IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

NOMOS CORPORATION,	:
Plaintiff,	· :
V.	: Civil Action No. 98-788-JJF
BRAINLAB, INC. and BRAINLAB USA, INC.,	· : :
Defendants.	:

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MEMORANDUM OPINION

January 10, 2003

Wilmington, Delaware

Farnan, District Judge.

Pending before the Court is a Motion For Summary Judgment (D.I. 95) filed by Defendants BrainLAB, Inc. and BrainLAB USA, Inc. (collectively "BrainLAB") against Plaintiff NOMOS Corporation ("NOMOS") requesting the Court to renew Defendants' previously filed motion for summary judgment of noninfringement of United States Patent No. 5,411,026 (the "'026 Patent"). For the reasons discussed, BrainLAB's Motion will be granted.

BACKGROUND

I. Procedural Background

On March 28, 2002, the Court issued its claim construction for the disputed terms in Claims 1 and 6 of the '026 Patent. In light of the Court's claim construction, the Court denied the parties' pending summary judgment motions with leave to renew upon consideration of the Court's claim construction order. BrainLAB subsequently renewed its motion for summary judgment requesting the Court to enter a final judgment of noninfringement in favor of BrainLAB. NOMOS opposes BrainLAB's Motion, and briefing on the renewed Motion has been completed. Accordingly, this matter is ripe for the Court's review.¹

¹ After briefing was completed on BrainLAB's Motion For Summary Judgment, NOMOS filed a letter (D.I. 100) requesting the Court to consider a claim construction decision pertaining to the '026 Patent rendered by Judge Lasker in the United States District Court for the District of Massachusetts. BrainLAB opposed NOMOS' request (D.I. 101), but subsequently asked the Court to consider Judge Lasker's later issued summary judgment

II. Factual Background

The factual background related to the technology and the '026 Patent is set forth fully in the Court's claim construction decision. (D.I. 89, 90). By way of summary, the '026 Patent describes a method and apparatus for verifying the position of a cancerous lesion on a patient's body which is to be treated by a radiation therapy device operating in accordance with a radiation therapy plan. ('026 Patent, col. 1, l. 7-10). Specifically, the '026 Patent discloses a method and apparatus for verifying the position of a lesion in a patient's body by comparing the location of the lesion as depicted in a CT scan with the position of the lesion as depicted in an ultrasound image. ('026 Patent, Abstract). The invention includes the steps of (1) disposing the patient on a treatment table of a radiation therapy device, (2) disposing on the treatment table a means for generating an ultrasound image, (3) generating at least one two-dimensional ultrasound image of the lesion in the patient's body, (4) outlining the outer surface of the lesion in the ultrasound image and (5) comparing the outline of the lesion in the ultrasound

decision in the event that the Court considers Judge Lasker's claim construction decision (D.I. 104). Although the '026 Patent was the subject of the Massachusetts litigation, the issues presented in this case are not identical. Further, the Court is not bound by the decisions of the Massachusetts court, and NOMOS has not argued otherwise. Accordingly, the Court declines to consider the decisions issued by Judge Lasker in rendering its decision in this case.

image to the outline of the lesion generated by one of the diagnostic images. ('026 Patent, col. 2, 1. 45-62).

NOMOS contends that BrainLAB's ExacTrac device infringes its '026 Patent. BrainLAB's ExacTrac device treats a patient using a radiation therapy plan developed by a surgeon after reviewing CT slices of the lesion to be treated and outlining the areas in the CT slice that correspond to the area to be irradiated. The ExacTrac system does not use a constrained fixed ultrasound probe mounted to a treatment table. Rather, the ExacTrac system utilizes a handheld ultrasound probe which can be moved around the patient's body at different angles by the surgeon so as to scan the target area. (Froehlich Decl., \P 10). The position of the ultrasound probe is tracked using an infrared light source, two cameras and three reflective spheres mounted to the ultrasound probe in a triangular arrangement. (Froehlich Decl., \P 11).

Prior to the ExacTrac procedure and after the CT scan of a patient has been completed, the physician creates a radiation treatment plan, in part, by outlining the lesion to be treated in the CT slice. During the ExacTrac procedure, the device mirrors the physician created outlines in the CT slice onto the ultrasound image so that the physician can determine if the lesion has moved since the time the CT scan was taken. (Froehlich Decl., ¶ 15-17). The physician created outlines

appear as red circles overlaid onto the ultrasound images. If the lesion has shifted since the initial CT scan, the physician can use the ExacTrac computer and a mouse to move the CT image contour to approximate the location of the lesion on the ultrasound image. The ExacTrac device measures the distance the physician moves the contour and thereby calculates the amount of actual movement of the lesion in the patient's body since the time of the initial CT scan.

In addition to this summary of the '026 Patent and the accused ExacTrac device, the Court will discuss further factual background as needed in the context of this Memorandum Opinion.

DISCUSSION

I. Standard of Review

Pursuant to Rule 56(c) of the Federal Rules of Civil Procedure a party is entitled to summary judgment if a court determines from its examination of "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any," that there are no genuine issues of material fact and that the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(c). In determining whether there is a triable dispute of material fact, a court must review all of the evidence and construe all inferences in the light most favorable to the non-moving party. <u>Goodman v. Mead</u> Johnson & Co., 534 F.2d 566, 573 (3d Cir. 1976). However, a

court should not make credibility determinations or weigh the evidence. <u>Reeves v. Sanderson Plumbing Prods., Inc.</u>, 120 S. Ct. 2097, 2110 (2000). Thus, to properly consider all of the evidence without making credibility determinations or weighing the evidence the "court should give credence to the evidence favoring the [non-movant] as well as that 'evidence supporting the moving party that is uncontradicted and unimpeached, at least to the extent that that evidence comes from disinterested witnesses.'" <u>Id.</u> The moving party bears the burden of proving that no genuine issue of material fact is in dispute. <u>Matsushita</u> <u>Elec. Indus. Co., Ltd. v. Zenith Radio Corp.</u>, 475 U.S. 574, 586 n. 10 (1986)).

To defeat a motion for summary judgment, Rule 56(c) requires the non-moving party to:

do more than simply show that there is some metaphysical doubt as to the material facts. . . . In the language of the Rule, the non-moving party must come forward with "specific facts showing that there is a genuine issue for trial." . . . Where the record taken as a whole could not lead a rational trier of fact to find for the non-moving party, there is "no genuine issue for trial."

<u>Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.</u>, 475 U.S. 574, 586-87 (1986). Accordingly, a mere scintilla of evidence in support of the non-moving party is insufficient for a court to deny summary judgment. <u>Anderson v. Liberty Lobby, Inc.</u>, 477 U.S. 242, 252 (1986). Rather, a genuine issue for trial exists only if the record taken as a whole could lead a rational person to conclude that the position of the person with the burden of proof on the disputed issue is correct. <u>Horowitz v. Federal Kemper</u> <u>Life Assurance Co.</u>, 57 F.3d 300, 302 n.1 (3d Cir. 1995) (citations omitted). Thus, if the non-moving party fails to make a sufficient showing on an essential element of his or her case to which he or she has the burden of proof, the moving party is entitled to judgment as a matter of law. <u>Celotex Corp. v.</u> <u>Catrett</u>, 477 U.S. 317, 322 (1986).

II. The Law of Infringement

A patent is directly infringed when a person "without authority makes, uses or sells any patented invention, within the United States during the term of the patent...." 35 U.S.C. § 271(a). A patent owner may prove infringement under either of two theories: literal infringement or the doctrine of equivalents. Literal infringement occurs where each element of at least one claim of the patent is found in the alleged infringer's product. <u>Panduit Corp. v. Dennison Mfg. Co.</u>, 836 F.2d 1329, 1330 n. 1 (Fed. Cir. 1987); Robert L. Harmon, <u>Patents</u> <u>and the Federal Circuit</u> 195 & n. 31 (3d ed.1994). For there to be infringement under the doctrine of equivalents, the accused product or process must embody every element of a claim, either literally or by an equivalent. <u>Warner-Jenkinson Co. v. Hilton</u> <u>Davis Chem. Co.</u>, 520 U.S. 17, 41 (1997). Thus, the mere showing that an accused device is equivalent overall to the claimed

invention is insufficient to establish infringement under the doctrine of equivalents. In determining whether a patent has been infringed, the patent owner has the burden of proof and must meet its burden by a preponderance of the evidence. <u>SmithKline</u> <u>Diagnostics, Inc. v. Helena Lab. Corp.</u>, 859 F.2d 878, 889 (Fed. Cir. 1988) (citations omitted).

Infringement is a two step inquiry. Step one requires a court to construe the disputed terms of the patent at issue. Step two requires the court to compare the accused products with the properly construed claims of the patent. Having construed the disputed terms of the '026 Patent, the Court will proceed to a comparison of the accused product with the claims of the patent as construed by the Court to determine whether BrainLAB is entitled to a judgment of noninfringement as a matter of law.

III. Whether BrainLAB Is Entitled To Summary Judgment That Its ExacTrac Device Does Not Infringe Claim 1 Of The NOMOS '026 Patent

By its Motion, BrainLAB contends that the ExacTrac system does not infringe Claim 1 of the '026 Patent, because the ExacTrac system does not include three of the limitations contained in Claim 1 as construed by the Court. Specifically, BrainLAB contends that the ExacTrac systems does not include the following elements: (1) a means for generating at least one ultrasound image; (2) a means for indicating the position with respect to the radiation therapy device, of the means for

generating at least one ultrasound image; and (3) whereby the position of the lesion in the ultrasound image can be compared with a position of the lesion in the radiation therapy plan.

In response to BrainLAB's motion, NOMOS contends that the Court improperly construed the disputed terms of the '026 Patent. NOMOS contends that the Court's claim construction is overly narrow because it improperly imports structural limitations beyond those which are necessary to perform the claimed functions and which are different from that which is expressly cited in the claim language. NOMOS requests the Court to set aside its claim construction and adopt the claim construction proposed by NOMOS. In the alternative, NOMOS contends that even under the Court's claim construction, triable issues of fact exist as to whether BrainLAB's ExacTrac system infringes Claims 1 of the '026 Patent.

A. <u>Whether The Court's Claim Construction Should Be Set-</u> <u>Aside As Erroneous</u>

With regard to the Court's claim construction, the Court is not persuaded that its interpretation of the disputed terms of the '026 Patent is erroneous. The Court's construction of these terms is consistent with and supported by the specification of the '026 Patent, and therefore, the Court is not persuaded that its construction should be altered by extrinsic evidence such as the declaration of Dr. Eisenbarth. <u>See e.g. Southwall</u> <u>Technologies, Inc. v. Cardinal IG Co.</u>, 54 F.3d 1570, 1578 (Fed. Cir. 1995) (holding that where the claim language, specification

and prosecution history are clear, extrinsic evidence cannot be used to alter the meaning of the claims). Accordingly, the Court declines to modify or reconsider its claim construction.

B. <u>Whether Genuine Issues Of Material Fact Preclude</u> <u>Summary Judgment</u>

As for the NOMOS' contention that genuine issues of material fact exist making summary judgment inappropriate, the Court is likewise unpersuaded by NOMOS' argument. In rendering this conclusion, the Court will examine the accused device in light of the claim limitations at issue.

Element (a) of Claim 1 of the '026 Patent --"means for generating an ultrasound image"

NOMOS contends that BrainLAB's ExacTrac system includes the means for generating at least one ultrasound image contained in Claim 1 of the '026 Patent. The Court defined the function of "a means for generating at least one ultrasound image" in paragraph (a) of Claim 1 of the '026 Patent as "generating at least one ultrasound image of the lesion in the patient's body." (D.I. 90, ¶ b). The Court also identified the corresponding structures to this means-plus-function limitation as "a fixed ultrasound probe and a bracket or fixation device that maintains the ultrasound probe perpendicular to the treatment table and constrains it to rotate or move along the axis of the table in order to generate an ultrasonic image, and equivalent structures." (D.I. 90, ¶ a). NOMOS contends that a factual question exists as to whether the

ExacTrac system contains an equivalent structure under 35 U.S.C. § 112, \P 6.

To literally infringe a means-plus-function limitation "the accused structure must either be the same as the disclosed structure or be an 'equivalent,' i.e. (1) perform the identical function and (2) be otherwise insubstantially different with respect to structure." Kemco Sales, Inc. v. Control Papers Co., Inc., 208 F.3d 1352, 1364 (Fed. Cir. 2000). For purposes of Section 112, Paragraph 6, structures are equivalent "if they perform the identical function, in substantially the same way, with substantially the same result." Id. In determining whether the accused structure is an equivalent, the court should not focus on a component-by-component comparison. Odetics, Inc. v. Storage Technologoy Corp., 185 F.3d 1259, 1268 (Fed. Cir. 1999). Rather, the court should consider the overall structure corresponding to the claimed function. Id. For this reason, structures with a different number of parts may still be equivalent under Section 112, Paragraph 6, thereby meeting the claim limitation. Id.

After comparing the accused structure with the claimed structure, the Court concludes that no reasonable jury could conclude that the accused structure is the same or an equivalent under Section 112, Paragraph 6 of the claimed structure. Although the accused structure performs the same function of

generating an ultrasound image as the claimed structure, the Court concludes as a matter of law that the accused structure is substantially different from the claimed structure in the way in which it performs this function. According to the Court's claim construction, the claimed structure performs the function of generating an ultrasound image using a fixed ultrasound probe and a bracket or fixation device that maintains the ultrasound probe perpendicular to the treatment table and constrains it to rotate or move along the axis of the table in order to generate an ultrasonic image. Stated differently, the way in which the ultrasound probe generates its image is by fixing or constraining an ultrasound probe perpendicular to the treatment table such that it rotates or moves only along the axis of the table. BrainLAB's ExacTrac system uses an ultrasound probe; however, it does not operate in substantially the same way. The ultrasound probe used in the ExacTrac system is a handheld device that does not need to be held perpendicular or substantially perpendicular to the treatment table. In addition, the handheld device need not rotate or move only along the axis of the treatment table. Rather, the handheld probe can be moved or rotated anywhere and can be positioned at any angle relative to the patient and the treatment table so that the physician can determine the best angle at which to view the subject lesion.

NOMOS contends that the "hand and arm of the radiation

therapist resting the probe against the patient" is an equivalent structure to the claimed bracket or fixation device. (D.I. 97 at 18). In the Court's view, NOMOS' argument only addresses part of the equivalents question. The Court's analysis is not focused on the components of the structure which secure the ultrasound probe, but rather, on the way in which the structure functions. In the ExacTrac System, the hand and arm of the therapist may well be the "bracket" or "fixation device" for the ultrasound probe; however, the hand and arm of the therapist is not constrained to move the device perpendicular to the treatment table and only along the axis of the treatment table. Because the handheld ultrasound probe can move at any angle, it is substantially different from a "fixed ultrasound probe and a bracket or fixation device that maintains the ultrasound probe perpendicular to the treatment table and constrains it to rotate or move along the axis of the table." (D.I. 90, \P a). Thus, the Court concludes that no reasonable jury could conclude that the accused structure is an equivalent of the claimed structure. Having concluded that the ExacTrac system does not include the "means for generating at least one ultrasound image" as that limitation is construed by the Court, the Court concludes that the ExacTrac system does not literally infringe Claim 1 of the '026 Patent.

To the extent that NOMOS alleges infringement under the

doctrine of equivalents, the Court likewise concludes that the ExacTrac system does not infringe Claim 1 of the '026 Patent. The equivalence analysis under Section 112, Paragraph 6 is related to the doctrine of equivalents, but they are not coextensive. "[A] finding of a lack of literal infringement for lack of equivalent structure under a means-plus-function limitation may preclude a finding of equivalence under the doctrine of equivalents." Chiuminatta Concrete Concepts, Inc. v. Cardinal Industries, Inc., 145 F.3d 1303, 1311 (Fed. Cir. 1998). However, the doctrine of equivalents may be applicable where later-developed technology is at issue. As the Federal Circuit has explained, "[d]ue to technological advances, a variant of an invention may be developed after the patent is granted, and that variant may constitute so insubstantial a change from what is claimed in the patent that it should be held to be an infringement." Id. at 1310.

In this case, NOMOS does not dispute BrainLAB's contention that handheld ultrasound probe technology was available at the time of filing of the application for the '026 Patent. Where the equivalence issue does not involve later-developed technology, a finding of non-equivalence for Section 112, Paragraph 6 purposes precludes a finding under the doctrine of equivalents. <u>Id.</u> at 1311. Because the ExacTrac system does not meet the "means for generating an ultrasound image" literally or under the doctrine

of equivalents, the Court concludes that NOMOS cannot, as a matter of law, establish infringement of Claim 1 of the '026 Patent. Accordingly, the Court will grant summary judgment in favor of BrainLAB on Claim 1 of the '026 Patent. Although the Court's holding with regard to element (a) of Claim 1 is sufficient to support a judgment of noninfringement as a matter of law in favor of BrainLAB with respect to Claim 1 of the '026 Patent, the Court will analyze the remaining disputed elements of Claim 1 for completeness.

> 2. Element (b) of Claim 1 of the '026 Patent --"means for indicating the position, with respect to the radiation therapy device, of the means for generating an ultrasound image"

NOMOS contends that BrainLAB's ExacTrac system includes the "means for indicating the position, with respect to the radiation therapy device, of the means for generating an ultrasound image" contained in element (b) of Claim 1 of the '026 Patent. The Court defined the function of element (b) as "indicating the position of the ultrasound probe with respect to the radiation therapy device when the ultrasound image is generated." (D.I. 90, \P d). The Court also identified the corresponding structures to this means-plus-function limitation as "active markers, i.e. light emitting diodes (LEDs) or ultrasonic emitters, mounted on the ultrasound probe parallel to the long axis of the probe, and a sensor for sensing the signals actively emitted by the active markers with the active markers and sensors being aligned with

the radiation therapy device, and equivalent structures." (D.I. 90, \P c). NOMOS contends that the accused structures are equivalent to the claimed structures for purposes of Section 112, Paragraph 6, or at the very least, there is a triable issue of fact regarding the position sensing structure.

After comparing the accused structure with the claimed structure in the '026 Patent as construed by the Court, the Court concludes that no reasonable jury could conclude that the accused structure is the same or an equivalent of the claimed structure. According to the Court's claim construction, the claimed structure performs its function of indicating the position of the ultrasound probe with respect to the radiation therapy device when the ultrasound image is generated by using active markers which emit light or sound. These active markers are mounted to the ultrasound probe parallel to the long axis of the probe and a sensor senses the actively emitted signals. In contrast, BrainLAB's ExacTrac system utilizes passive tracking technology which consists of an infrared light source, two cameras and three reflecting spheres mounted to the ultrasound probe in a triangular arrangement. The ExacTrac does not use active sound or light emitting markers, and the passive reflective spheres are not mounted on the ultrasound probe parallel to the long axis of the probe and are not aligned with the radiation therapy device.

NOMOS contends that BrainLAB's passive tracking system is

the equivalent of its active tracking system, because whether the markers emit light (active markers) or reflect light (passive markers) is technically insignificant. The Court disagrees. The two tracking systems are opposites insofar as the way in which they operate. While they each use markers and cameras, the ExacTrac structure performs its function using a passive system, while the claimed invention utilizes an active tracking system in which light or sound is actively emitted from the marker. In the Court's view, whether a sensor reflects light or actively emits light or sound is a fundamental difference in the way in which the systems operate such that the differences between the structures are not insubstantial. Accordingly, the Court concludes that no reasonable juror could find that the ExacTrac's passive tracking system is the equivalent of the claimed active tracking system under Section 112, Paragraph 6.

The Court likewise concludes that equivalence cannot be established under the doctrine of equivalents. Although the ExacTrac's passive tracking system is a later-developed technology, the Court concludes that the differences between the claimed active tracking system and the accused passive tracking system are substantial such that the claimed limitation is not present in the accused device under the doctrine of equivalents. Further, the Court observes that BrainLAB obtained a patent, U.S. Patent No. 6,351,659 B1, on its passive tracking system

specifically over NOMOS' patent. Although the patentability of an accused structure is not dispositive on the issue of equivalents, it is relevant in determining whether the device is substantially different from the claimed invention. See Zygo Corp. v. Wyko Corp., 79 F.3d 1563, 1570 (Fed. Cir. 1996) ("The non-obviousness of the accused device, evidenced by the grant of a United States patent, is relevant to the issue of whether the change therein is insubstantial."). In this case, the patentability of the accused structure confirms the Court's initial view that the differences between the accused structure and the claimed structure are not insubstantial. Because the ExacTrac system does not contain the "means for indicating the position, with respect to the radiation therapy device, of the means for generating an ultrasound image" literally or under the doctrine of equivalents, the Court concludes that NOMOS cannot, as a matter of law, establish infringement of Claim 1 of the '026 Patent.

> 3. The "Whereby Clause" of Element (b) -- "whereby the position of the lesion in the ultrasound image can be compared with a position of the lesion in the radiation therapy plan"

NOMOS contends that BrainLAB's ExacTrac system includes the element of outlining the lesion in the ultrasound image so that it can be compared with the position of the lesion in the radiation therapy plan as described in the "whereby clause" of element (b) of Claim 1 of the '026 Patent. The parties agree

that the "whereby clause" of element (b) limits the '026 Patent to a system "which outlines the lesion in the ultrasound images, and which forms a rendering of the outline of the lesion from the ultrasound images so that the comparison 'can be made.'" (D.I. 95 at 16, adopting definition in D.I. 80, NOMOS' Brief In Support Of Its Proposed Construction Of The Claims Of U.S. Patent No. 5,411,026, at 10).

After comparing the ExacTrac system with the requirements of the "whereby clause" in element (b) of Claim 1 of the '026 Patent, the Court concludes that no reasonable jury could conclude that the ExacTrac system outlines the lesion in the ultrasound image. The ultrasound image is not outlined by the physician or the ExacTrac system during the ExacTrac procedure. Rather, it is prior to the ExacTrac procedure and after the CT scan of the patient, that the physician outlines the lesion to be treated in the CT slice. This physician created outline of the CT image is then mirrored onto the ultrasound image during the ExacTrac procedure so that the physician can determine how far the lesion may have moved since the time of the CT scan. Relying on the declaration of Dr. Eisenbarth, NOMOS contends that the ExacTrac system outlines the lesion in the ultrasound image. However, a careful reading of Dr. Eisenbarth's declaration does not support NOMOS' assertion. Dr. Eisenbarth states that "the ExacTrac has at least one mechanism by which outlining can be

performed," but he never identifies that mechanism. (Eisenbarth Decl., \P 23). Dr. Eisenbarth then goes on to discuss several ways in which outlining can be performed, but he never attributes those methods to the ExacTrac system. (Eisenbarth Decl., \P 24). The only method for outlining which Dr. Eisenbarth appears to attribute to the ExacTrac system is the "moving or dragging [of] a previously generated outline (for example, from an analogous CT or MRI image) to surround or 'outline' the ultrasound image of the lesion." (Eisenbarth Decl., \P 25). However, this is not the type of outlining that is contemplated by the "whereby clause" of element (b). Element (b) requires the image of the lesion in the ultrasound to be outlined. The dragging step to which Dr. Eisenbarth refers is the physician created outline of the lesion in the CT image, which is then overlaid onto the ultrasound image so that a comparison can be made. The ultrasound image is not traced or outlined in the ExacTrac system and the outlines of the lesions in the CT slice are physician generated and are independent of the information received from the ultrasound probe during the ExacTrac procedure. Thus, the Court concludes as a matter of law that the ExacTrac system does not outline the image of the lesion in the ultrasound image as required by element (b) of Claim 1 of the '026 Patent. Because this element is missing from the accused device, the Court concludes that NOMOS cannot establish its claim for literal infringement of Claim 1 of the

'026 Patent.

In addition, the Court concludes that NOMOS cannot establish infringement of Claim 1 under the doctrine of equivalents. The doctrine of equivalents must be applied to each element of the claim and not to the invention as a whole. As such, each element contained in a patent claim is deemed material, and the doctrine of equivalents cannot be used to eliminate an element from a claim. Warner-Jenkinson Co., 520 U.S. at 30 ("It is important to ensure that the application of the doctrine, even as to an individual element, is not allowed such broad play as to effectively eliminate that element in its entirety). As the Court has explained, the lesion in the ultrasound image is not outlined by the ExacTrac system, and therefore the ExacTrac system is missing this element entirely such that NOMOS cannot establish its infringement claim.

4. Summary

In sum, the Court has concluded that three independent reasons exist for concluding that NOMOS cannot establish that the ExacTrac system infringes Claim 1 of the '026 Patent literally or under the doctrine of equivalents. Claims 2, 4 and 5 are dependent on Claim 1, and therefore, NOMOS cannot establish infringement of these claims, as well. Accordingly, the Court concludes that BrainLAB is entitled to summary judgment of noninfringement with respect to Claims 1, 2, 4 and 5 of the '026

Patent.

III. Whether BrainLAB Is Entitled To Summary Judgment That Its ExacTrac Device Does Not Infringe Claim 6 Of The NOMOS '026 Patent

By its Motion, BrainLAB contends that the ExacTrac system does not infringe Claim 6 of the '026 Patent, because the ExacTrac system does not include four of the limitations contained in Claim 6. Specifically, BrainLAB contends that the ExacTrac system does not include the following limitations: (1) means for generating at least one ultrasound image; (2) disposing on the treatment table a means for generating an ultrasound image; (3) outlining the outer surface of the lesion in at least one of said ultrasound images; and (4) comparing the outlines of the outer surface of the lesion of the said at least one ultrasound image with the outline of the outer surface of the lesion of at least one of the diagnostic images.

In response, NOMOS reiterates its argument that the Court's claim construction is erroneous. In addition, NOMOS contends that genuine issues of material fact preclude summary judgment.

For the reasons discussed in the context of Claim 1 of the '026 Patent, the Court declines to alter its claim construction. Further, with respect to the "means for generating at least one ultrasound image" and the two claim limitations pertaining to "outlining," the Court concludes that these limitations are not contained in the ExacTrac system for the reasons discussed in the context of Claim 1 of the '026 Patent. Although the absence of any one of these elements alone is sufficient to warrant judgment in favor of BrainLAB, the Court will consider the remaining element raised by the parties for completeness.

The remaining element pertaining to Claim 6 of the '026 Patent is the step of "disposing on the treatment table a means for generating an ultrasound image." The Court construed this step to mean "arranging the means for generating an ultrasound image in physical contact with and supported by the treatment table." (D.I. 90, \P 2).

NOMOS contends that this element is met in the ExacTrac system, because the handheld ultrasound probe is in contact with the body of the patient which in turn is in contact with and supported by the treatment table. In response, BrainLAB contends that NOMOS' argument overlooks that the "means for generating an ultrasound image" is not limited to the ultrasound probe, but includes a "bracket or fixation device" mounting the probe to the table.

After reviewing the accused ExacTrac system in light of this claim element as construed by the Court, the Court agrees with BrainLAB that the ExacTrac system does not perform the step of disposing on the treatment table a means for generating an ultrasound image. BrainLAB correctly points out that the "means for generating an ultrasound image" as construed by the Court

includes a bracket or fixation device mounted to the table. Thus, these structures are necessarily included in the Court's claim construction of the phrase "disposing on the treatment table <u>a means for generating an ultrasound image</u>." The ExacTrac system, however, does not include a bracket and fixation device connected to the treatment table, but rather, utilizes a handheld ultrasound probe which is not directly connected to the treatment table. Thus, the Court concludes that the ExacTrac system is not in physical contact with the treatment table or supported by the treatment table, and thus, it is not "disposed on" the treatment table as required by this element of Claim 6. Because this element is absent from the ExacTrac system, the Court concludes that NOMOS cannot establish that the ExacTrac system literally infringes Claim 6.

Further, the Court concludes that NOMOS cannot establish infringement of Claim 6 under the doctrine of equivalents. This element is missing entirely from the ExacTrac system, and the doctrine of equivalents cannot be used to completely ignore a claim limitation. <u>See Warner-Jenkinson</u>, 520 U.S. at 30. Because NOMOS cannot establish infringement of Claim 6 literally or under the doctrine of equivalents, the Court concludes that NOMOS cannot establish infringement of Claims 7, 8, 14, 15 and 19, all of which depend on Claim 6. Accordingly, the Court concludes that BrainLAB is entitled to summary judgment of noninfringement

with regard to Claims 6, 7, 8, 14, 15 and 19 of the '026 Patent.

CONCLUSION

For the reasons discussed, the Court will grant BrainLAB's Motion For Summary Judgment and enter a judgment of noninfringement in favor of BrainLAB on independent Claims 1 and 6 of the '026 Patent and dependent Claims 2, 4, 5, 7, 8, 14, 15, and 19 of the '026 Patent.

An appropriate Order will be entered.

IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

NOMOS CORPORATION,	:
Plaintiff,	
ν.	: Civil Action No. 98-788-JJF
BRAINLAB, INC. and BRAINLAB USA, INC.,	
Defendants.	:

ORDER

At Wilmington, this 10th day of January 2003, for the reasons discussed in the Memorandum Opinion issued this date;

IT IS HEREBY ORDERED that:

 Defendants' Motion For Summary Judgment (D.I. 95) is GRANTED.

 Judgment of noninfringement is entered in favor of Defendants and against Plaintiff on Plaintiff's claims of infringement of independent Claims 1 and 6 and dependent Claims
4, 5, 7, 8, 14, 15, and 19 of United States Patent No.
411,026.

> JOSEPH J. FARNAN, JR. UNITED STATES DISTRICT JUDGE