

United States District Court,
E.D. Texas, Marshall Division.

BROOKTROUT, INC,
v.
EICON NETWORKS CORPORATION.

Civil Action No. 2:03-CV-59

July 28, 2004.

Samuel Franklin Baxter, Emily A. Berger, McKool, Smith, Marshall, TX, Robert E. Hillman, Steven R. Katz, Fish & Richardson, PC, Boston, MA, for Brooktrout, Inc.

Barbara L. Moore, Adam Phillip Samansky, Kathleen B. Carr, Richard Roos, Edwards, Angell, Palmer & Dodge, LLP, Boston, MA, Mark Keith Sales, Christopher David Kratovil, Hughes & Luce, Dallas, TX, for Eicon Networks Corporation, Et Al.

MEMORANDUM OPINION AND ORDER

T. JOHN WARD, District Judge.

The court issues this order to resolve the areas of disagreement between the parties relating to claim construction.

1. Introduction.

The plaintiff in this case, Brooktrout, Inc. ("Brooktrout"), filed this case against the defendants, Eicon Networks Corporation and Eicon Networks Inc., (collectively "Eicon") contending that the defendants infringed certain claims of two United States Patents, 5,291,546 (the "% '546 patent") and 5,488,651 (the "'651 patent"). These patents are directed generally toward fax messaging systems. Eicon counterclaimed against Brooktrout, claiming that Brooktrout infringed certain claims of United States Patent No. 4,969,184 (the "'184 patent"). The '184 patent is related generally to a system that utilizes a process intermediary unit and a non-telephone actuation signal to facilitate data transmission. The parties have filed briefs regarding their respective claim construction positions. The court held a claim construction hearing on April 30, 2004, and now issues this opinion to resolve the disputed terms.

2. Legal Principles Relevant to Claim Construction.

"A claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention." *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed.Cir.1999). Claim construction is an issue of law for the court to decide. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71 (Fed.Cir.1995) (en banc), *aff'd*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996).

To ascertain the meaning of claims, the court looks to three primary sources: the claims, the specification, and the prosecution history. *Markman*, 52 F.3d at 979. Under the patent law, the specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the

invention. A patent's claims must be read in view of the specification, of which they are a part. *Markman*, 52 F.3d at 979. For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims. *Id.* "One purpose for examining the specification is to determine if the patentee has limited the scope of the claims." *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed.Cir.2000).

Nonetheless, it is the function of the claims, not the specifications, to set forth the limits of the patentee's claims. Otherwise, there would be no need for claims. *SRI Int'l, v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed.Cir.1985) (en banc). The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics*, 952 F.2d 1384, 1388 (Fed.Cir.1992). And, although the specifications may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 1054 (Fed.Cir.1994).

To assess the ordinary meaning of terms used in a patent claim, a court may properly rely on dictionary definitions. The Federal Circuit has noted that "[i]t has long been recognized in the precedent of our predecessor court, the Court of Customs and Patent Appeals, that dictionaries, encyclopedias and treatises are particularly useful resources to assist the court in determining the ordinary and customary meaning of claim terms." *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1202 (Fed.Cir.2002). The court reasoned that such sources are objective resources that serve as reliable sources of information on the established meanings that would have been attributed to the terms of the claims by those of skill in the art. *Id.* at 1202-03. According to the court, dictionaries, encyclopedias and treatises "constitute unbiased reflections of common understanding not influenced by expert testimony or events subsequent to the fixing of the intrinsic record by the grant of the patent, not colored by the motives of the parties, and not inspired by litigation." *Id.* at 1203.

Several of the claim terms at issue in this case are conceded by all parties to be drafted in means-plus-function format; therefore, a discussion of the rules pertaining to such terms is appropriate. Title 35, section 112, paragraph 6 of the United States Code provides:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. s. 112 para. 6.

Claim elements drafted under this statutory section are commonly referred to as means-plus-function or step-plus-function limitations. Through use of means-plus-function limitations, patent applicants are allowed to claim an element of a combination functionally, without reciting structures for performing those functions. *Enviro Corp. v. Clestra Cleanroom, Inc.*, 209 F.3d 1360, 1364 (Fed.Cir.2000). The trade-off, however, for the use of this technique, is that the applicant is limited to the structure disclosed in the specification and equivalents. The statute specifically provides its own rule of claim construction when it states that "such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof." 35 U.S.C. s. 112 para. 6.

Once it is determined that a particular limitation is drafted in means-plus-function form, claim construction of the element is a two-step process. First, the court must identify the claimed function. *Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d 1314, 1324 (Fed.Cir.2001). The court must construe the function to include only the limitations contained in the claim language. *Lockheed Martin Corp. v. Space Sys/Loral, Inc.*, 249 F.3d 1314, 1324 (Fed.Cir.2001). General principles of claim construction govern the interpretation

of claim language used to describe the function.

After the court identifies the claimed function, the court must then determine what structure, if any, disclosed in the specification corresponds to the claimed function. *Id.* To qualify as corresponding structure, the structure must not only perform the claimed function, but the specification must clearly associate or "link" the structure with the performance of the function. *Medtronic, Inc. v. Advanced Cardiovascular Systems, Inc.*, 248 F.3d 1303, 1311 (Fed.Cir.2001). The court undertakes this task from the perspective of a person of ordinary skill in the art. *Amtel Corp. v. Info. Storage Devices, Inc.*, 198 F.3d 1374, 1378-79 (Fed.Cir.1999). The determination of what constitutes corresponding structure can be difficult.

Corresponding structure, it must be remembered, need not include all things necessary to enable the claimed invention to work. But corresponding structure must, however, include all structure that actually performs the recited function. *Asyst Techs., Inc. v. Empak, Inc.*, 268 F.3d 1364, 1371 (Fed.Cir.2001). Bearing these standards in mind, the court will construe the disputed terms in the three patents in suit.

A. '546 and '651 Patents

The '546 and the '651 patents describe fax messaging inventions. The specifications of the two patents are very similar. And, although the parties have agreed on the construction of several claim terms, there are a few that require construction by the court. As to these patents, the parties have disputes concerning the terms "receiving station" and "computer network." In addition, the parties dispute whether certain claim terms are drafted pursuant to 35 U.S.C. s. 112 para. 6 in means-plus-function format. The court now addresses those disputes.

1. "Receiving Station"

First, the parties dispute the meaning of the term "receiving station." The parties agree that the term "receiving station" as used in these claims did not have an understood meaning in the art in 1989, the date of the applications. Generally speaking, however, the language of the term suggests simply a "station" that "receives" something.

Both sides offer suggested definitions in an attempt to describe this term, given the context in which it appears. The plaintiff urges that the court should define "receiving station" as "an apparatus that answers a telephone call." The defendants argue that the court should define the term to mean "one or more devices which accepts a signal from a network."

Each side notes problems with the other's suggested definition. The defendants argue that the plaintiff is attempting to define the term too narrowly. They point out that the plaintiff's proposed definition—a device which simply answers a telephone call—fails to account for the primary "receiving" function of the receiving station. The defendants argue that the plaintiff, by describing the claim term by reference to one of the several non-receiving functions performed at the station, is suggesting a definition at odds with the plain language of the claim. For its part, the plaintiff argues that the defendants' proposal is too vague. The plaintiff points to the written description and notes that many devices in the system "accept signals" from the network, but not all of these devices are appropriately classified as receiving stations. For instance, a Central Office would accept a signal from the network, but, according to the description of the invention, a Central Office is something distinct from a receiving station.

To define the terms in the context of this invention, the court has reviewed the claims in light of the specification and the prosecution history to determine what meaning the patentee gave to the terms. As Claim 1 of the '546 patent illustrates, the claim language itself sets forth various functions performed at the receiving station. *See* claim elements 1(d) and (g) (imposing limitations of answering telephone call, receiving part of the telephone address signal and receiving the sent message at the receiving station). The written description is no different. In the '546 patent specification, the patentee states in the Summary of

Invention that:

In general, in one aspect, the invention features a method for causing information including at least a FAX message sent via a telephone system to be subjected to prespecified actions at a receiving station. In this feature, a telephone call is initiated via the telephone system to the receiving station by dialing a telephone number enabling the telephone call to be routed to the receiving station, the telephone number also indicating the prespecified action to which a message is to be subjected at the receiving end. The telephone number is passed through the telephone system in the form of a telephone address signal as part of the call initiation process. At the FAX receiving station, the telephone call is answered and the telephone address signal is received. When the call has been established, the FAX message is sent via the telephone system to and received at the FAX receiving station. Stored action information associates each possible telephone address signal with a prespecified action to be taken with respect to each received FAX message corresponding to the telephone address signal.

'546 Patent, Col. 1, ll. 49-68, Col. 2, ll.1-4.

The Summary of Invention also states:

In general, in another aspect, the invention features a FAX receiving station which includes (i) a FAX message receiver which answers the telephone call, receives the telephone address signal, and, when the call has been established, receives the FAX message via the telephone system, and (ii) storage for storing the action information. The FAX receiving station is arranged to handle the received FAX message in accordance with the prespecified action based on the telephone address signal.

'546 Patent, Col. 2, ll. 16-25.

In the course of the prosecution of the '546 patent, the applicant stated the following in connection with a July 12, 1993 amendment:

In the system of the present invention, a receiving station comprises a message receiver which receives telephone address signals such as DID address signals and handles the received telephone message in accordance with a prespecified action stored in memory for that address.

See Remarks, attached as Exhibit G to Defendants' Claim Construction Brief, BKT 000166.

After considering the claims and the intrinsic record, the court is persuaded that both parties are correct to criticize the other's proposed definition. In the context of this patent, the receiving station performs a variety of functions, but many of these functions are set forth as additional limitations in the language of the claims. At a minimum, however, a receiving station must have the capability to answer a telephone call and accept a telephone address signal. Accordingly, the court defines a receiving station as "a device which answers a telephone call and accepts a telephone address signal."

2. Computer Network

The parties also dispute the terms "computer," "computer network," and "multinode computer network," although the parties agree that the latter two terms should be construed consistently. The plaintiff argues that the terms need no construction and, alternatively, that if the court elects to construe the term "computer," then the court should actually focus on the term "network" rather than computer. In its brief, the plaintiff urged the court to adopt a definition of computer network to mean "at least two interconnected computers." At the claim construction hearing, the plaintiff argued that based on certain invalidity positions taken by the defendants, the court should construe computer network to mean either "two computers interconnected by something other than a telephone network" or "two computers interconnected that send packets that contain

computer network addressing." (Transcript of Claims Construction Hearing, at 16).

The defendant urges the court to adopt a definition of computer in connection with the definition of computer network and, in doing so, to define computer to include all devices that include a central processing unit ("CPU"). The defendant argues that the plaintiff could have chosen a narrower term when it prosecuted the patent had it desired a more focused definition.

The terms used in the claims bear a "heavy presumption" that they mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art. *Texas Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1202 (Fed.Cir.2002) (*citing* *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed.Cir.2002); *K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1362-63 (Fed.Cir.1999); *Johnson Worldwide Assocs., Inc. v. Zebco Corp.*, 175 F.3d 985, 989 (Fed.Cir.1999); *Specialty Composites v. Cabot Corp.*, 845 F.2d 981, 986 (Fed.Cir.1988)). At the approximate time of the patent application, a "computer network" was generally understood to be "a complex consisting of two or more interconnected computer systems, terminals, or communications facilities." *Webster's New World Dictionary of Computer Terms* 74 (4th ed.1992). That same source defines "network" to mean (1) the result of two or more computers being connected together to allow them to share the same software and information or (2) a system of interconnected computer systems and terminals. *Id.* at 278. Those of skill in the art referred to computer networks as "an interconnected collection of autonomous computers." Andrew S. Tanenbaum, *Computer Networks* 2 (Prentice Hall, 2d ed.1989). Tanenbaum explains that the computers were "interconnected" if they were able to exchange information. *Id.* Finally, in this context, a "node" meant "an individual computer (or occasionally another type of machine) in a network." Michael Covington & Douglas Downing, *Dictionary of Computer Terms* 212 (Barron's 2d ed.1989). Thus, the ordinary meaning of "computer network" or "multinode computer network," at the time of the patents in suit, would be "a system of two or more interconnected computers;" the computers were "interconnected" if they were able to exchange information.

Determining the ordinary meaning of a claim term is just the first step. The court must also review the specification to determine whether the patentee intended to define, expressly or by implication, the claim term in a manner other than according to its ordinary meaning. In this case, the court has examined the specification and discerns no such intent. A review of the specification confirms that the patentee used the terms according to their ordinary meaning. The description explicitly refers to two types of geographically-defined computer networks. In the context of Figure 5, the description states that personal computer 18 is "connected to a local area or wide area network 60 having other PCs, file servers, printers, and any other desired combination of computers and peripheral devices." '546 patent, Col., 4, ll. 55-59. These are specific types of computer networks subsumed by the ordinary meaning of the term. Accordingly, the court defines computer network and multinode computer network to mean "a system of two or more interconnected computers;" the computers are "interconnected" if the computers are able to exchange information.

The defendants urge the court also to define "computer." According to the defendants, the court should define "computer" to include any device having a CPU. In the court's view, such a construction is unnecessary. In the context of these patents, the reference to computer cannot be divorced from the reference to network, and the court is persuaded that it is more appropriate, given the intrinsic record and, specifically, the reference to local and wide area networks, to adopt instead a definition of "computer network" as set forth above.

3. Message Receiver

Next, the court considers the term "message receiver." Brooktrout argues that the term needs no construction. The defendants, however, urge the court to construe the term according to 35 U.S.C. s. 112 para. 6. The court has considered the pertinent portions of the briefs and arguments and is not persuaded that the term is drafted in means-plus-function format. The claim term does not invoke the word "means;"

therefore, a presumption applies that the term is not drafted according to 35 U.S.C. s. 112 para. 6. *Apex v. Raritas Computer Inc.*, 325 F.3d 1364 (Fed.Cir.2003); *Mas-Hamilton Group v. LaGard, Inc.*, 156 F.3d 1206, 1213 (Fed.Cir.1998). Contrary to the defendants' arguments, the court holds that one of skill in the art would have understood receiver to connote specific structure such that the term is not drafted according to 35 U.S.C. s. 112 para. 6.

4. "Storage"

The court next turns to the term "storage." Like the term "message receiver," the parties' primary dispute is whether the term "storage" is drafted in means-plus-function format. The patentee did not use the term "means" and a presumption arises that the claim term is not drafted according to s. 112 para. 6. The court concludes that the term "storage" connotes specific structure and that the term is not drafted in means-plus-function format. The also concludes that the claim term does not need any further construction.

2. '184 Patent

A. Non-telephone actuation signal

The first claim term in dispute in the '184 Patent is the term "non-telephone actuation signal." The defendants contend that the claim term should be construed to mean "a one-way activation signal sent outside standard telephone system signaling channels." The plaintiff contends that the term means "a broadcast activation signal sent via something other than a telephone system." The parties agree that an actuation signal is an "activation signal." The core disagreement is over the construction of "non-telephone."

After reviewing the intrinsic record, the court construes the term "non-telephone actuation signal" to mean an "activation signal sent over something other than a telephone system," Although Eicon suggests that the claim term could include a signal sent outside "*standard telephone system signaling channels*," this definition is, in the court's view, too vague. Eicon does not suggest what these channels include or whether, for instance, a *non-telephone* actuation signal could include a signal sent via non-standard telephone system signaling channels.

The plaintiff's definition is also not appropriate. Brooktrout contends that the court should limit the definition to a "broadcast signal," because the preferred embodiment of the invention discloses an airborne activation signal transmitted from a broadcast facility. The Federal Circuit has warned district courts not to impose limitations appearing in the preferred embodiments of inventions when the claim language supports a broader claim scope. *E.g.*, *Nystrom v. Trex Company, Inc.*, 374 F.3d 1105, 2004 WL 1432247 (Fed.Cir. June 28, 2004). The court observes that the claim language itself simply uses the term "non-telephone," implying that the patentee intended to claim all methods of actuation other than through the telephone system. Had the patentee intended to restrict the scope of the claim to broadcasted signals, the claim language would have used the phrase "broadcast actuation signal" or similar terms.

In addition, the written description states:

Preferably, an actuation signal is immediately sent out over the local broadcast facility indicated as 22 with the computer logic 30, which includes broadcast receiving capability, of the facsimile machine 18 effectively listening for an actuation signal received by the associated antenna 20 connected thereto. This arrangement is described in U.S. Pat. No. 4,713,837 incorporated herein by reference.

'184 Patent, Col. 2, ll. 58-65. The language of the specification suggests that the broadcast example described is not the only method of supplying a non-telephone actuation signal. Moreover, in the '837 patent, the patentee discloses that "[i]t can be appreciated that the antenna 6 could be replaced with a connection to a broadcast carried over a cable network as but one alternative." By this language, the patentee is attempting to illustrate additional ways of transmitting the actuation signal. Accordingly, the

court construes the term "non-telephone actuation signal" to mean "an activation signal sent via something other than the telephone system."

B. Corresponding structure issues.

The parties also dispute the structure which corresponds to the claimed function of various means-plus-function elements in the '184 patent. The court has carefully reviewed the briefs and the applicable law and adopts the corresponding structure as set forth below.

1. Means for receiving a non-telephone actuation signal (claim 1)

The claimed function is "receiving a non-telephone actuation signal." The corresponding structure is computer logic 30 which includes broadcast receiving capability and its associated antenna 20. '184 Patent, Col. 2, ll. 60-63 ("... with the computer logic 30, which includes broadcast receiving capability, of the facsimile machine 18 effectively listening for an actuation signal received by the associated antenna connected thereto").

2. Means for initiating a telephone communication with the process intermediary unit upon receipt of the actuation signal (claim 1)

The claimed function is "initiating a telephone communication with the process intermediary unit upon receipt of the actuation signal." The written description states that "[u]pon recognizing the actuation signal, the computer logic 30, which can be integral with or connected to the facsimile machine 18, completes a telephone communication with the local node 8 over the shared direct line 28 having the associated private telephone exchange 26." '184 Patent, Col. 2, ll. 66-68 to Col. 3, 111-2. The corresponding structure is the computer logic 30.

3. Non-telephone actuation means which when actuated causes said data transmitting/receiving terminal to complete a telephone connection with a process intermediary unit by means of existing telephone networks (claim 6)

As noted by the plaintiff, this means clause appears to combine the preceding two functions. The means "when actuated" causes the terminal to complete a telephone connection with the process intermediary unit. Accordingly, the corresponding structure includes the computer logic 30 which includes broadcast receiving capability and the associated antenna 20.

4. Means for receiving communications destined for one of said data transmitting/receiving devices identified by a telephone number or telephone number address (claim 1)

The recited function in this element is "receiving communications destined for one of said data transmitting/receiving devices identified by a telephone number or telephone number address ." The written description states:

Upon receiving its actuation signal, the computer logic 30, which can be integral with or connected to the facsimile machine 18, completes a telephone communication with the local node 8 over the shared direct line 28 having the associated private telephone exchange 26. *Once connected, the data which was received from the facsimile machine 16 by the local node can be transmitted to facsimile machine 18.*

'184 Patent, Col. 2, ll.66-68 to Col. 3 ll. 1-5 (emphasis added). The structure corresponding to the receiving function is local node 8.

5. Means for producing and transmitting an appropriate non-telephone actuation signal when a communication is received and the identified data transmitting/receiving device is one said data

transmitting/receiving devices capable of being actuated by said non-telephone actuation signal (claim 1)

The recited function in this claim element is "producing and transmitting an appropriate non-telephone actuation signal when a communication is received and the identified data transmitting/receiving device is one said data transmitting/receiving devices capable of being actuated by said non-telephone actuation signal." The corresponding structure is local broadcast facility 22. '184 Patent, Col. 2, ll. 55-65.

So **ORDERED** and **SIGNED** this *27th* day of July, 2004.

E.D.Tex.,2004.

Brooktrout, Inc. v. Eicon Networks Corp.

Produced by Sans Paper, LLC.