

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION**

ACQIS LLC

Plaintiff,

vs.

**APPRO INTERNATIONAL, INC.,
CLEARCUBE TECHNOLOGY, INC.,
DELL INC., FUJITSU COMPUTER
SYSTEMS CORP., HITACHI AMERICA,
LTD., HEWLETT-PACKARD CO.,
INTERNATIONAL BUSINESS
MACHINES CORP., NEC CORP. OF
AMERICA, NEXCOM INC., ORACLE
AMERICA, INC., and SUPER MICRO
COMPUTER, INC.,**

Defendants.

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**CASE NO. 6:09 CV 148
PATENT CASE**

MEMORANDUM OPINION

During the January 20, 2011 pretrial conference, it became apparent the parties required further claim construction. This Memorandum Opinion construes the terms “hub” and “PCI bus transaction” from “the ’8,415 Patent family. The Court previously construed terms from the patents-in-suit. Dkt. No. 315.

BACKGROUND

Plaintiff ACQIS LLC (“ACQIS”) alleges infringement of eight patents: U.S. Patent Nos. 6,216,185 (“the ’185 Patent”), 6,718,415 (the “’8,415 Patent”), 7,099,981 (the “’981 Patent”), 7,146,446 (the “’446 Patent”), 7,328,297 (the “’297 Patent”), 7,363,415 (the “’3,415 Patent”), 7,363,416 (the “’416 Patent”), and 7,376,779 (the “’779 Patent”) (collectively, “the patents-in-suit”).

The ACQIS patent portfolio includes one patent directed to a computer peripheral console, the ’185

Patent, and seven patents allegedly directed to blade servers, the '8,415, '981, '446, '297, '3,415, '416, and '779 Patents (“the '8,415 Patent family” or “blade server patents”). The '446, '297, '3,415, '416, and '779 Patents are continuations of the '981 patent, which itself is a continuation of the '8,415 Patent. The blade server patents supplement a modular computer concept of the peripheral console patent. The peripheral console (“PCON”) provides a platform (e.g., keyboard, mouse, display, and disk drive) adapted to receive an attachable computer module (“ACM”) having core computing hardware (e.g., CPU, memory, I/O, and hard drive). The ACM (100) can be inserted into the PCON (200) to form a complete PC.

A blade server implements an ACM, and the patents-in-suit contemplate using two or more ACMs in a single PCON. The various blade server patents address particular aspects of connectivity between modules for high speed serial communication, common hardware I/O connectivity to allow “swapping out” of modules, mechanical configurations for multiple modules, and fault tolerance.

APPLICABLE LAW

“It is a ‘bedrock principle’ of patent law that ‘the claims of a patent define the invention to which the patentee is entitled the right to exclude.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (quoting *Innova/Pure Water Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). In claim construction, courts examine the patent’s intrinsic evidence to define the patented invention’s scope. *See id.*; *C.R. Bard, Inc. v. U.S. Surgical Corp.*, 388 F.3d 858, 861 (Fed. Cir. 2004); *Bell Atl. Network Servs., Inc. v. Covad Commc’ns Group, Inc.*, 262 F.3d 1258, 1267 (Fed. Cir. 2001). This intrinsic evidence includes the claims themselves, the specification, and the prosecution history. *See Phillips*, 415 F.3d at 1314; *C.R. Bard, Inc.*, 388 F.3d at 861. Courts give claim terms their ordinary and accustomed meaning as understood by one of

ordinary skill in the art at the time of the invention in the context of the entire patent. *Phillips*, 415 F.3d at 1312–13; *Alloc, Inc. v. Int’l Trade Comm’n*, 342 F.3d 1361, 1368 (Fed. Cir. 2003).

The claims themselves provide substantial guidance in determining the meaning of particular claim terms. *Phillips*, 415 F.3d at 1314. First, a term’s context in the asserted claim can be very instructive. *Id.* Other asserted or unasserted claims can also aid in determining the claim’s meaning because claim terms are typically used consistently throughout the patent. *Id.* Differences among the claim terms can also assist in understanding a term’s meaning. *Id.* Courts presume a difference in meaning and scope when a patentee uses different phrases in separate claims. *Id.* at 1314–15. For example, when a dependent claim adds a limitation to an independent claim, it is presumed that the independent claim does not include the limitation. *Id.* However, the doctrine of claim differentiation is not a “hard and fast rule,” and courts cannot use the doctrine to broaden claims beyond their correct scope, determined in light of the intrinsic record and relevant extrinsic evidence. *Seachange Int’l, Inc. v. C-COR, Inc.*, 413 F.3d 1361, 1369 (Fed. Cir. 2005); *see also Phillips*, 415 F.3d at 1312–15.

“[C]laims ‘must be read in view of the specification, of which they are a part.’” *Id.* (quoting *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc)). “[T]he specification ‘is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.’” *Id.* (quoting *Vitronics Corp. v. Conceptoronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)); *Teleflex, Inc. v. Ficosa N. Am. Corp.*, 299 F.3d 1313, 1325 (Fed. Cir. 2002). This is true because a patentee may define his own terms, give a claim term a different meaning than the term would otherwise possess, or disclaim or disavow the claim scope. *Phillips*, 415 F.3d at 1316. In these situations, the inventor’s lexicography governs.

Id. Also, the specification may resolve ambiguous claim terms “where the ordinary and accustomed meaning of the words used in the claims lack sufficient clarity to permit the scope of the claim to be ascertained from the words alone.” *Teleflex, Inc.*, 299 F.3d at 1325. But, “[a]lthough the specification may aid the court in interpreting the meaning of disputed claim language, particular embodiments and examples appearing in the specification will not generally be read into the claims.” *Comark Commc’ns, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed. Cir. 1998) (quoting *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1571 (Fed. Cir. 1988)); *see also Phillips*, 415 F.3d at 1323. The prosecution history is another tool to supply the proper context for claim construction because a patent applicant may also define a term in prosecuting the patent. *Home Diagnostics, Inc., v. Lifescan, Inc.*, 381 F.3d 1352, 1356 (Fed. Cir. 2004) (“As in the case of the specification, a patent applicant may define a term in prosecuting a patent.”).

Although extrinsic evidence can be useful, it is “less significant than the intrinsic record in determining the legally operative meaning of claim language.” *Phillips*, 415 F.3d at 1317 (quoting *C.R. Bard, Inc.*, 388 F.3d at 862). Technical dictionaries and treatises may help a court understand the underlying technology and the manner in which one skilled in the art might use claim terms, but technical dictionaries and treatises may provide definitions that are too broad or may not be indicative of how the term is used in the patent. *Id.* at 1318. Similarly, expert testimony may aid a court in understanding the underlying technology and determining the particular meaning of a term in the pertinent field, but an expert’s conclusory, unsupported assertions as to a term’s definition is entirely unhelpful to a court. *Id.* Generally, extrinsic evidence is “less reliable than the patent and its prosecution history in determining how to read claim terms.” *Id.*

CLAIM TERMS

Hub

The '8,415 patent family uses the term “hub controller.” Acqis proposes a “hub” is “a device joining communication lines at a central location, providing a common connection to all devices on the network.” IBM asserts “hub controller” needs no construction and instead offers separate definitions for both “hub” and “controller.” IBM proposes “hub” is “a computer networking device for collecting output data signals from two or more devices and rebroadcasting them to every other devices on the network” and “controller” is a “device that controls the operation of one or more input/output devices.”

Acqis argues its construction is supported by intrinsic evidence and the plain and ordinary meaning of “hub” at the time the '8,415 patent was filed. Acqis contends the specification and claims support that a hub provides a common communications link between connected devices. '8,415 patent at 7:21-23; 9:50-51; *see also* '3,415 patent at 24:31-33. Acqis further contends its definition is supported by the patentee's remarks made during the prosecution of the '297 patent, a continuation application of the '8,415 patent. *See* April 28, 2007 Resp. To Office Action at 24.

Acqis also cites extrinsic evidence to support its position. Acqis asserts that IBM's expert also applies the same plain and ordinary meaning, equating a switch to a hub, to invalidate the patent.

The Ketris 9000 system discloses a “serial communication hub controller adapted to transfer data between any two of the computer modules.” As shown above, each of the Server Blades (“computer modules”) connects to a midplane in the enclosure. **The midplane contains four additional connectors (two in front, and two in the rear) that support a “Switch Blade,”** which contains four Ethernet connectors. In order to have a fully functioning system, the Ketris 9000 system required that at least two Switch Blades be connected.

....

I have personally inspected the hardware components of the Ketris 9000 system and have verified that it meets this limitation.

Expert Witness Report of Robert McClure at ¶¶ 56-58 (emphasis added). Likewise, Acqis argues that IBM took a similar position during the reexamination of the '3,415 patent, asserting that a prior art switch meets the claimed “hub” limitation because it provides point-to-point communication links between computer modules:

Accordingly, **the CrayLink Interconnect discloses a set of switches (called routers) that dynamically allocate multiple and simultaneous point-to-point links among the Modules as the connections are needed. Therefore, the CrayLink Interconnect discloses a serial communication hub controller,** whether properly construed in accordance with its plain and ordinary meaning or as presently construed by the Patent Owner.

August 23, 2010, Reexamination No. 95/001,276, Comments by Third Party Requester at 23 (emphasis added); *see also id.* at 27. Acqis further bolstered its proposed definition with citations to contemporaneous technical publications and dictionary definitions.

Conversely, IBM argues that the plain meaning of “hub” does not include a switch. In support of its proposed constructions for “hub” and “controller,” IBM cites extrinsic dictionary definitions and argues that neither the claims nor specification mention “switches” in connection with a “hub”—evidence that the inventor did not intend “hub” to have a special meaning that includes a switch. IBM also argues that the statements made during the '297 patent's prosecution in 2007 are irrelevant to the original meaning of the parent application that was filed in 2000. IBM asserts that its arguments made during the reexamination and its expert's invalidity opinions of the patents-in-suit were merely applying Acqis's infringement positions.

The intrinsic record does not support IBM's constructions for “hub” and “controller.” IBM cites solely to extrinsic evidence to support its proposed definitions and attempts to improperly import limitations from these sources. The parties' dispute and focuses on the term “hub” and Acqis did not propose a separate construction for “controller.” The term “controller” is a term readily

understandable by the jury and does not require construction. Although the specification does not specifically equate a “hub” to a “switch,” the intrinsic evidence, nevertheless, supports Acqis’s definition. *See* ’8,415 patent at 7:21-23 (“The Ethernet Hub Controller provides the high-speed communication function between the two computer modules.”); 9:50-51 (“The computer modules communicate through a four port Ethernet hub.”); *see also* ’3,415 patent at 24:31-33 (claim 25). Acqis’s definition is further supported by the patentee’s remarks made during the ’297 patent’s prosecution. *See* April 28, 2007 Resp. To Office Action at 24 (ACQIS0002874) (“The various types of Ethernet hub controllers (e.g. switching hub, passive hub or intelligent hub) require computer modules to communicate to the hub controller through separate and distinct Ethernet connections”). Although the statements were made during the prosecution of a continuation application that was filed years after the original statement, which is typical for continuation applications, it is still relevant intrinsic evidence. The Court construes “hub” as “a device joining communication lines at a central location, providing a common connection to all devices on the network.”

PCI Bus Transaction

Acqis construes “PCI bus transaction” as “sufficient information to permit decoding to create a PCI bus transaction.” IBM asserts “PCI bus transaction” needs no construction and instead offers separate definitions “PCI bus” and “bus.” IBM proposes “PCI bus” means “an industry-standard parallel computer bus developed by Intel” where a “bus” is “a set of signal lines to which a number of devices are connected and over which information is transferred between them.” The parties’ primary dispute is whether the term is limited to the conventional, parallel PCI Local Bus, and, therefore excludes PCI Express bus architecture and bus transaction protocol.

Acqis contends that the asserted patents' specifications support its construction, arguing that one goal of the patented invention was to maintain compatibility with PCI legacy devices while replacing the outdated and slower conventional parallel PCI bus with a serial architecture. *See e.g.*, '8,415 patent at 3:3-63, 5:26-34. Acqis asserts this goal is further supported by Acqis's statements during the reexamination of the '3,415 patent:

The communication of PCI bus transactions in an encoded and serial form allows an interface channel to be implemented using a smaller number of signal channels, relative to PCI buses.

December 30, 2010, Reexamination No. 95/001,424, Resp. to Office Action at 15.

Acqis contends its definition is also supported by the patents' broadly drafted claim language. Acqis argues that the claims describe a structure to carry serial bits of "encoded PCI bus transactions" to maintain compatibility with older PCI devices while eliminating the use of a conventional PCI bus. *See e.g.*, '3,415 at claims 12, 25, 27, 73, 74; '416 at claims 6, 56, 61, 66; '779 at claims 16, 26, 56, 57. Acqis contends this is evidenced by the dependent claims, which specify that "the serial bit stream of PCI bus transaction comprises encoded PCI address and data bits." *See e.g.*, '3,415 patent at claim 14. Acqis also cites to extrinsic dictionary definitions, industry standards, and statements made by IBM's expert to further support its proposed definition.

IBM contends that "PCI bus transaction" does not require construction, as it merely refers to a transaction on a PCI bus. Rather, IBM proposes separate constructions for the terms "PCI bus" and "bus" contending that each term must be given meaning. IBM contends that the parties' essential dispute is whether a "PCI bus" is required by the claims. In support of its proposed constructions, IBM cites extrinsic dictionary definitions and its own expert's opinions.

IBM cites solely to extrinsic evidence to support its proposed definitions and attempts to improperly import limitations from these sources. The intrinsic record does not support IBM's separate constructions for "bus" and "PCI bus." Contrary to IBM's proposal that the "PCI bus" is "an industry-standard parallel computer bus developed by Intel," the claims and specification are not specifically limited to a traditional, parallel PCI bus. On the other hand, Acqis's construction "sufficient information to permit decoding to create a PCI bus transaction" reiterates "PCI bus transaction" and does not sufficiently define the term. Acqis contends that its proposed definition is consistent with the PCI standard that defines a "transaction" as "an address phase plus one or more data phases." Acqis argues the standard definition and intrinsic record supports that a "PCI bus transaction" requires the presence of information sufficient to maintain compatibility with a conventional PCI bus, while also ensuring support for legacy devices. Acqis's reference to the extrinsic industry standards is less significant than the intrinsic record, but nevertheless useful to help understand the the manner in which one skilled in the art might use the claim terms.

The specifications of the '8,415 patent family disclose an embodiment showing a CPU coupled directly to a combined north bridge and interface controller circuit that outputs encoded "PCI bus transaction" data over unidirectional differential signal channels:

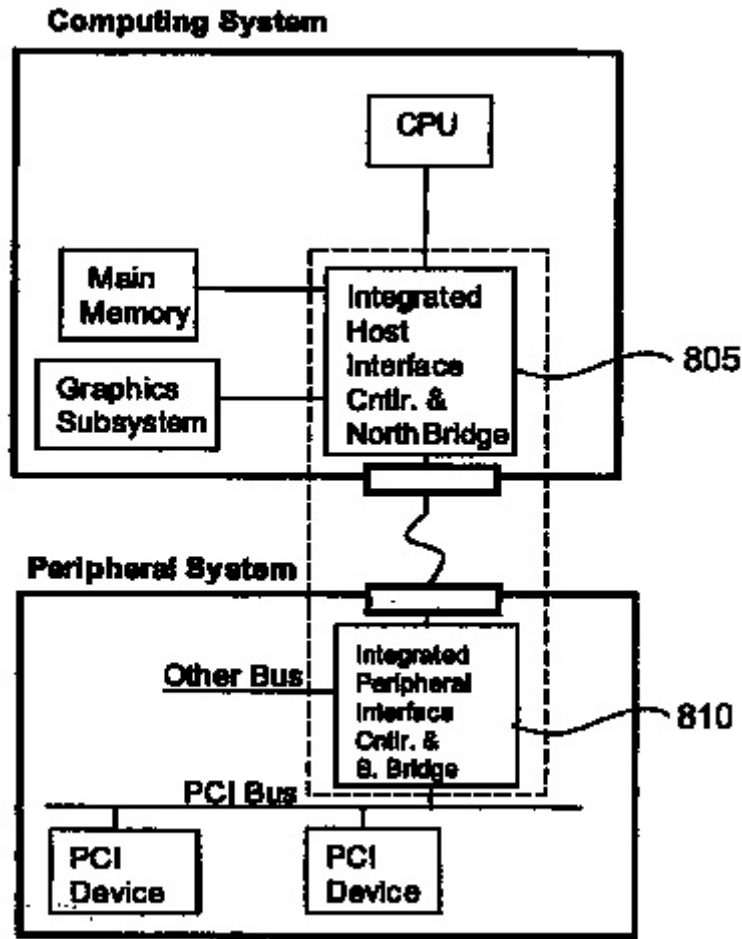


FIG. 8

See e.g., '3,415, '3,425, '416, '779 at Fig. 8. The depicted embodiment does not show a conventional, parallel PCI bus. This is consistent with the broad language of the claims as each asserted claim including the “PCI bus transaction” language is broad enough to capture all disclosed embodiments including those that employ intervening PCI buses in a computer module and those that do not. For example, claim 73 of the '3,415 patent recites:

[A]n interface controller coupled to two unidirectional serial, differential signal channels which transmit encoded PCI bus transaction data in opposite directions.

'3,415 patent at claim 73; *see also* '3,415 at claims 12, 25, 27, 73, 74; '416 at claims 6, 56, 61, 66; '779 at claims 16, 26, 56, 57. Therefore, consistent with Acqis's arguments, the "PCI bus transaction" allows compatibility with PCI legacy devices when replacing the conventional parallel PCI bus with a serial architecture. *See e.g.*, '8,415 patent at 3:3-63, 5:26-34; December 30, 2010, Reexamination No. 95/001,424, Resp. to Office Action at 15 ("The communication of PCI bus transactions in an encoded and serial form allows an interface channel to be implemented using a smaller number of signal channels, relative to PCI buses."). Moreover, the intrinsic record does not provide a specific disclaimer that limits "PCI bus transaction" to one that is in accordance with the PCI standard or to a parallel bus architecture to the exclusion of a serial bus architecture. *See e.g.*, '3,415 patent at claim 5. Likewise, one of skill in the art would conclude that the term PCI bus in the patent is not specific to a PCI Local Bus Standard form of architecture and that a "PCI bus transaction" is used to merely designate an ability to communicate with a legacy device (i.e., an interconnected peripheral that is designed to operate over a conventional PCI Local bus) so that backward compatibility with an installed base of peripherals is assured.

"PCI bus" and "bus" used in "PCI bus transaction" do not require separate constructions. The "bus transaction" portion describes data communication, and the "PCI" portion describes an interconnected peripheral component attached to the system bus. As such, the Court construes "PCI bus transaction" as "a data signal communication with an interconnected peripheral component."

CONCLUSION

For the foregoing reasons, the Court interprets the claim language in this case in the manner set forth above.

So ORDERED and SIGNED this 3rd day of February, 2011.

A handwritten signature in black ink, appearing to read 'Leonard Davis', written over a horizontal line.

LEONARD DAVIS
UNITED STATES DISTRICT JUDGE