United States District Court,
D. Maryland, Southern Division.

CITEC, INC,
Plaintiff.
v.
ROMTEC, INC,
Defendant.

Dec. 8, 2003.

Mark W. Wasserman, Matthew Robertson Sheldon, Reed Smith LLP, Falls Church, VA, for Plaintiff.

Kirk Gordon Downing, Law Offices of Kirk G. Downing, Los Angeles, CA, Steven B. Lehat, Steven B. Lehat Attorney at Law, Washington, DC, Robert K. Epstein, Law Office of Robert K. Epstein, Silver Spring, MD, for Defendant.

MEMORANDUM AND ORDER RE: PATENT CLAIM CONSTRUCTION

RICHARD D. BENNETT**, District Judge.**

In this case, Plaintiff Citec, Inc. ("Citec") sues Defendant Romtec, Inc. ("Romtec") for infringement of the claims of United States Letters Patent No. 5,894,551 ("the '551 Patent"). Pursuant to the Scheduling Order, the parties have filed materials relating to what they have specified as material claim construction issues. The Court held a claim construction hearing on Thursday, November 6, 2003 for purposes of reviewing the intrinsic evidence of record.

I. *THE COURT'S REJECTION OF EXPERT TESTIMONY*

As a threshold matter at the hearing, the Court granted Citec's Motion to Strike the Declaration of Romtec's expert witness, Euclid Woo, Esquire and declined to hear testimony from Mr. Woo on the bases (1) that Mr. Woo was unqualified to testify as an expert with respect to the technology described in the '551 Patent, and (2) that Mr. Woo's proffered testimony was irrelevant to the matter of claims construction. The Court need not consider extrinsic evidence unless it deems such evidence helpful in arriving at the true meaning of the language employed in the patent. Markman v. Westview Instruments, Inc., 52 F.3d 967, 980 (Fed.Cir.1995) (en banc), *aff'd,* 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996); *see also* Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1583 (Fed.Cir.1996) (reliance on extrinsic evidence, including expert testimony, is improper where analysis of intrinsic evidence alone will resolve any ambiguity in a disputed claim term); Endress + Hauser, Inc. v. Hawk Measurement Systems Pty., Ltd., 122 F.3d 1040, 1042 (Fed.Cir.1997) (Federal Circuit has "on numerous occasions noted the impropriety of patent lawyers testifying as expert witnesses and giving their opinion regarding the proper interpretation of a claim as a matter of law, the ultimate issue for the court to decide"). The construction of patent claims is a matter for the trial judge, who has sole discretion to decide whether or not he needs, or even just desires, an expert's

assistance to understand a patent. Markman, 517 U.S. at 390, 52 F.3d at 981.

II. *GENERAL PRINCIPLES OF CLAIM CONSTRUCTION*

In the process of claims construction, "the focus is on the objective test of what one of ordinary skill in the art at the time of the invention would have understood the term to mean." Markman, 52 F.3d at 986.

The Court must first look at the basic evidence of record, namely, the language of the claim, the specification, and the prosecution history. Insituform Tech., Inc. v. Cat Contracting, Inc., 99 F.3d 1098, 1105 (Fed.Cir.1996), *cert. denied,* 520 U.S. 1198, 117 S.Ct. 1555, 137 L.Ed.2d 703 (1997). The claim language itself defines the scope of the claim. Therefore, "a construing court does not accord the specification, prosecution history, and other relevant evidence the same weight as the claims themselves, but consults these sources to give the necessary context to the claim language." Eastman Kodak Co. v. Goodyear Tire & Rubber Co., 114 F.3d 1547, 1552 (Fed.Cir.1997).

The Court of Appeals for the Federal Circuit has held that claims should be read in view of the specification. *See, e.g., id.* at 1582. However, the Federal Circuit cautions against limiting the scope of a claim to the preferred embodiment or to specific examples disclosed in the specification. *See, e.g.,* Ekchian v. Home Depot, Inc., 104 F.3d 1299, 1303 (Fed.Cir.1997); *see also* Intervet Am. ., Inc. v. Kee-Vet Lab., Inc., 887 F.2d 1050, 1053 (Fed.Cir.1989) ("[L]imitations appearing in the specification will not be read into claims, and ... interpreting what is meant by a word in a claim 'is not to be confused with adding an extraneous limitation appearing in the specification, which is improper.' ") (citation omitted).

III. *DISCUSSION*

A. *The Patent and Claims at Issue*

In broad terms, the '551 Patent describes a computer system that allows a user to switch between at least two networks having different levels of security without transferring data between the two networks. '551 Patent Summary. The parties dispute the meaning of the terms in Independent Claims 1, 8, and 13 and Dependent Claims 2, 4, 9, 10, 14, and 15 that are highlighted below. FN1 Accordingly, those claims require this Court's construction.

FN1. 'Independent Claim 1 is incorporated by reference in dependent claims 2 and 4. Independent Claim 8 is incorporated by reference in dependent claims 9 and 10. Independent Claim 13 is incorporated by reference in dependent claims 14 and 15.

Claims 1, 8, and 13:

A computer system comprising:

a computer including a ***central processing unit coupled to*** a random access memory and a power supply;

at least two ***networks*** including a first network comprising said computer coupled to a first ***network card*** and a first ***data storage means*** and a second network card comprising said computer ***coupled to*** a second network card and second data storage means, at least one of said first and second networks including ***means for locking the storage means*** of said network;

reset means for ***rebooting*** said central processing unit and for clearing said random access memory; and

user actuated switching means coupled to said first and second networks and for switching said computer system between three states:

a first state wherein said first network is activated, said second network card, said second data storage means, and said ***reset means*** are inactivated;

a second state in which said second network is activated and said first network card, said first data storage means, and said ***reset means*** are inactivated, and

a third state in which said ***reset means*** is activated and said first and second networks are inactivated;

said computer system being switched to said third state whenever said computer system is switched between said first and second states whereby data is unable to be transferred between said first and second networks.

Claims 2, 9, and 14:

The computer system according to claim 1[, 8, or 13], wherein said locking means comprises a ***password data security system.***

Claims 3, 10, and 15:

The computer system according to claim 1[, 8, or 13], wherein said locking means comprises a ***hardware key data security system .***

Claim 4:

The computer system according to claim 1, wherein said switching means is selected from the group consisting of: ***rotary switches,*** rocker switches, and push button switches.

B. ***Construction of the Claim Language***

1. ***Central Processing Unit***

The parties do not disagree as to the meaning of the term "central processing unit" in Claims 1, 8, and 13. The term "central processing unit" is construed to mean a key component of a computer, which contains circuitry to interpret and execute program instructions.

2. ***Network***

Citec defines a "network" as a "network card" connected to a "storage device." Romtec argues that Claims 1, 8, and 13 expressly define a network as "comprising said computer coupled to a ... network card and a ... data storage means." Claims 1, 8, 13. Romtec also argues that Citec's use of the term "storage device" rather than "data storage means" is an attempt to circumvent 35 U.S.C. s. 112, para. 6. The Court agrees that the term "network" must be construed by reference to its component parts, as identified in the claims, that is, a "computer," a "network card," and a "data storage means." Romtec contends that the phrase should be

construed to require that, for each network, the network card and data storage means be connected to the computer, and not directly to each other. In support of its position, Romtec refers the Court to the preferred embodiment, which depicts two network cards being installed on the motherboard of the computer and two different hard drives being connected to the motherboard via a hard drive ribbon cable. *See* Col. 2, l. 62-Col. 3, l. 1; Fig. 1.

Citec also refers the Court to the specification, which indicates that "[t]he computer is coupled to each of two different network cards, each of which is in turn connected to a separate storage device, such as a hard drive." Col. 2, ll. 5-7. "Each combination of a network card connected to a storage device constitutes a network." Col. 2, ll. 7-9.

The Federal Circuit has repeatedly cautioned against limiting the scope of a claim to the preferred embodiments described in the specification. *See, e.g., Comark Communications, Inc. v. Harris Corp.,* 156 F.2d 1182, 1186 (Fed.Cir.1998); Intervet America, Inc. v. Kee-Vet Laboratories, Inc., 887 F.2d 1050, 1053 (Fed.Cir.1989). Accordingly, the Court declines to read Romtec's desired embodiment into the claims. Moreover, the Court does not find that the words and grammatical structure of the claims preclude the connection of the network card directly to the data storage means, as long as that combined device is connected to the computer. Accordingly, the term "network" is construed to mean a combination of a network card and data storage means in some manner connected to a computer, but not necessarily connected independently to the computer.

3. ***Network Card***

The term "network card" is not defined in the claims or specification and should therefore be given its ordinary meaning to one skilled in the art. Quantum Corp. v. Rodime, PLC, 65 F.3d 1577, 1580 (Fed.Cir.1995) ("[T]he words of a claim will be given their ordinary meaning to one of skill in the art unless the inventor appeared to use them differently."). The preferred embodiment supports such a construction when it describes "identical, conventional network cards" which "can be connected to separate external network systems." Col. 2, ll. 62-65. Citec seeks to define the term primarily in the context of its location or function within the system, because the specification describes the connection of a network card to a data storage means. Romtec seeks to limit both the function of the network card and its location within the patented system. Specifically, Romtec argues that the network card does not connect with a data storage means for purposes of the transfer of data, because the data storage means connects with the computer's motherboard through a hard drive ribbon cable. For the reasons outlined in the preceding section, the Court declines to read Romtec's functional and structural limitations into the claims. Accordingly, the Court construes the term "network card" to mean an electrical interface that couples a data storage means with a computer and may, but need not, interface with an external network system.

4. ***Data Storage Means, Storage Means***

Romtec argues that the term "data storage means" in Claims 1, 8, and 13 invokes a means-plus-function limitation. 35 U.S.C. s. 112, paragraph 6 provides that

An element of 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.

Where a claim uses the word "means" to describe a limitation, a court must presume "that the inventor used the term advisedly to invoke the statutory mandates for means-plus-function clauses." Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1427 (Fed.Cir.1997) (citation omitted). The presumption may be rebutted where the claim, in addition to the functional language, recites structure sufficient to perform the claimed function in its entirety. Id. at 1427-28. Once the court has determined that the claim limitation is a means-plus-function limitation, it must identify the function of the limitation. Micro Chem., Inc. v. Great Plains Chem. Co., 194 F.3d 1250, 1258 (Fed.Cir.1999). Next, the court must determine the corresponding structure in the written description that is necessary to perform that function. *Id*. "Structure disclosed in the specification or prosecution history is 'corresponding' structure only if the specification or prosecution history clearly links or associates that structure to the function recited in the claim. B. Braun Med. v. Abbott Labs., 124 F.3d 1419, 1424 (Fed.Cir.1997).

The Court finds that "data storage means" is a means-plus-function limitation. The presumption of a limitation has not been rebutted by the inclusion of a structure sufficient to perform the function of data storage. Therefore, the Court looks to the specifications to determine whether there is some corresponding structure necessary to perform that function.

The specifications are quite clear that, although the preferred embodiment depicts the use of a fixed IDE hard drive and a removable IDE hard drive to store data, "it is contemplated that the ... invention can be used with other forms of data storage such as SCSI drives, read/write optical drives, etc." Col. 3, ll. 3-10. Romtec seeks further to narrow the structures by requiring that the IDE hard drive, SCSI hard drive, or read/write optical drive be disconnected from the drive active and ground lines, be connected to a switching means through an interrupt request line and a single chip select line, and be directly connected to the motherboard through all remaining lines. While the preferred embodiment admittedly contains the recited structural features, such features do not actually perform the claimed function of data storage and thus do not constitute claim limitations. Wenger Manufacturing, Inc. v. Coating Machinery Systems, Inc., 239 F.3d 1225, 1233 (Fed.Cir.2001); Asyst Technologies, Inc. v. Empak, Inc., 268 F.3d 1364, 1370 (Fed.Cir.2001). The Court may not import structural limitations that merely enable the pertinent structure, here the IDE hard drives, to operate as intended. Asyst Technologies, Inc., 268 F.3d at 1371. Accordingly, the Court construes the term "data storage means" to mean a device associated with a computer system for storage of data, including an IDE hard drive, a SCSI drive, or a read/write optical drive, or an equivalent structure.

5. *Means for Locking the Storage Means*

The Court finds that "means for locking the storage means" is a means-plus-function limitation. The presumption of a limitation has not been rebutted by the inclusion of a structure in Claims 1, 8, or 13 sufficient to perform the function of locking the data storage means. Therefore, the Court looks to the specification to determine whether there is some corresponding structure necessary to perform that function.

Romtec contends that the specification identifies several means for locking the network, including the password security system described in U.S. Patent No. 5,375, 243, the security system involving a security software program, a hardware key and a user password described in U.S. Patent No. 5,212,729, and the security system involving use of a plug-in expansion card described in U.S. Patent No. 5,012,514. *See* Col. 4, ll. 50-64. Citec contends that the specification merely provides examples of locking means, and that the claim term includes *any* known means for permitting or denying access to the storage means. *See* Col. 4, ll. 64-67 ("The security systems described in the patents listed above are but a partial list of the known data security systems that can be used with the present invention."); Col. 2, ll. 59-61 ("A network card may

include a locking means to secure data."); Col. 4, ll. 46-50 ("[A]t least one of the first and second networks is provided with a known security system which locks the network until it is unlocked by a physical key, a hardware key, a password etc."). Citec's suggested definition would result in an impermissibly open-ended interpretation.

The means limitation in question must be construed in light of the corresponding structures or acts disclosed in the specification and their equivalents. Micro Chemical, Inc. v. Great Plains Chemical Co., Inc., 194 F.3d 1250, 1258 (Fed.Cir.1999). The specification discloses various structures that may be used to lock the data storage means. Although it states that other known data security systems may be used with the invention, it fails specifically to identify those systems. Therefore, under section 112, para. 6, the claim is limited to use of the identified systems and their equivalents. Fonar Corp. v. General Electric Co., 107 F.3d 1543, 1551-52 (Fed.Cir.), *cert. denied,* 522 U.S. 908, 118 S.Ct. 266, 139 L.Ed.2d 192 (1997); *see also* Atmel Corp. v. Information Storage Devices, Inc., 997 F.Supp. 1210, 1215 (N.D.Cal.1998) ("A specification that merely mentions the possibility of alternative structures without specifically identifying them is not sufficient to expand the scope of the claim beyond the example used."). The Court therefore construes the term "means for locking the data storage means" to mean a security system known as of the date of the filing of the application for the '551 Patent which locks the network until it is unlocked by (1) a physical key, (2) a hardware key, or (3) a password; or the security system described in one of the following patents: U.S. Patent No. 5,375,243; U.S. Patent No. 5,212,729; or U.S. Patent No. 5,012,514, or their equivalents.

6. *Reset Means (First Instance)*

The terms "reset means" in Claims 1, 8, and 13 FN2 must be construed in the context of the phrases where they are located: "reset means for rebooting said central processing unit and for clearing said random access memory." Because the limitation is expressed in "means-plus-function" language and because it does not recite definite structure to completely perform the functions of rebooting the central processing unit and clearing the random access memory (RAM), it is subject to the requirements of 35 U.S.C. s. 112, para. 6. Accordingly, the Court must look to the written description of the Patent to locate the structure that corresponds to the means recited in the limitation.

FN2. The Court refers to the first instance of the term in Claim 13.

The specification describes the reset means as a conventional reset pushbutton found in a typical personal computer, which includes a powered line and a grounded line. Activating the reset button supplies a voltage of 5V to reboot the computer system and clear the RAM. The remainder of the specifications cited by Romtec involve the interaction of the circuitry for the reset button with the switch that allows a user to switch between networks. As such, they do not perform the claimed function of rebooting the central processing unit and clearing the RAM and thus do not constitute claim limitations. Wenger Manufacturing, Inc., 239 F.3d at 1233; Asyst Technologies, Inc. v. Empak, Inc., 268 F.3d at 1370. Accordingly the Court construes the term "reset means" to mean a conventional reset pushbutton, which includes a powered line and a grounded line, the activation of which supplies a voltage of 5V to reboot the computer system and clear the RAM, or its equivalents.

7. *Reset Means (Second Instance)*

The term "reset means" also appears in dependent Claims 5 and 11, and in the second instance in independent Claim 13. Claims 5 and 11 provide as follows: "The computer system according to claim 1 [or

8], wherein said ***reset means*** comprises a capacitor connected to a ground for completely depowering the RAM of said computer system." Claim 13 provides: "reset means for rebooting said central processing unit and for clearing said random access memory, said ***reset means*** comprising a capacitor connected to a ground for completely depowering the RAM of said computer system." In each of these claims, reference is made through the term "reset means" to an additional structural element that performs the function of completely depowering the computer's RAM. Accordingly, the term "reset means" in the second instance shall be construed to mean "circuitry, including a capacitor connected to a ground for completely depowering the RAM of the computer.

8. ***Rebooting***

The term "rebooting," as used in Claims 1, 8, and 13, must be construed in accordance with its plain and ordinary meaning to a person skilled in the art. Citec's proposed construction is supported by reference to the *Random House Unabridged Dictionary* (2d ed.1993), which defines "boot" as "to start (a computer) by loading the operating system" and the prefix "re" as "again" or "again and again." In addition, the claims and specification identify "rebooting" as a function associated with the central processing unit. *See, e.g.,* Col. 5, ll. 46-47 ("reset means for rebooting said central processing unit"); Col. 2, ll. 9-10 ("activating the reset switch reboots the CPU"). Accordingly, the Court construes the term "rebooting" to mean the restarting of the central processing unit of a computer.

9. ***User Actuated Switching Means***

The Court finds that the term "user actuated switching means" in Claims 1, 8, and 13 invokes a means-plus-function limitation. The presumption of a limitation has not been rebutted by the inclusion of a structure sufficient to perform the function of switching the computer system between the three states described in the claims while preventing the transfer of data between the networks. Therefore, the Court looks to the specifications to determine whether there is some corresponding structure necessary to perform that function.

Citec notes that the Patent provides examples of a switch as a switching means: "A user chooses between the activating of two networks by using a two position switch which activates one of the networks or the reset switch." Col. 2, ll. 10-13. The Patent identifies the type of two position switch more particularly as a "rotary, rocker, or push button." Col. 2, ll. 13-14. The file history contains an Amendment dated January 29, 1998, which adds the limitation "user actuated" to the term "switching means" in Claims 1, 8, and 13. The Remarks to the Amendment indicate clearly that the present invention provides a computer system which employs a user actuated switching means, which may either be a mechanical switch or a password security system/software program, to switch the computer between a first network state, a second network state, and a reset state. The '551 Patent however omits any reference to the use of a password security system or software program to perform the function of switching the computer between states.

Romtec defines the phrase by reference to the specifications as "a rotary, rocker or push button two position switch constructed so that it is impossible to switch between the two networks before first activating the reset switch to prevent data from being transferred between two networks." *See* Col. 2, ll. 13-18. It notes that in the preferred embodiment, the switching means is coupled to the first and second networks by lines that connect to the interrupt request 31 st line and the chip select zero 37th line of the storage means, and to the network cards through activate lines, and that "coupled" in that context is depicted as cuts to lines. *See* Col. 3, ll. 34-38, 42-44. This structure appears to perform the function of switching the computer between the three states described in the claims. Therefore, the Court adopts Romtec's proposed claim construction and construes the term "user actuated switching means" to mean a rotary, rocker, or push button two

position switch (1) actuated by a user, (2) coupled to the first and second networks and to the network cards in the manner described in the specifications (as the term "coupled" is defined below), and (3) constructed so that it is impossible to switch between the two networks before first activating the reset switch to prevent data from being transferred between the networks, and equivalents.

10. ***Coupled/Coupled To***

The terms "coupled" and "coupled to," as used in Claims 1, 8, and 13, are not defined in the claims or specification and therefore must be construed in accordance with their ordinary meaning to a person skilled in the art. Citec's proposed construction is supported in part by reference to the *Random House Unabridged Dictionary* (2d ed.1993), which defines the verb "couple" as "to fasten, associate or link together" or "to join or associate by means of a coupler." However, Citec's proposed definition of "*functionally, operatively,* or *communicatively* linked" seeks to introduce limitations not suggested by the specifications. Similarly, Romtec's interpretation of the term "coupled to" as used with "user actuated switching means" improperly seeks to read into the term a limitation in the specification. Therefore, the Court construes the terms "coupled" and "coupled to" to mean linked together.

11. ***Password Data Security System***

The term "password data security system" appears in dependent Claims 2, 9, and 14 as a permissible structure for the "means for locking the storage means" identified in Claims 1, 8, and 13. The specification indicates that the term should not be construed in a limiting sense. Rather, it describes the term as a known security system which locks the network until it is unlocked by a *password*. *See* Col. 4, ll. 46-67. Reference is made to the system described in U.S. Patent No. 5,375,243 as an example of a password security system that may be used with the current invention. That limitation need not be read into the claim. Accordingly, the Court construes the term "password data security system" to mean a security system which locks the network until it is unlocked by a password.

12. ***Hardware Key Data Security System***

Like the term "password data security system," the term "hardware key data security system" in dependent Claims 3, 10, and 15 is a permissible structure for locking the data storage means. For the reasons set forth in the preceding section, the Court construes the term as a security system which locks the network until it is unlocked by a hardware key.

13. ***Rotary Switches***

The term "rotary switch" is identified in dependent Claim 4 as a permissible structure for the "user actuated switching means" identified in Claim 1. Because it is not defined, except generically by reference to a "conventional rotary selector switch," *see* Col. 3, ll. 11-12, it must be given its ordinary meaning to one skilled in the art and is not limited by the embodiment shown in the specification. Citec has referred the Court to the definition contained in the Encyclopedia of Electronics, 2nd Edition: "Rotary switches switch alternate circuits in a sequence dictated by a coaxial shaft with a rotary-detent action. A pointer knob selects the options." The Court construes "rotary switch" to mean a switch that alternates circuits in a sequence dictated by a coaxial shaft with a rotary-detent action, depending on the position of the pointer knob.

IV. ***CONCLUSION***

For the foregoing reasons, the Court concludes the following with regard to the construction of the claim terms at issue:

1. The term "central processing unit" is construed to mean a key component of a computer, which contains circuitry to interpret and execute program instructions.

2. The term "network" is construed to mean a combination of a network card and data storage means in some manner connected to a computer, but not necessarily connected independently to the computer.

3. The term "network card" is construed to mean an electrical interface that couples a data storage means with a computer and may, but need not, interface with an external network system.

4. The term "data storage means" is construed to mean a device associated with a computer system for storage of data, including an IDE hard drive, a SCSI drive, or a read/write optical drive, or an equivalent structure.

5. The term "means for locking the data storage means" is construed to mean a security system known as of the date of the filing of the application for the ' 551 Patent which locks the network until it is unlocked by (1) a physical key, (2) a hardware key, or (3) a password; or the security system described in one of the following patents: U.S. Patent No. 5,375,243; U.S. Patent No. 5,212,729; or U.S. Patent No. 5,012,514, or their equivalents.

6. The term "reset means" in Claims 1, 8, and in the first instance in Claim 13 is construed to mean a conventional reset pushbutton, which includes a powered line and a grounded line, the activation of which supplies a voltage of 5V to reboot the computer system and clear the RAM, or its equivalents.

7. The term "reset means" in dependent Claims 5 and 11 and in the second instance in Claim 13 shall be construed to mean "circuitry, including a capacitor connected to a ground for completely depowering the RAM of the computer.

8. The term "rebooting" shall be construed to mean the restarting of the central processing unit of a computer.

9. The term "user actuated switching means" shall be construed to mean a rotary, rocker, or push button two position switch (1) actuated by a user, (2) coupled to the first and second networks and to the network cards in the manner described in the specifications (as the term "coupled" is defined below), and (3) constructed so that it is impossible to switch between the two networks before first activating the reset switch to prevent data from being transferred between the networks, and equivalents.

10. The terms "coupled" and "coupled to" are construed to mean linked together.

11. The term "password data security system" is construed to mean a security system which locks the network until it is unlocked by a password.

12. The term "hardware key data security system is construed to mean a security system which locks the network until it is unlocked by a hardware key.

13. The term "rotary switch" is construed to mean a switch that alternates circuits in a sequence dictated by a coaxial shaft with a rotary-detent action, depending on the position of the pointer knob.

IT IS SO ORDERED. this fifth day of December 2003.

D.Md.,2003.
Citec, Inc. v. Romtec, Inc.