

United States District Court,
S.D. Texas, Houston Division.

NEUTRINO DEVELOPMENT CORPORATION,
Plaintiff.

v.

SONOSITE, INC,
Defendant.

Aug. 20, 2003.

Jeffrey Roger Parsons, William C. Norvell, Jr., Scott Dion Marrs, Beirne Maynard and Parsons, Richard Theodore Redano, Duane Morris LLP, Houston, TX, for Plaintiff.

Paul E. Krieger, Lucas Thomas Elliot, Morgan Lewis & Bockius LLP, Clay Erik Hawes, Morgan Lewis, Reagan M. Brown, Heather K. Kubiak, Fulbright & Jaworski LLP, Houston, TX, for Defendant.

ORDER

JOHN D. RAINEY, District Judge.

This is an action for patent infringement brought by Neutrino Development Corporation ("Neutrino") against SonoSite, Inc. ("SonoSite"). Neutrino is the owner of United States Patent No. 6,221,021 ("the '021 Patent"). Neutrino alleges that four devices manufactured and marketed by SonoSite, Inc. ("SonoSite"), the SonoSite 180, SonoHeart, SonoSite 180 PLUS, and SonoHeart PLUS, infringe on the '021 Patent. On February 20, 2002 the Court held a *Markman* hearing to construe the claims of the '021 Patent.

THE PATENTED DEVICE

The '021 Patent is titled "Method and Apparatus for Penile Hemodynamic Stimulation, Monitoring, and Drug Delivery Acceleration" and describes a device for "stimulating and/or monitoring hemodynamic activity, such as blood flow, in a penis." U.S. Patent No. 6,221,021 at col. 1, ll. 15-16. This device operates by "coupling ... an ultrasound source to the outer surface of the penis and transmitting ultrasound energy into the penis at a sufficient frequency and intensity to increase hemodynamic activity." *Id.* at col. 1, ll. 18-21. The device fits around the penis when in use and is operated using a pistol-type grip.

DISPUTED CLAIMS

There are 27 claims in the '021 Patent. Of these claims, three, 8, 20, and 25, are independent. It is these three independent claims that form the primary nexus of dispute in this case. Each of the three independent claims contain very similar language. Claim 20 is representative:

A hand held apparatus capable of displaying measured hemodynamic parameters, comprising:

- a. a portable body sized to be hand held;
- b. an ultrasonography generator mounted in said body and capable of measuring one or more hemodynamic parameters, said generator comprising a display capable of displaying at least one measured hemodynamic parameter;
- c. a transducer mounting assembly moveably connected to said body such that the distance between said assembly and said body can be adjusted by a user using only one hand;
- d. at least one ultrasound emitter mounted in said assembly; and
- e. a triggering mechanism connected to said generator and capable of actuating said generator

Id. at col. 9, 1. 29 to col. 10, 1. 4. The following claim terms are in dispute: 1) "a transducer mounting assembly moveably connected to said body such that the distance between said assembly and said body can be adjusted by a user using only one hand;" 2) "a portable body sized to be hand held;" and 3) "ultrasound emitters." FN1

CLAIM CONSTRUCTION STANDARD

In construing the claims of a patent the court must consider all of the intrinsic evidence, that is, the claims, the specification, and the prosecution history. *Vitronics Corp. v. Conceptiontronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996). Patents are technical documents which are meant to instruct and inform those skilled in the art and "the court must determine how a person of experience in the field of [the] invention would, upon reading the patent documents, understand the words used to define the invention." *Toro Co. v. White Consol. Indus., Inc.*, 199 F.3d 1295, 1299 (Fed.Cir.1999). Thus, claim terms are not construed in a "lexicographic vacuum, but in the context of the specifications and drawings," *id.* at 1301, and "dictionary definitions of common words are often less useful than the patent documents themselves in establishing the usage of ordinary words in connection with the claimed subject matter." *Id.* at 1299; *see also Multiform Desiccants, Inc. v. Medzam, Ltd.*, 133 F.2d 1473, 1478 (Fed.Cir.1998) ("Courts must exercise caution lest dictionary definitions, usually the least controversial source of extrinsic evidence, be converted into technical terms of art having legal, not linguistic, significance."). In addition, a claim construction that does not cover a preferred embodiment disclosed in the specification is "rarely, if ever, correct." *Vitronics*, 90 F.3d at 1583.

There is a certain tension, however, between the rule requiring courts to interpret claim terms in light of the patent specification and another basic axiom of patent law, that is, that claim terms should not be limited to the preferred embodiment. *N. Telecom Ltd. v. Samsung Elecs. Co.*, 215 F.3d 1281, 1293 (Fed.Cir.2000). The Federal Circuit has offered the following clarification:

Although it is entirely proper to use the specification to interpret what the patentee meant by a word or phrase in the claim, ... this is not to be confused with adding an extraneous limitation appearing in the specification, which is improper. By "extraneous," we mean a limitation read into a claim from the specification wholly apart from any need to interpret ... particular words or phrases in the claim.FN2

In re Paulson, 30 F.3d 1475, 1480 (Fed.Cir.1994) (quoting *E.I. Du Pont de Nemours & Co. v. Phillips*

ANALYSIS

I. The Moveably Connected Transducer Mounting Assembly

Neutrino has advanced the following proposed construction of the "moveably connected transducer mounting assembly" limitation:

An assembly sized to contain at least one ultrasound emitter or transducer, which is connected to the portable body such that a user of the apparatus can cause a change in the distance between the transducer mounting assembly and the portable body, using only one hand.

SonoSite has offered the following construction:

A structure that maintains the transducer mounting assembly a distance from the portable body to envelope an organ,FN3 having a mechanism that permits the user to adjust the distance using only one hand.

The Court believes that Neutrino's proposed claim construction is a more accurate interpretation of the '021 Patent.

The preferred embodiment of the '021 Patent device is depicted in Figure 2 of the patent which is reproduced below.

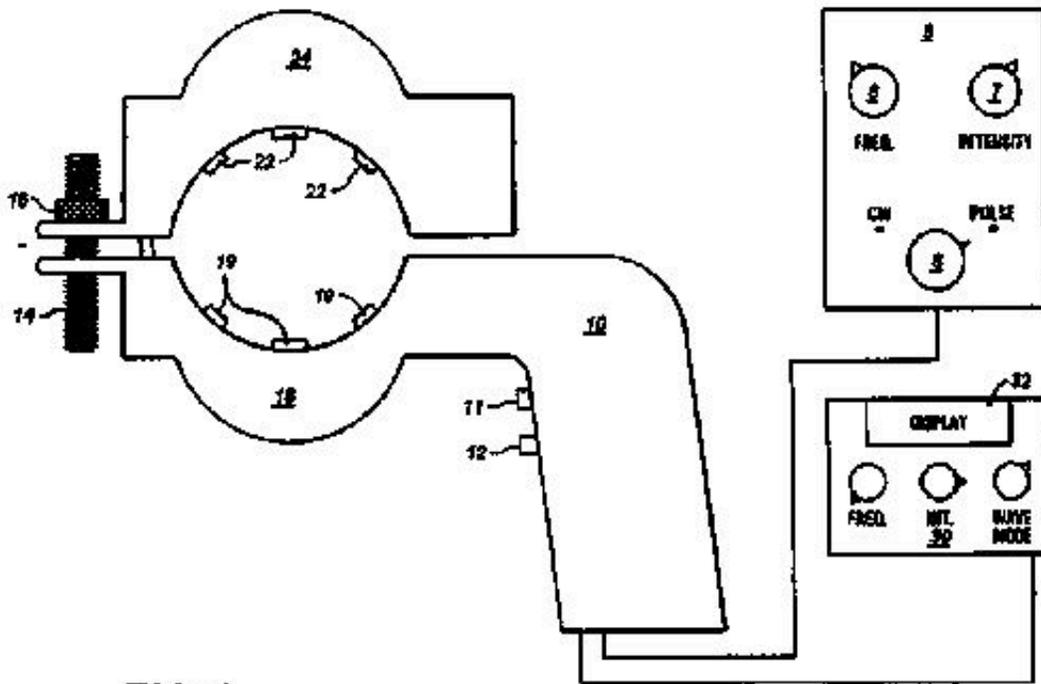


FIG. 2

In this diagram the component labeled "9" is "an ultrasound generator ... sized to be grasped or held in a user's hand." U.S. Patent No. 6, 221, 021 at col. 4, ll. 33-39. Component 30 is "the ultrasonography generator" which is also "sized to be grasped or held in a user's hand." Id. at col. 6, ll. 18-20. Component 10 is a "portable housing coupled to the ultrasound generator." Id. at col. 4, ll. 33-34. Components 18 and 24 are, respectively, the upper and lower transducer mounting assemblies. Id. at col. 4, ll. 42-44; col. 5, ll. 26-28. Components 14 and 16 are a threaded rod and adjusting wheel which make up the axial position adjuster. The '021 Patent's specification describes a device containing two transducer mounting assemblies, an upper mounting assembly and a lower mounting assembly:

... The housing comprises at least one ultrasound trigger and a first transducer mounting assembly. The invention further comprises a position adjuster coupled to the first transducer mounting assembly and a second transducer mounting assembly mounted across from the first transducer mounting assembly. The second transducer mounting assembly is coupled to the position adjuster.

A first ultrasound emitter is mounted in the curved lower transducer mounting assembly. The first ultrasound emitter is connected to the ultrasound trigger and to the ultrasound generator. A second ultrasound emitter is mounted in the curved second transducer mounting assembly. The second ultrasound emitter is connected to the ultrasound trigger and to the ultrasound generator....

Id. at col. 3, l. 67 to col. 4, l. 13. The description of the preferred embodiment is similar:

The invention further comprises a second transducer mounting assembly 24 mounted across from the first

transducer mounting assembly. As shown in FIG. 2, the position adjuster permits the distance between the housing 10 and mounting assembly 24 to be adjusted by the user using one hand. In the preferred embodiment shown in FIG. 2, the mounting assembly 24 is moveably connected to the housing 10. In a preferred embodiment, the second transducer mounting assembly is mounted in alignment with the first transducer mounting assembly. In another preferred embodiment, the second transducer mounting assembly is curved. The second transducer mounting assembly is coupled to the position adjuster. The radii of curvature of the first and second transducer mounting assemblies are sized such that the first and second transducers can be coupled to the outer surface of a penis.

Id. at col. 5, ll. 26-41.

It appears that the device described in the '021 Patent contains two transducer mounting assemblies that together perform the penis enveloping function described in the specification. The axial position adjuster holds the upper and lower transducer mounting assemblies in a fixed position relative to each other so that the device can perform this penis enveloping function. However, the axial position adjuster does not connect either the ultrasound or the ultrasonography generator to either transducer mounting assembly. In addition, while the housing (number 10 in Figure 2) is described as being portable and, because it has a pistol-type grip, Id. at col. 5, l. 16, it is presumably intended to be hand held, it is not reasonable to read the specification as placing either the ultrasound or the ultrasonography generator within this housing as SonoSite suggests doing. There is no indication of such a configuration in either the specification or the drawings. In addition, the ultrasound generator has control knobs mounted on it and the ultrasonography generator has both control knobs and a display. Thus, it is very counterintuitive to place these components inside the housing or to somehow merge them with the portable housing. The specification and the claims both indicate that although the housing, the ultrasound generator, and the ultrasonography generator are all designed to be portable and hand held, each is a separate and distinct component of the patented device. Thus, the specification does not support SonoSite's contention that the transducer mounting assemblies must be maintained at a fixed distance from either the ultrasound or the ultrasonography generator.

In support of its proposed claim construction SonoSite also relies on the patent examiner's initial rejection of claim 20 for obviousness-type double patenting. The preexisting patent with which claim 20 of the '021 Patent came into conflict was United States Patent No. 5,931,783 ("the '783 Patent"), which is also owned by Neutrino. The '783 Patent describes a portable ultrasound device very similar to the '021 Patent but which includes a limitation requiring the connection between the ultrasound generator and the transducer mounting assemblies to consist of a screw-like apparatus identical to the axial position adjuster described in the '021 Patent specification. In fact, the diagram identified as "Figure 2" in the '021 Patent is also included in the '783 Patent. The patent examiner stated that,

[a]lthough the conflicting claims are not identical, they are not patentably distinct from each other because the axial positioning adjuster as claimed in the portable ultrasound generating apparatus therein described is effectively a narrower recitation of a one-handedly adjustable moveable transducer mounting assembly as called for in the current base claims.

Communication from U.S. Patent Office to Richard T. Redano dated October 25, 2000 at para. 2. This implies that the patent examiner understood the moveable connection in the '021 Patent to be the axial position adjuster and not the connection between the ultrasound and the ultrasonography generator and the housing on which the transducer mounting assemblies are located, as urged by Neutrino.

SonoSite argues that the double patenting rejection "suggests that the Examiner was viewing the amended claims from the perspective of obvious variations of the original penis-enveloping structure ... and not as a fundamentally different and non-obvious structure." *Def.'s Mot. for Summ. J.* at 20. While this may be true, it does not mean that the patent examiner believed that the moveable connection described in the '021 Patent would be the threaded rod connector described in the '783 Patent. The '783 Patent is merely a species of the genus '021 Patent. *See In re Goodman*, 11 F.3d 1046, 1052-53 (Fed.Cir.1993). Because "the generic invention is 'anticipated' by the species of the patented invention ... without a terminal disclaimer, the species claims preclude issuance of the generic application." *Id.* at 1053. But, it would be a mistake to assume that the specific claims in the species patent are necessarily limitations on the generic claims in the genus patent. It appears that the patent examiner simply viewed the threaded rod connector as a type of moveable connector and not an identical structure. This conclusion is supported by *In re Goodman* and similar cases which have consistently viewed the double patenting inquiry as consisting of two parts: 1) a determination of whether or not the competing patents are identical in scope, resulting in a rejection of the subsequent patent under 35 U.S.C. s. 101, and 2) a determination of whether the subsequent patent is merely an obvious variation of the first, resulting in rejection under the judicially created doctrine of obviousness-type double patenting. *Id.* at 1052; *see also Gerber Garment Tech., Inc. v. Lectra Sys., Inc.*, 916 F.2d 683, 686 (Fed.Cir.1990); *In re Longi*, 759 F.2d 887, 892 (Fed.Cir.1985). Because the patent examiner's initial rejection of the '021 Patent was based on the judicial doctrine and not s. 101, this implies that the patent examiner viewed the '783 Patent as nothing more than a more narrow version of the '021 Patent and not as an identical apparatus.

The Court adopts Neutrino's construction of the "moveably connected transducer mounting assembly" limitation.

II. A Portable Body Sized to be Hand Held

Neutrino has advanced the following proposed construction for the "portable body sized to be hand held" limitation:

A body that is small and light enough to be held in one hand for the duration of an ultrasound examination to measure a hemodynamic parameter in a patient.

SonoSite has offered the following construction:

A body that is sized such that it can be held by hand and, so held, moved from one location to another.

Although Neutrino's proposed construction is more consistent with the common understanding of the term "hand held" as that term is used to describe electronic devices such as computers, Neutrino's proposed interpretation is foreclosed by the patent specification.

Properly adjusting the distance between the two transducer mounting assemblies described in the preferred embodiment is very important:

It is known in the ultrasound arts that a satisfactory ultrasound coupling is necessary for effective delivery of ultrasound energy to a patient for therapeutic or diagnostic purposes. The position adjuster provides a mechanism for maintaining a satisfactory ultrasound coupling as the penis expands circumferentially as a result of increased hemodynamic activity.

U.S. Patent No. 6,221,021 at col. 5, ll. 1-5. The specification also states that, "[t]he placement of the triggers and axial position adjuster on opposite sides of the housing facilitates the user's ability to easily use both hands to simultaneously manipulate the trigger and the position adjuster." *Id.* at col. 5, ll. 22-25. Thus, if the Court adopted Neutrino's proposed claim construction, in order to operate the device described in the preferred embodiment, the user would need one hand to hold the ultrasound generator, one hand to hold the pistol grip (where the buttons that turn the device on are located), and one hand to adjust the axial position adjuster. Obviously this is an impossible arrangement for one person. However, the specification also states that, "[t]he apparatus and method of the present invention may be practiced by the patient, after proper training, without assistance from another person." *Id.* at col. 5, ll. 13-15. Thus, a third-party cannot relieve Neutrino of this difficulty. Because Neutrino's proposed construction would exclude the preferred embodiment from the patented claims, it must be rejected.

The Court adopts SonoSite's construction of the "portable body sized to be hand held" limitation.

III. Ultrasound Emitters

Neutrino has advanced the following proposed construction of the "ultrasound emitter" limitation:

At least one component, also known as a "transducer" or "emitter," and capable of emitting ultrasound energy.

SonoSite has offered the following construction:

Mechanisms that are solely capable of emitting ultrasound waves, a one-way function, rather than emitting and receiving ultrasound waves, a two way function.

Although SonoSite's proposed construction is more consistent with the normal understanding of the term "emitter" as that term is used in the ultrasound arts, it is inconsistent with the manner in which the word "emitter" is used in the '021 Patent and therefore, must be rejected.

As even SonoSite acknowledges, *Def's Markman Br. Regarding Construction of the Claims of [the '021 Patent]* at 56, the '021 Patent's specification uses the terms "emitters" and "transducers" interchangeably:

A first ultrasound *emitter* 19 is mounted in the first *transducer* mounting assembly. The first transducer is connected to the ultrasound trigger and to the ultrasound generator....

A second ultrasound *transducer* 22 is mounted in the second transducer mounting assembly, as shown in FIG. 2. The second ultrasound *emitter* is connected to the ultrasound trigger and to the ultrasound generator....

U.S. Patent No. 6,221,021 at col. 5, ll. 42-54 (emphasis added). While it is presumed that claims have the meaning which would normally be attributed to them by someone skilled in the relevant art, this presumption can be overcome when the patentee has chosen to be his own lexicographer. *Tate Access Floors, Inc. v. Interface Architectural Res., Inc.*, 279 F.3d 1357, 1370 (Fed.Cir.2002). If a patentee wishes to use a term in a manner inconsistent with its commonly understood meaning in the art, he must do so clearly. *Id.* However, a claim term may be given a novel meaning by implication and the primary inquiry is

always whether the intrinsic evidence would put someone skilled in the art on notice that the patentee was redefining an otherwise clear term. *Bell Atl. Network Servs., Inc. v. Covad Communications Group, Inc.*, 262 F.3d 1258, 1268 (Fed.Cir.2001). The '021 Patent's specification clearly uses the terms "emitter" and "transducer" interchangeably and thus the claim construction advanced by SonoSite is contrary to the intrinsic evidence. FN4

The Court adopts Neutrino's construction of the "ultrasound emitter" limitation.

CONCLUSION

The Court construes the following claim terms from the '021 Patent as follows:

(a) "A transducer mounting assembly moveably connected to said body such that the distance between said assembly and said body can be adjusted by a user using only one hand"-An assembly sized to contain at least one ultrasound emitter or transducer, which is connected to the portable body such that a user of the apparatus can cause a change in the distance between the transducer mounting assembly and the portable body, using only one hand.

(b) "A portable body sized to be hand held"-A body that is sized such that it can be held by hand and, so held, moved from one location to another.

(c) "Ultrasound emitter"-At least one component, also known as a "transducer" or "emitter," and capable of emitting ultrasound energy.

It is so ORDERED.

FN1. The parties have also engaged in some debate as to the meaning of the following terms: 1) "mounted in," "mounted on," "housed within," and "top surface;" 2) "portable body comprising a top surface;" 3) "connected to" and "coupled to;" 4) "generating an instruction;" and 5) "display." These terms are unambiguous and do not need to be interpreted by the Court.

FN2. The difficulty with this explanation is that the process of interpretation is, by its nature, also a process of limitation. Claim construction is the mechanism by which the precise meaning of a patent's claims becomes legally fixed. Adopting any particular claim construction necessarily entails rejecting other possible claim constructions, thereby reducing the universe of possible meanings attributable to a given claim. Therefore, because the specification must be used to construe claims, the specification will always play a role in limiting the patent's claims. Thus, courts must attempt to determine whether a particular claim construction would improperly impose an "extraneous" limitation from the specification on the claims or simply explicate and clarify the claim terms in light of the description of the invention contained in the specification. In regards to this process the Federal Circuit has noted that: "Although precedent offers assorted quotations in support of differing conclusions concerning the scope of the specification, these cases must be viewed in the factual context in which they arose." *Wang Labs., Inc. v. Am. Online, Inc.*, 197 F.3d 1377, 1383 (Fed.Cir.1999). Thus, it is "as clear as is the summer's sun." WILLIAM SHAKESPEARE, *THE LIFE OF KING HENRY THE FIFTH* act. 1, sc. 2.

FN3. Initially SonoSite argued that the transducer mounting assembly was limited to a structure designed to envelope a penis. At the *Markman* hearing, SonoSite acknowledged that the '021 Patent is not so limited and that a structure specifically designed to envelope a penis is not required by the claims.

FN4. Of course, using terms with distinct meanings in the art interchangeably may result in serious invalidity problems. Such muddled nomenclature may deprive the patent of the clarity required by 35 U.S.C. s. 112 or draw prior art within the scope of the patent.

S.D.Tex.,2003.

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