

United States District Court,
N.D. California.

SUN MICROSYSTEMS, INC,
Plaintiff.

v.

DATARAM CORPORATION,
Defendant.

No. 96-20708 SW

Aug. 29, 1997.

ORDER RE: CLAIM CONSTRUCTION

WILLIAMS, District Judge.

I. BACKGROUND

Plaintiff Sun Microsystems initiated the present action for patent infringement against Defendant Dataram Corporation. Sun alleges that Dataram is infringing 67 claims contained in five Sun patents: U.S. Patent Nos. 5,270,964; 5,383,148; 5,532,954; 5,260,892; and 5,265,218. FN1 Three of the patents share a common specification (the '964, '148 and '954 patents) and all of the patents relate to single in-line memory modules, which are devices designed to expand a computer's storage capacity. A memory module is a smaller circuit board that can be inserted into a slot on a larger printed circuit board or computer motherboard. Sun manufactures workstations (computers) as well as memory modules. Dataram sells memory modules for use in Sun workstations and other computers. In this suit, Sun alleges that several modules sold by Dataram infringe Sun's memory module patents.

FN1. Hereafter, the Court will refer to the patents by using the final three digits of the patent number.

II. LEGAL STANDARDS FOR CLAIM CONSTRUCTION

Adjudication of an infringement claim entails two steps. The first step is to determine the meaning and scope of the patent claims at issue. *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, ----, 116 S.Ct. 1384, 1389, 134 L.Ed.2d 577. Claim construction is a matter of law to be determined by a court. *Id.* at 1387. The second step is comparing the properly construed claims to the device accused of infringing. *Id.* This determination is a question of fact. *General Mills, Inc. v. Hunt-Wesson, Inc.*, 103 F.3d 978, 981 (Fed.Cir.1997).

In construing the meaning of claims, courts consider the intrinsic evidence which includes: the claims, the specification, and the prosecution history. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed.Cir.1995) *aff'd.*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). The parties may also offer

extrinsic evidence which includes: expert testimony, inventor testimony, dictionaries and learned treatises. *Id.* at 980. Although a court may consider extrinsic evidence, it should look first to the intrinsic evidence of record. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed.Cir.1996). "In most situations, an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term. In such circumstances, it is improper to rely on extrinsic evidence." *Id.* at 1583.

When considering the intrinsic evidence courts are to look first to the claims themselves to define the scope of the invention. *Id.* at 1582. Generally, the words in a claim are given their ordinary and customary meaning. *Id.* However, "a patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the specific definition of the term is clearly stated in the patent specification or file history." *Id.* Thus, the specification may act as a dictionary when it expressly or impliedly defines terms used in the claims. *Id.* Further, the file history is often critical in determining the meaning of the claims. Any interpretation that was disclaimed during the prosecution must be excluded from the definition of claim terms. *Southwall Tech., Inc. V. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed.Cir.1995), *cert. denied*, 516 U.S. 987, 116 S.Ct. 515, 133 L.Ed.2d 424 (1995).

As a general principle of claim construction, limitations found in the specification of a patent should not be read into a claim. *In re Donaldson Co.*, 16 F.3d 1189, 1195 (Fed.Cir.1994). However, claim elements expressed as a means or step for performing a specified function are construed to cover the corresponding "structure, material or acts" disclosed in the patent specification and their "equivalents." 35 U.S.C. s. 112, para. 6.

III. DISCUSSION

On August 11, 12, 13 and 14, the Court conducted a hearing on claim construction. During the hearing, the parties presented tutorials, offered evidence and made arguments for the purpose of aiding the Court in construing the disputed terms used in the 67 claims at issue.

In considering the arguments, the Court finds that following terms and phrases are disputed: single in-line memory module; arranged; mirror image; electrically distinct contacts; substantially centered; full-width data path; rise time; symmetrical power and ground; integrated data and video storage; first coupling means; second coupling means; and directly connected. After carefully considering the evidence submitted and the arguments of counsel, the Court defines these terms and phrases as follows:

1. *Single In-line Memory Module (SIMM)*

A compact circuit board with memory chips mounted on it which can be inserted into a connector within a computer system to expand the computer's memory and which derives all necessary electrical signals from the connector.

2. *Arranged (A first set of elements arranged on the first side of said printed circuit board)*

A well defined collection of memory elements arranged in a logical fashion on one side of the printed circuit board.

3. *Mirror Image*

Memory chips that are mounted on a circuit board in such a manner that the memory chips on the second

side are located directly behind the chips on the first side *and* the pins or leads of the corresponding memory chips are matched. In other words, the memory chips are mirror images in both location on the board and lead location.

4. Electrically Distinct Contacts

Contacts along the edge of a printed circuit board in which the contacts on the first side of the printed circuit board and the contacts on the second side of the printed circuit board are not connected across the printed circuit board edge but may be electrically connected away from the edge.

5. Substantially Centered (Driver circuit)

The driver circuit is mounted near the center of one side of the memory module.

6. Full-width Data Path

A data path on the memory module that is at least as wide as the path used by the central processing unit of the computer into which the module is installed.

7. Rise Time

Rise time is the time it takes a signal to rise to substantially its final steady value. Rise time as used in claim 1 of the '892 patent refers to the rise time of the clock pulse.

8. Symmetrical Power and Ground

All of the power and ground leads on the memory module are positioned in such a way that when the memory module is inserted into the connector backwards, all of the power and ground leads on the module line up with comparable power and ground leads on the connector, thereby avoiding damage to the computer or module.

9. Integrated Data and Video Storage

The memory module has memory elements configured to store bits representing data and memory elements configured to store bits representing video information.

10. First Coupling Means

This element is written in means-plus-function language and is limited to the corresponding structure, and its equivalents, disclosed in the specification of the '892 patent. The corresponding structure for electrically coupling the driving IC to the RAM IC is the circuit traces shown in Figure 5 and Figure 8 of the '892 patent.

11. Second Coupling Means

Also a means-plus-function element, the corresponding structure of second coupling means is the arrangement of vias, which make direct connections between the leads of the memory chips on one side of the board and leads of the memory chips on the other side of the board, as shown in Figure 6 of the '892 patent.

12. Directly Connected

A connection that runs from the driver IC directly, without any intervening connections, to the center memory chip in the chip clusters on the memory module.

IT IS SO ORDERED.

N.D.Cal.,1997.

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