION,
Plaintiff.

v.

PRINCO CORPORATION and Princo America Corporation,
Defendants.

Gigastorage Corporation and Gigastorage USA,
Plaintiffs.

v.

U.S. Philips Corporation and Koninklijke Philips Electronics N.V,
Defendants.

Nos. 02 CIV. 246(CLB), 04 CIV. 2825(CLB)

Feb. 2, 2005.

Background: Patentee brought action against competitors alleging infringement of patents providing a means of guiding a write laser in order to input the user's data onto the disc's data track. Patentee filed motion for summary judgment and parties filed cross-motions for summary judgment on counterclaim for patent misuse.

Holdings: The District Court, Brieant, J., held that:

(1) competitors' compact discs were within the language of claims of patents providing a means of guiding a write laser in order to input the user's data onto the disc's data track, and therefore infringed the patents, and
(2) patentee's package licensing of patents for a single product was not tying within the meaning of patent misuse statute.

plaintiff's motion granted as to infringement claims and counterclaim for patent misuse.

4,807,209, 4,962,493, 4,972,401, 4,999,825, 5,023,856, 5,418,764. Infringed.

Garrard R. Beeney, Margaret Pfeiffer, Sullivan & Cromwell LLP, New York City, Maite Aquino, Sullivan & Cromwell LLP, Washington, DC, for Plaintiffs.

Alan Dean Smith, Renee Skinner, Fish & Richardson, P.C., Boston, MA, Autumn Hwang, Raymond R. Castello, Fish & Richardson P.C., New York City, Thomas M. Melsheimer, Fish & Richardson P.C., Dallas, TX, Eric C. Stops, Calvin Griffith, Robert Kahral, Pennie & Edmonds, New York City, for Defendants.

Memorandum and Order

BRIEANT, District Judge.

By motion filed on September 29, 2004, and fully submitted on December 2, 2004, U.S. Philips ("Philips") moves under *Markman v. Westview Instruments, Inc.*, 52 F.3d 967 (Fed.Cir.1995) (en banc), *aff'd*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996) and Fed. R. Civ. Pro. 56 for the Court to determine the correct construction of the patent claims involved and for summary judgment against defendant Princo on Counts 1-6 of Philips' Complaint for patent infringement, and for summary judgment against Gigastorage on Counts 1-6 of Philips' Counterclaim to Gigastorage's Complaint for Violation of Antitrust laws. FN1 This decision will determine the proper construction of disputed claims within U.S. Patent Nos. 4,807,209 ("209 patent"), 4,962,493 ("493 patent"), 4,972,401 ("401 patent"), 5,023,856 ("856 patent"), 4,999,825 ("825 patent"), and 5,418,764 ("764 patent"). All of these patents are owned by Philips. Opposition papers to this motion were filed on October 20, 2004. Also before the Court is Defendants' motion for summary judgment on the issue of patent misuse. This motion was filed on October 18, 2004 and opposition papers were filed on November 9, 2004. The motion was fully submitted for decision on December 2, 2004.

FN1. For ease, the Court will refer to both Princo and Gigastorage as "Defendants." Defendants are both Taiwanese corporations and former licensees of Philips.

Familiarity of the reader with the underlying facts of this case and all prior proceedings and Court decisions in this matter will be assumed. The purpose of a *Markman* hearing is to allow a court to examine and resolve disputes over the scope and meaning of the claim language in the patent. "[T]he interpretation and construction of patent claims, which define the scope of the patentee's rights under the patent, is a matter of law exclusively for the court." *Markman*, 52 F.3d at 970-71. When construing claim language, a court should look first at the claims themselves, then the specifications, and finally the prosecution history of the patent if in evidence. *Id.* at 980. These three sources, referred to as "intrinsic evidence" are the "most significant source[s] of the legally operative meaning of the disputed claim language." *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996).

If the meaning of the language within the claim is still unclear, extrinsic evidence, such as expert and inventor testimony, dictionaries, and learned treatises, can be used "to aid the court in coming to a correct conclusion" as to the "true meaning of the language employed in the patent." *Markman*, 52 F.3d at 980. However, extrinsic evidence should only be "used for the court's understanding of the patent, not for the purpose of varying or contradicting the terms of the claims." *Id.* at 981.

[1] There is a "heavy presumption" that the claim terms carry their ordinary meaning as viewed by one having ordinary skill in the art. *Rexnord Corp. v. Laitram Corp.*, 274 F.3d 1336, 1341 (Fed.Cir.2001). This presumption can be rebutted where (1) the patentee clearly established a definition of the term different from its customary meaning, *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996); (2) where a claim term deprives the claim of clarity such that there is no means by which the scope of the claim may be ascertained from the language used, *Bell Atlantic Network Services, Inc. v. Covad Communications Group*, 262 F.3d 1258, 1268 (Fed.Cir.2001); or (3) the patentee disavowed an interpretation of a claim during prosecution, *see Texas Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1204 (Fed.Cir.2002).

Purpose of Each Patent

The '209 and '493 patents provide a means of guiding a write laser (the laser that records information onto an optical recording disc, such as a compact disc ("CD")) in order to input the user's data onto the disc's data track. The claims of these patents cover the CD-R/RW's spiral shaped pregroove. A pre-recorded compact disc has a spiral data track that has the same "track pitch" FN2 and general shape as this pregroove. The CD-R/RW's pregroove eliminates the need for the CD-R/RW recorder to create the spiral groove required by standard CD players. The CD-R/RW's recording laser follows this pregroove when it is writing information onto the optical disc. The pregrooves in turn ensure that the recording laser does not cross over from one recording track onto another. The Court infers from use of the word "pregroove" that the laser following the pregroove burns the deeper groove. See *infra* where the groove is discussed (pp. 174-75).

FN2. "Track pitch" refers to the radial distance between the center-points of two lands on either side of the grooves.

The types of low-cost motors used to spin the discs in machines priced to be consumer competitive are not the type of motors that can be relied upon to spin the discs accurately. The '401 patent teaches a slight wobbling of the center line of the pregroove away from the shape of a perfect spiral. This introduces a signal when the unrecorded pregroove is read by the machine's laser, and the wobble is used as a clock to monitor and control the rotation speed within the machine, in order to ensure that the machine writes information onto the disc accurately. This is known as a "clock signal."

Data known as "position data" is required to determine where the laser is on the disc at a given point in time. Position data enables the recorder to avoid writing information on an area that has previously been written upon. The '856 patent introduces a "frequency modulation" of the wobble that provides digital code information that tells the recorder where the laser is on the spiral pregroove. This location is known as "Absolute Time in Pregroove," or ATIP. The '825 patent teaches the use of "synchronization data" which tells the CD recorder when a new ATIP address is starting on the disc and allows the recorder to align the address data in the wobble with the address data encoded by the CD recorder during the write process. The '764 patent provides the disc with auxiliary information needed by the recorder to record content data properly, without unreasonably interfering with a standard CD player that is playing back the CD-R.

Disputed Terms

At oral arguments, the parties agreed that there are four disputed terms which the Court must interpret. These terms are (1) "periodic;" (2) "diffractive follow-on track;" (3) "auxiliary code;" and (4) "a spot of radiation." It appears unnecessary for the Court to interpret or define any of the additional terms analyzed in the parties' submissions to the Court that are not considered by counsel as essential to the Court's determination of these motions.

Periodic

[2] The first disputed term is "periodic." This term is used within '401, '856, '825 and '764. Counsel agree that this term has the same meaning in each of these patents. *See Dec. 1, 2004 Tr. at 39*. Claim 1 of '401 states:

...said record carrier comprising:

a substrate provided with substantially parallel elongated tracks each having a periodic undulation in a

direction transverse thereto at said predetermined frequency, so that during scanning of any portion of a track by said scanned beam to record and/or reproduce information thereon a beam of radiation is produced therefrom which is periodically modulated at said predetermined frequency...

The parties dispute whether "periodic," as used within the patents, means "identical." Philips argues that a periodic event is one that occurs at regular, but not necessarily identical, intervals. *See Dec. 1, 2004 Tr. at 20* ("Everyone agrees that the '401 patent clock signal is a periodic signal. What the defendants argue is that once that clock signal...is changed by being frequency modulated...they say it is not periodic."); *at 21* ("This [825] makes clear that what is being called a periodic signal is also a frequency modulated signal...And it ends with a piece of the specification that specifically says that the deviation of the frequency from the clock-signal frequency is plus or minus one kilohertz. So that's what the specification says is a periodic frequency."). Defendants argue that "periodic" means identically occurring. *See id. at 37* ("Periodic means 'repeating itself identically at regular intervals.'"); *at 38* ("The only modulations that are disclosed in the '825 patent are, again, identical modulations...Nowhere in any of the Philips patents is there any disclosure of a modulation that is anything but periodic or identical.").

The Defendants argue that periodic must mean identical, because '401 is designed to generate a clock signal. In order to function correctly in correcting tracking errors, a clock signal must be an identically repeating event. *See id. at 41* ("A clock signal can't be generated by random periods because you would have a clock that-you would have a start and stop, or you would have a....let's put it this way. You would have a velocity for this disc that would change constantly because the clock would be going back and forth; it wouldn't be constant.").

Philips' asserts that the patentee is permitted to define "periodic" in the manner in which it chooses, and extrinsic dictionary definitions are not controlling upon intrinsic evidence. *See id. at 21* ("The Federal Circuit... is very clear that the patentee's entitled to be his own lexicographer. He can explicitly or implicitly tell the reader what he means by a term that's used in the claim, and when he does that, you can't go to a dictionary."). Notwithstanding, the dictionary is a good place to begin.

See Oxford English Dictionary, Second Edition 1989

Periodic

1. Of, pertaining, or proper to the revolution of a heavenly body in its orbit, as *periodic motion, time*.
2. Characterized by periods; recurring at regular intervals; *spec. in Path.* having regularly recurring symptoms, as periodic fever . Often *loosely*, Recurring or reappearing at intervals; intermittent.
3. Of or pertaining to a rhetorical or grammatical period; characterized by or expressed in periods.
4. = *PERIODICAL* a, 5. *rare*.
5. Relating to a period or space of time. *rare*.
6. as *n. pl.* = *PERIODICAL n. 3*.

See also Webster's Third New International Dictionary, unabridged

- 1a. characterized by periods: occurring at regular intervals <~ phases of the moon> < municipal elections>;
- b. occurring repeatedly from time to time: RECURRENT, INTERMITTENT <~ epidemics> <~ drinking sprees>; FREQUENT <one of Bermuda's ~ power failures- *Time*> ;
2. consisting of a series of stages or processes that is regularly repeated: CYCLIC <~ vibration>;
3. of or relating to a period <house was pleasant and comfortable, they were too sophisticated to be ~- *Scribner's*>;
- 4a. of or relating to a form of construction found in some Greek odes in which the second and third in a group of four strophes are alike in structure and the first and fourth differ from these and from each other;
- b. expressed in or characterized by periodic sentences <~ style>.

Regardless of any dictionary definitions of periodic which seem to suggest, or even require identical elapsed time between events, or occurrences, in order for something to be described as "periodic" (and as noted above, they do not), the common speech of the people supports Plaintiff's position. The language belongs to the people and not to the lexicographers. For example, the rise and fall of the tides in an harbor are called periodic, yet the times elapsed between them are not identical. Neurotics are described as having "periodic mood swings", clearly not identical. Wars, famines, volcanic eruptions, hurricanes, tsunamis and other naturally recurring phenomena are recognized in the English language as periodic. Fortunately, they do not recur after identical time lapse; similarly we speak of the weather: "a period of sunshine followed by rain": a time in history: "the interwar period" an evolutionary or developmental unit: "Picasso's blue period"; a time regularly set aside for a purpose: "rest period", "lunch period." All such periods are properly described by the adjective "periodic." The words "intermittent" and "recurrent" are both recognized synonyms for "periodic." FN3

FN3. See Roget's II, the New Thesaurus, New York 1988, listing "intermittent" and "recurrent" as synonyms for "periodic."

The various patents' specifications demonstrate that the "periodic undulations" that are referenced are regularly occurring intermittent events, but these events are not identically occurring. '825 17: 65-68:

Moreover, it is to be noted that on account of the d.c. component of the position-information signal the average frequency of the FM-modulated signal is exactly equal to 22.05 kHz...

The FM-modulated signal has an "average" frequency of 22.05 kHz. Claim 1 of '856 is clear as to why the signal is measured by its average, instead of its identically repeating value. *See* '856 6: 68-7: 5:

characterized in that each of said tracks has a periodic modulation of its position in a direction transverse thereto and which, without occupying any portion of the track, generates a periodic clock signal in the radiation therefrom having a substantially constant frequency corresponding to the velocity of scanning of said track, the frequency of said clock signal only varying in accordance with variations in said scanning signal....

The "periodic" clock signal varies based upon variations in the scanning signal. Because of these variations, the clock signal is frequency modulated, with an average frequency of 22.05 kHz. This average is based upon fluctuations between a high frequency of 23.05 kHz and a low frequency of 21.05 kHz. The reference to an average indicates that the undulations are not identical. If it were otherwise, the frequency would not be an average, but rather a simple measurement of identically repeating frequencies. Defendants' argument that the clock signal must be identical to function appropriately is belied by the language of the patents themselves. The clock signal itself has a "substantially constant frequency" which varies in accordance with "variations in [the] scanning signal." A signal with a "substantially constant frequency" which varies is not the same as an identically repetitive signal. Defendants' argument does not find support in the patent, which teaches a periodic clock signal that is not identical, but varies. Because the language of the patents' claims and specifications teach a modulated clock signal, the Court should not contradict the language usage chosen by the patentee, especially where, as here, periodic has the accepted secondary dictionary definition of "intermittent." Accordingly, the Court interprets "periodic" to mean "regularly but not necessarily identically repeating."

Diffraction Follow-on Track

[3] The parties dispute whether the "diffractive follow-on track" includes any portion of the disc's area that does not lie physically within the disc's grooves. The area in between the grooves is known as the "lands of the disc." Philips argues that the track is simply the groove itself, while Defendants argue that it is the groove and a portion of the lands on each side of the groove, which they refer to as "track pitch." *See Tr. at 17* ("It is impossible to read the width of the groove as also encompassing the lands on either side of the groove..."); *at 46* ("It is the defendants' position that this diffractive follow-on track includes not only the groove, but also includes the land adjacent to the groove."). Defendants' argument is again one of functionality. They assert that an insufficient amount of light will be diffracted if the track does not include a portion of the land on each side of the groove. *See id. at 46* ("Our argument on this issue, your Honor, is that if you don't take these lands into account, because the lands directly adjacent to the groove are what provide this diffractive pattern with sufficient intensity so that they will be able to read, if you don't have that, it will not work.").

The claims are clear that the "diffractive follow-on track" is a groove that exists to guide the radiation beam as it writes information on the disc. *See Claim 1 of '209*:

... said record carrier body having a radiation-sensitive layer on which the information to be recorded is written with the write beam and a continuous, generally circular, diffractive follow-on track extending about the center of said disc-shaped record carrier body for guiding the write beam during recording of the information, said follow-on track being configured to diffract radiation incident thereon when scanned with a spot of radiation of a predetermined size and having a width which is smaller than the dimension of the spot in the width direction...

Claim 11 of '493 states:

...the information to be recorded is written with the write beam and a diffractive follow-on track in the form of an elongated groove formed in said record carrier body for guiding the write beam during recording of the information, said groove being configured to diffract radiation incident thereon when scanned with a spot of radiation of a predetermined size and having a width which is smaller than the dimension of the spot in the width dimension ...

Defendants' argument that the "track" includes a portion of the lands is inconsistent with the language of the patent, which explains that the track is a groove. What is a groove? The Oxford English Dictionary, Second Edition 1989 defines a groove as:

1. A mining shaft; a mine, pit;
2. A channel or hollow, cut by artificial means, in metal, wood, etc.; e.g. the spiral rifling of a gun, one of the air-passages leading from the wind-chest to the pipes of an organ, etc.;
3. A channel or furrow of natural formation.

As noted in the above definition, a groove is synonymous with a furrow. A furrow is defined as:

1. A narrow trench made in the earth with a plough, esp. for the reception of seed;
2. In extended sense: A trench, drain;
3. A quantity (of land) having the length or breadth of a furrow;
4. Anything resembling a furrow; a. generally, e.g. a rut or track, a groove, indentation, or depression narrow in proportion to its length.

A furrow or groove, cannot exist without the existence of sidewalls as well as a floor. The sides are formed by portions of the adjoining "lands." A groove by its very definition is comprised of only a floor and sidewalls extending up from the floor of the groove to the "ground level" on each side of the groove. It would defy all customary usages of the word "groove" to include land outside of the indentation itself as being part of the groove.

The patent specifications also support the view that the "track" does not include any part of the surrounding "lands." '209 1:55-61 states:

The record carrier body according to the invention is characterized in that the follow-on track is a flat track, and that follow-on track influences the direction of a radiation beam in the same way as, but the radiation distribution over the beam section in a different way, than the rest of the surface of the record carrier body on which the information is to be written.

The patent differentiates clearly the groove itself from the area between the grooves. It also makes clear that the track's radiation distribution differs from its surrounding "lands." *See also '209 17-22*

For example, the reflection coefficient or the absorption coefficient of the follow-on track may differ from its surrounding, so that the intensity of a beam which emerges from the record carrier body differs according to whether the beam has or has not interacted with the track.

Defendants' assertion that the "diffractive follow-on track" must include a portion of the adjoining lands due to functional necessity to achieve a sufficient level of diffraction does not find support in either the claim language itself or in the patent specifications. The Court is bound by the plain language of the patent. The

patent differentiates between the track, which is a groove, and the area surrounding the track, known as the land. The patent teaches that diffraction occurs when the radiation beam strikes the narrower groove. Accordingly, the Court interprets "diffractive follow-on track" as meaning "the groove in between the lands on an optical storage disc, which is narrower than a spot of radiation."

Auxiliary Codes

[4] The parties' dispute whether the auxiliary signal includes the synchronization signal. Philips asserts that the term "auxiliary codes" specifies "control data" that is "distinct from synchronization signals, which contain no information." See *Philips Memo. at 40*. It states that "synchronization signals are used to indicate that a code word, whether an address or an auxiliary code, will follow immediately." See *id.* at 40. In comparison, Defendants argue that Claim 20 of '764 does not state that certain types of control information are included within the auxiliary signal, with synchronization signals being excluded from the auxiliary signal. In fact, Claim 20 states that "the auxiliary signal is comprised of address codes and auxiliary codes." See *Def's. Memo. at 20*. As the patent does not specifically exclude synchronization signals from the auxiliary signal, Defendants argue that those signals are included within the auxiliary signal. See *Tr. at 48-49* ("Now, the language of the claim, the '764 patent, states that the auxiliary codes specify control data used for recording information on the carrier. Synchronization codes are used exactly for that purpose, for specifying control data used for recording information on the record carrier.").

The patent specification explains the function of the auxiliary codes. See '764 2: 6-12 ("the auxiliary codes comprise control data for controlling the recording process, wherein the recording device is adapted to control the recording process in dependence upon the extracted auxiliary codes."); '764 2:61-65 ("In such a case, a predetermined address can be assigned to one of the radial positions, while the addresses of track portions having the other radial positions can be indicated by means of auxiliary codes."). The patent differentiates clearly between the auxiliary codes and the synchronization signal. See '764 4: 44-46 ("FIG. 2 provides an example of a suitable auxiliary signal comprising code signals 12 which alternate with synchronized signals [comprising code signals] 11."); '764 59-61 ("The synchronized signals 11 are selected in such a way that they can be distinguished from the code signals 12."); '764 6:64-7: 6:

As already stated, it should be possible for the auxiliary codes and the address codes to be distinguished from one another. This can be achieved, for example, if the code signals representing the address codes and code signals representing the auxiliary codes are preceded by different synchronization signals 11. A number of different synchronization signals 11 which may be used in conjunction with the code signals 12 described herein are described *inter alia* in Netherlands Patent Application NL-A-8801275, which corresponds to U.S. Pat. No. 5,060,219.

The plain language of the patent claims and specification indicates that the "auxiliary codes" and the "synchronization signals" are separate and distinct from one another. It would make no sense to contrast the synchronization signal and the auxiliary signal, which encompasses the auxiliary codes, if the synchronization signal was in fact part of the auxiliary signal. As the auxiliary signal is comprised of the address codes and the auxiliary codes, and the synchronization signal is shown to be distinct from the auxiliary signal, and hence cannot be part of either the address codes or auxiliary codes, the Court interprets the disputed term "auxiliary code" as separate and distinct from synchronization signals.

Spot of Radiation

[5] The final disputed term is "spot of radiation." Philips argues that "it's clear from the specification and

from the prosecution history that the claim is broad enough to cover both a one-beam system and a multi-beam system, but it certainly cannot be confined to a one-beam system." *See Tr. at 14*. It argues further that "the preferred embodiment...shows a three-beam reading system...it is almost never correct...to come up with a claim interpretation that excludes the preferred embodiment." *See id. at 15*. Defendants argue that "[T]hat claim speaks in terms of a beam, intensity distribution caused by the beam so as to enable the position of the spot to be determined. Normal claim language interpretation would indicate that that means a single beam." *See id. at 49*.

In '209 5:2-14, the patent provides that "said follow-on track being configured to diffract radiation incident thereon when scanned with a spot of radiation of a predetermined size and having a width which is smaller than the dimension of the spot in the width direction..." '493 11:45-46 states "said groove being configured to diffract radiation incident thereon when scanned with a spot of radiation of a predetermined size and having a width which is smaller than the dimension of the spot in the width direction..."

The claim language, to which this Court must adhere, is written in terms of "a spot of radiation." The presence of the article "a" does not necessarily limit the element to its singular. *See KCJ Corp. v. Kinetic Concepts*, 223 F.3d 1351, 1356 (Fed.Cir.2000). The article "a" will receive a singular interpretation only where the patent evidences a clear intent to limit the article to its singular form.

[6] These patents do not demonstrate an intent to limit "a spot of radiation" to a single spot. The specifications disclose clearly a three-beam tracking system, and such a three-beam system is described as the preferred embodiment of the device. A Court is seldom, if ever, correct to interpret a claim in a manner that does not read on the claim's preferred embodiment. *See Vitronics Corp. v. Conceptronic*, 90 F.3d 1576, 1583 (Fed.Cir.1996). Highly persuasive evidentiary support is required before the Court may adopt an interpretation that excludes the preferred embodiment. *See Hoechst Celanese Corp. v. BP Chems. Ltd.*, 78 F.3d 1575, 1581 (Fed.Cir.1996) ("We share the District Court's view that it is highly unlikely that an inventor would define the invention in a way that excluded the preferred embodiment, or that persons of skill in this field would read the specification in such a way."). Interpreting the claims to exclude multi-beam tracking systems would exclude the three-beam tracking system which is the preferred embodiment of the claim. To do so in this situation would be improper.

Defendants acknowledged at oral argument that the three beam method is the preferred embodiment. They argue that the claims were redirected from a multibeam tracking system to a single beam system because of a change in technology since these patents originated. *See Tr. at 50*. The mere fact that the patent speaks to "a spot" in one location and "spots" in another is not "persuasive evidentiary support" that "a spot of radiation" is to be interpreted as applying to only single-spot tracking when such an interpretation would exclude the patents' preferred embodiment. The term must be read consistently with the preferred embodiment, and cannot be construed in a manner that would rule out the inventor's preferred embodiment. Accordingly, the Court interprets "a spot of radiation" to apply to both single and multi-beam tracking systems.

Cross-Motions for Summary Judgment

Having interpreted the terms in dispute, the Court will now decide the parties cross-motions for summary judgment on infringement and non-infringement. Determining infringement is a two-step process. First, the meaning and scope of the relevant claims must be determined by the Court. The properly constructed claims are then compared to the device that allegedly infringes upon those claims. *See Innova/Pure Water, Inc. v.*

Safari Water Filtration Sys., 381 F.3d 1111, 1115 (Fed.Cir.2004). As the patentee bears the burden at trial of proving infringement, a defendant moving for summary judgment on the issue of non-infringement need only establish a deficiency in the infringement claim. *See* Linear Tech. Corp. v. Impala Linear Corp., 379 F.3d 1311, 1326-27 (Fed.Cir.2004). Infringement is a question of fact, and the Court analyzes a motion for summary judgment on infringement in the same manner as other motions for summary judgment.

Fed.R.Civ.P. 56(c) provides that summary judgment shall be rendered if "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 a judgment as a matter of law." In evaluating the record to determine whether there is a genuine issue as to any material fact, "the evidence of the non-movant is to be believed and all justifiable inferences are to be drawn in his favor." *Anderson v. Liberty Lobby*, 477 U.S. 242, 255, 106 S.Ct. 2505, 2513, 91 L.Ed.2d 202 (1986).

[7] The claims alleged to have been infringed by the defendants are claims 1, 5 and 6 of '209, claims 1, 2 and 3 of '401, claims 1, 3, and 4 of '856, claims 1, 2, 4, 5 and 6 of '825, and claims 20 and 22-34 of '764. Philips is required to prove by a preponderance of the evidence that the defendants' devices infringe one or more of these patent claims either literally or under the doctrine of equivalents. *See* Bayer AG v. Elan Pharm. Research Corp., 212 F.3d 1241, 1247 (Fed.Cir.2000). Literal infringement requires a patentee to demonstrate that the accused device satisfies all of the limitations within a claim of the patented device. There is infringement under the doctrine of equivalents when there is no substantial difference between the limitations contained within a claim of the patented device and that of the alleged infringers. *See id.* at 1250.

Philips argues that summary judgment should be granted as to the '209 and '493 patents because defendants admit that their disc's pregroove is narrower than the scanning spot and diffracts light to produce a radial tracking signal. Philips also states that the defendants' discs are Orange Book compliant, FN4 which reads on the asserted claims. Philips next argues that summary judgment should be granted as to the '401, '825, and '856 patents because the FM-modulated, wobbled pregroove of the defendants' discs is periodic. It argues that the defendants admit that the non-FM-modulated wobble signal is periodic at 22.05 kHz, and that this periodic signal is extracted from the FM-modulated wobble that includes the auxiliary signals. Philips also states that the defendants' expert has testified that the defendants discs exhibit the 22.05kHz wobble signal and that the discs work in a recorder, which is their intended purpose, and thus the "periodic" limitation is met. This same expert allegedly admitted that the discs are frequency modulated, and that Princo's wholly owned German subsidiary stipulated in an action involving the UK counterpart to the '825 patent that its CD-R discs contain all the limitations contained within '825.

FN4. The Orange book is published by Philips and Sony. It sets out specifications for CD-Rs and CD-RWs. It is available only to licensees of Philips, Sony or another of the companies owning patents that are licensed to produce CD-R/RWs.

Defendants assert that summary judgment of non-infringement is proper as to '401, '856, '825 and Claim 24 of '764 because "the parties agree that the frequency modulation in defendants' discs is 22.05 kilohertz plus or minus 1 kilohertz. And there is testimony that that variation would not be considered to be identical or periodic by persons of skill in the art." *See Tr. at 52*. The Court has interpreted "periodic" to mean regularly but not necessarily identically repeating. This interpretation would encompass Defendants' discs, which have a regularly repeating frequency modulation centered on 22.05 kHz. The term, as discussed earlier, does not require the modulation to be an identically repeating occurrence in order to be periodic as defined in the

patent. The frequency swing from a low of 21.05 kHz to a high of 23.05 kHz would be a regularly occurring event (periodic) within the language of the patents, and is thus encompassed by their terms. Accordingly, Defendants' discs are within the language of the above claims in Philips' patents, and summary judgment of infringement is granted to Philips.

Defendants also argue that they have not infringed upon '209 and '493 because "the radiation spot in defendants' discs is smaller than what is considered to be the diffractive path, or the track width, if you will-the track pitch is the term." *See Tr. at 52*. Defendants are incorrect in arguing that the track pitch is synonymous with "diffractive follow-on track." Patents '209 and '493 teach a groove that is smaller than a spot of radiation and is different from the surrounding lands. The track is smaller than the "track pitch." Defendants' argument is premised upon the track being larger than it is in fact. The claims, properly interpreted, do not teach such a track. They teach a groove, that is, there is no evidence that the grooves of the accused discs are larger than a spot of radiation. Accordingly, Philips' motion for summary judgment is granted as to '209 and '493.

Defendants have not cross-moved for summary judgment of non-infringement as to claims 20, 22, 23 25-34 of '764. These claims teach an auxiliary signal providing "control" data. Philips argues that Defendants produce Orange Book compliant discs, and by that fact alone they necessarily infringe upon '764. FN5 It is possible to write a patent that reads so closely upon a standard that compliance with the standard would require one to practice the patent. In such an instance, a party may infringe upon the patent by complying with the standard. *See Dynacore Holdings Corp. v. U.S. Philips Corp.*, 363 F.3d 1263, 1275-76 (Fed.Cir.2004) (A party can prove infringement by demonstrating that compliance with a standard necessarily infringes upon a patent.).

FN5. A failure of substantial compliance with Orange Book standards would make the discs non-merchantable, and probably useless.

The Orange Book lists the specifications that must be complied with to produce a functional CD-R/RW. Similarly, Philips' patents must be practiced if a manufacturer wishes to produce CD-R/RWs. Philips claims that the Orange Book reads upon its patents.FN6 The question is therefore whether compliance with the Orange Book standards requires the Defendants to practice Philips' patents.

FN6. As Philips is one of the authors of the Orange Book, it is to be expected that the Orange Book's standards would read upon Philips' patents.

It is clear that Defendants' discs contain the auxiliary code information. The encoding device used by Defendants inputs "the optimum recording power, lead-in area start time and last possible lead-out start time...." This is "input in conformity with Orange Book part II." This information is the same "control data" that is described within the '764 patent. *See '764 1:45-48* ("It is desirable that the radial positions of the beginnings of the lead-in area and the program area as prescribed by the CD standard can be detected accurately."); *1:51-54* ("This is desirable in particular if standard CD signals are recorded, in which case the program area should end at a lead-out portion of the track in which a specific lead-out signal is recorded."); *1:57-62* ("Apart from the aforementioned information, it may be desirable, for that purpose, that of controlling the recording process, other control data, which may vary considerably from disc to disc, be known prior to recording as well. For example, the write energy for recording on the recording material.");

2:53-58 ("This is the case, for example, when information is to be recorded in conformity with the CD standard, in which case the information signals must be recorded in a program area which begins at a radial position described by the standard and a table of contents specifying the addresses of specific portions of the recorded information must also recorded [sic] in an area which begins at a prescribed radial position."); 2:66-3:2 ("In another illustrative embodiment of the information recording system, which is also very suitable for standard CD signals, the address of the most extreme location at which recording of the lead-out track portion should start is incorporated in the auxiliary signal."). Defendants' ATIP recorder inputs the exact control data which is described within '764. The ATIP recorder's manual is clear that this recording is in compliance with the Orange Book standards. Defendants' discs therefore contain the auxiliary code information contained within Claim 20, 22, 23, and 25-34. Complying with the Orange Book standard requires the Defendants to practice Philips' patent.

Because of the necessity of utilizing Philips' patents and the standards contained within the Orange Book, the Court finds it highly implausible if not impossible as a practical matter that one could comply with Orange Book standards regarding auxiliary code data and not infringe upon '764. In order to produce a functional CD-R/RW, one must comply with these standards and practice Philips' claims. As regards the '764 patent, there is no evidence that the Defendants can comply with the Orange Book's standards and not infringe Philips' patent. The Orange Book reads upon '764. Defendants have failed to raise an issue of fact. They cannot survive summary judgment by making unsupported assertions that genuine issues of fact exist. Such assertions are insufficient to avoid summary judgment. *See Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 586, 106 S.Ct. 1348, 89 L.Ed.2d 538 (1986) (Defendants opposing summary judgment must do more than raise a mere metaphysical doubt as to the material facts. They must offer specific facts showing that there is a genuine issue for trial.). Accordingly, the Court concludes that Defendants infringe upon the remaining claims of '764.

Defendants' Motion for Patent Misuse

Defendants allege that Philips has misused its patents and that they are unenforceable. Defendants allege that Philips pools together patents necessary to the production of CD-Rs and CD-RWs with patents that are unnecessary and therefore "ties" essential and nonessential patents. Defendants offer the findings of the Administrative Law Judge ("ALJ") and the panel of the International Trade Commission ("ITC") on this issue. The ALJ conducted a nine-day hearing, at the end of which she determined that Philips' patents were unenforceable under both the *per se* rule as well as the rule of reason. The ITC reviewed the ALJ's determination *de novo* and also concluded that Philips' conduct constituted unlawful patent misuse under both the *per se* rule and the rule of reason. This Court has held previously by memorandum and order dated September 5, 2002 that it is not bound by the decisions of the ALJ or the ITC and adheres to that holding.

[8] [9] [10] The patent misuse defense exists in order to "prevent the patentee from using the patent to obtain market benefit beyond that which inures in the statutory patent right." *See Monsanto Co. v. McFarling*, 363 F.3d 1336, 1341 (Fed.Cir.2004). A valid defense of patent misuse exists where the patentee impermissibly expands the patent's scope with anticompetitive effect. A patentholder who has been held to misuse its patents may not recover for infringement until it purges such patent misuse.FN7

FN7. Philips has disclaimed that purging is an issue in this case, and thus may not raise purging as a defense to patent misuse. Therefore, if misuse is found, Philips will be unable to enforce the six patents at issue.

[11] [12] A tying arrangement exists when the patentee conditions the granting of a license under the patent upon "the purchase of a separable, staple good...." *See Virginia Panel Corp. v. MAC Panel Co.*, 133 F.3d 860, 869 (Fed.Cir.1997). While patent misuse is similar in nature to an antitrust violation, establishing patent misuse requires less exacting proof. *See id.* at 872. The corollary to this statement is that patent misuse is demonstrated if an antitrust violation can be shown. *See C.R. Bard, Inc., v. M3 Systems, Inc.*, 157 F.3d 1340, 1372 (Fed.Cir.1998) (stating that patent misuse "is seen as a broader wrong than an antitrust violation because of the economic power that may be derived from the patentee's power to exclude. Thus, misuse may arise when the conditions of antitrust are not met.").

[13] Under the doctrine of patent misuse, the Federal Circuit examines the *per se* illegality approach under the antitrust laws. *See Philips Memo. at 17 n. 14*. While it has jurisdiction over all claims arising under the patent laws, the Federal Circuit applies the antitrust law of the Circuit from which the patent case emerged. As our Court of Appeals has held, evaluating market power begins with defining the relevant market. *See Geneva Pharmaceuticals v. Barr Laboratories*, 386 F.3d 485 (2nd Cir.2004). The relevant market is defined as "all products reasonably interchangeable by consumers for the same purposes." *See id.* at 496. A firm's ability to conduct anti-competitive practices decreases when readily assumable substitutes are present within a market. Claims of anti-competitive practices are strengthened when high barriers to entry into an industry exist and there is little evidence that supply substitution is present.

[14] [15] In the context of a claim for patent misuse due to tying, the claimed invention must be examined to determine whether the allegedly tied product is a necessary component or "concomitant" of the product or in fact can be sold as an entirely separate product. *See Senza-Gel Corp. v. Seiffhart*, 803 F.2d 661, 670 n. 14 (Fed.Cir.1986). This factor is known as "separability." Unlike the law of antitrust, which will look to the consumer demand test to determine whether products are legally separable, consumer demand for a tied patent may be non-existent. A defendant alleging patent misuse must look at the nature of the product itself, and from this nature, determine whether the tied product is a separate product from that to which it is tied. *See id.* at 670 n. 14. Separability is required because a "tying arrangement" is defined as "an agreement by a party to sell one product but only on the condition that the buyer also purchases a different (or tied) product...." *See Northern Pacific Ry. Co. v. United States*, 356 U.S. 1, 5-6, 78 S.Ct. 514, 2 L.Ed.2d 545 (1958). An unlawful tying arrangement is based on the essential characteristic that the seller exercises such control over the tying product that the seller is able to force the buyer to purchase the tied product against the buyer's economic interest in order to receive the tying product.

Many facts are currently disputed between the parties. None of these disputed facts are material to the fundamental issue presented by this motion: Can a tying arrangement exist involving only one product? A disputed fact is not material if it cannot affect the outcome of the lawsuit. *See Anderson*, 477 U.S. at 242, 106 S.Ct. 2505. If no material disputed facts are present, the Court may grant summary judgment to the non-moving party if that party is entitled to judgment as a matter of law. *See Bridgeway Corp. v. Citibank*, 201 F.3d 134, 140 (2nd Cir.2000). A non-moving party is entitled to judgment as a matter of law if the moving party has failed to produce evidence supporting an essential element of its claim on which it bears the burden of persuasion and thus demonstrates that it is unable to succeed at trial. *See Celotex Corp. v. Catrett*, 477 U.S. 317, 324-26, 106 S.Ct. 2548, 91 L.Ed.2d 265 (1986).

Defendants argue that Philips has misused its patents through unlawful "tying" arrangements. An essential element of this claim is proving the existence of a tying arrangement. Because Defendants seek relief under 35 U.S.C. s. 271,FN8 this tying arrangement must be the type prohibited under the statute. In the absence of such an arrangement, disputed issues of fact regarding market definition, market power and disagreement as

to whether a *per se* or rule of reason approach is required are immaterial.

FN8. (d) No patent owner otherwise entitled to relief for infringement of a patent shall be denied relief or deemed guilty of misuse or illegal extension of the patent right by reason of his having done one or more of the following:

...(5) conditioned the license of any rights to the patent or the sale of the patented product on the acquisition of a license to rights in another patent or purchase of a separate product, unless, in view of the circumstances, the patent owner has market power in the relevant market for the patent or patented product on which the license or sale is conditioned.

[16] The relevant statute s. 271(d)(5) speaks in terms of "products." A patentholder may not condition "the license of any rights to the patent or the sale of the patented product on the acquisition of a license to rights in another patent or purchase of a separate product...." The language "patent or the sale of the patented product" means that the buyer seeks either (1) to purchase a license to a patent or (2) to purchase the actual patented product.

[17] The second patent is linked to a second, separate product. There is no readily apparent reason why the Court should interpret the language "in another patent or purchase of a separate product" otherwise. Under s. 271(d)(5), an unlawful tie exists when a buyer is forced to purchase either a license in a patent for a second product or to purchase the second product itself. Multiple patents covering a single product do not implicate the statute. This interpretation is commanded by the plain meaning of the words used in the statute. In common speech, a patent is not "the product." If it were, references to the "patented product" would be cumulative and unnecessary. A patentee applies for a patent covering a product. Various separate patents do not constitute products.

Legislative history also supports this interpretation. This history demonstrates that it is unlawful to tie "a patented product to another separate product." *See 134 Cong. Rec. H. 10646, 10648 (1988)*. Tying analysis requires the Court to determine whether the "tied product is a staple or a nonstaple," and whether the tying of one product to a second, tied product causes economic harm. The legislative history states further that "In real world situations where the only practical way to meter output [may be] to tie the sale of a patented product to the sale of another separate product....[there would be no violation]." The statute and its history speaks clearly in terms of two separate products, not in terms of two separate patents covering the same product.

The case of *Virginia Panel v. MAC Panel Co.*, 133 F.3d 860 (Fed.Cir.1997) does not support Defendants' argument that package licensing as practiced by Philips in this case constitutes tying under s. 271(d)(5). Consistent with the plain meaning of the statute noted above, the Federal Circuit rejected the argument that a tying arrangement existed in the absence of a second product. *See id.* at 870-71 (citing *Northern Pac. Ry. v. United States*, 356 U.S. 1, 5-6, 78 S.Ct. 514, 2 L.Ed.2d 545 (1958) and *Stephen Jay Photography, Ltd. v. Olan Mills, Inc.*, 903 F.2d 988, 991 (4th Cir.1990)). The Court instructed that a tying arrangement does exist when a buyer is forced to enter into a license agreement to purchase a separate product. *See Virginia Panel*, 133 F.3d at 871. The case does not support the argument that a tying arrangement can exist in the absence of a second product. Requiring a buyer to acquire rights in additional patents covering the same product does not constitute use of a patent to control a separate unpatented product. Accordingly, Philips' package licensing of patents for a single product is not tying within the meaning of s. 271(d)(5).

The Court is unconvinced that any of the patents at issue are "non-essential." In the absence of a plenary

trial on infringement, determinations as to essentiality cannot be made. It is highly implausible that non-essential patents would be included in Philips' package license, because such licenses would not aid functionality and in all likelihood would render the product ineffective or useless. When combined with the increased possibility of litigation, the Court is hesitant to believe that Philips would knowingly package useless patents with valuable patents.

Because the Defendants have failed to present evidence as to an essential element of their tying claim, summary judgment is granted to Philips, and Defendants' patent misuse claim is dismissed.

Conclusion

Philips' motion for summary judgment of infringement is granted as to '209, '401, '493, '825, '856 and '764. Summary Judgment is granted to Philips as to dismissing Defendants' claim for Patent Misuse.

A status conference will be held with the Court on February 25, 2005 at 11:00 A.M. to consider all issues left unresolved in this case. The Court declines at this time to make the findings contemplated by Fed. R.Civ. Pro. 54(b).

SO ORDERED.

S.D.N.Y., 2005.

U.S. Philips Corp. v. Princo Corp.

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