UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

CYPRESS SEMICONDUCTOR CORPORATION,

Plaintiff,

v.

GSI TECHNOLOGY, INC.,

Defendant.

Case No. 13-cv-02013-JST

ORDER CONSTRUING CLAIMS OF U.S. PATENT NUMBER 6,967,861

Re: ECF Nos. 68, 74, 80

On October 28, 2014, the Court held a hearing for the purpose of construing two disputed terms in the claims of United States Patent No. 6,967,861 (the "'861 Patent"). ECF No. 129; see also ECF Nos. 68, 74, 80 (claim construction briefs). After consideration of the arguments and evidence presented by the parties, as well as the relevant portions of the record, the Court construes the terms as set forth below.

I. BACKGROUND

Plaintiff Cypress Semiconductor Corporation brings this action against Defendant GSI Technology, Inc., alleging that GSI infringed its patents relating to static random access memory ("SRAM") for computers, networking, and other electronic systems. ECF No. 1. The patents describe semiconductor "chip" technology that increases memory speed. Id. Cypress alleges that GSI directly infringes Cypress' patents, by manufacturing and selling GSI's SigmaQuad product line, among other Cypress products. Id. ¶ 21.

In addition to the '861 Patent, there are six other patents at issue in this case: U.S. Patent Nos. 6,069,839 ("'839 Patent"); 6,292,403 ("'403 Patent"); 6,385,128 ("'128 Patent"); 6,445,645 ("'645 Patent"); 6,651,134 ("'134 Patent"); and 7,142,477 ("'477 Patent"). On April 22, 2014, the parties identified ten terms construction of which is "likely to be most significant to resolving the

parties' dispute," pursuant to Patent Local Rule 4-1(b). ECF No. 88. On July 29, 2014, the Court construed seven terms of two of the patents-in-suit, the '134 and '477 Patents. ECF No. 114. On October 7, 2014, the Court granted GSI's motion to stay the action with respect to the '128, '645, '403, and '839 Patents. In this Order, the Court construes the two disputed terms from the one remaining patent, the '861 Patent. Both of the disputed terms appear in claims 1, 3, 9, 11, 18, 20, 26, and 28 of the '861 Patent.

II. JURISDICTION

Because this is a civil action arising under an Act of Congress relating to patents, this Court has jurisdiction over this action pursuant to 28 U.S.C. § 1338.

III. LEGAL STANDARD

The construction of patent claim terms is a matter of law for the court. Markman v. Westview Instruments, Inc., 517 U.S. 370, 372 (1996). A "bedrock principle" of patent law is 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) (quotation omitted). The "objective baseline" for construing patent terms is to identify the "ordinary and customary meaning" of the term, which is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." Id. at 1313. "[T]he person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification" and the prosecution history. Id. In some cases, the ordinary meaning of a disputed term to a person of skill in the art is readily apparent, and claim construction involves "little more than the application of the widely accepted meaning of commonly understood words." Id. at 1314.

When construing the claims of a patent, the Court looks first "to the words of the claims themselves, both asserted and nonasserted, to define the scope of the patented invention." Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996). After that, a patent's intrinsic record is the "primary basis for construing [a] claim" and "is the best source for understanding a technical term." Phillips, 415 F.3d at 1314. The intrinsic record includes the

patent and its file history, including any reexaminations and reissues, related patents and their prosecution histories, and the prior art that is cited or incorporated by reference in the patent-in-suit and prosecution history. Id. Other than the claims themselves, the written specification that accompanies the claims generally "is the single best guide to the meaning of a disputed term." Id. at 1312, 1315 (citation omitted).

Courts may also rely on extrinsic evidence to construe claim terms, although they must give it less weight. Id. at 1317. Extrinsic evidence includes all evidence that is not part of the patent's intrinsic record, such as inventor testimony, expert testimony, documentary evidence as to how the patentee and alleged infringer have used claim terms, dictionaries, learned treatises, and other similar sources. Id. at 1318 (citing Markman, 52 F.3d at 980, aff'd, 517 U.S. 370 (1996). Where there is a conflict between intrinsic and extrinsic evidence, the latter is to be disregarded. "[E]xtrinsic evidence may be used only to assist in the proper understanding of the disputed limitation; it may not be used to vary, contradict, expand, or limit the claim language from how it is defined, even by implication, in the specification or file history." Tempo Lighting, Inc. v. Tivoli, LLC, 742 F.3d 973, 977-978 (Fed. Cir. 2014) (quoting Bell Atl. Network Servs. v. Covad Commc'ns Grp., 262 F.3d 1258, 1269 (Fed. Cir. 2001).

IV. ANALYSIS

Claim 1 of the '861 Patent recites:

Claim 1

> A method for implementing a self-timed, read to write operation in a memory storage device, the method comprising:
>
> capturing a read address during a first half of a current clock cycle;
>
> commencing a read operation so as to read data corresponding to said captured read address onto a pair of bit lines;
>
> commencing a write operation for said current clock cycle so as to cause write data to appear on said pair of bit lines **as soon as said read data** from said captured read address **is amplified by a sense amplifier**, wherein said write operation uses a previous write address captured during a preceding clock cycle; and

capturing a current write address during a second half of said current clock cycle, said current write address to be used for a write operation implemented during a subsequent clock cycle;

wherein said commencing a write operation for said current clock cycle is timed independent of said current write address captured during said second half of said current clock cycle.

The use of the disputed terms in claim 1 is representative of the use in the other claims of the '861 Patent asserted here.

A. "As soon as"/ "as soon as said read data . . . is amplified"

Disputed Claim Term	Cypress's Proposal	GSI's Proposal
"as soon as" / "as soon as read data . . . is amplified"	Plain meaning, which is "shortly after the amplification of the read data"	"as soon as" means "immediately, without delay" "as soon as said read data . . . is amplified" means "immediately, without delay, as said read data . . . is detected"

Cypress proposes a "plain meaning," relatively broad construction of the disputed terms, and argues that GSI's proposed construction improperly imports the limitation into the claims of occurring "without delay" or, in other words, "instantaneously." ECF No. 68 at 11-13. Cypress points to the embodiment in figure 4 of the specification to demonstrate that there is a delay between the amplification of read data and the appearance of write data. ECF Nos. 68 at 12, 80 at 10. GSI's proposed construction is narrower, requiring that write data appear "immediately, without delay" after the read data is amplified. ECF No. 74 at 18. GSI contends that this is the "plain meaning" construction of the term, and that it is also true to the "teaching of the specification" and "consistent with the extrinsic evidence." Id. The Court finds that neither proposed construction, in its entirety, is appropriate here.

First, the Court finds that Cypress' proposed construction is not "plain meaning." A person of ordinary skill in the art of SRAM technology would understand that "as soon as" conveys not only that a second event occurs after the first one, but that the second event occurs as quickly after the first event as the circumstances permit. See ECF No. 74-3 (Decl. of R. Jacob Baker) at ¶ 30; Phillips, 415 F.3d at 1314 ("In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words."). Cypress' use of "shortly after" potentially indicates an indefinite (though short) delay after the first event, which does not carry this same meaning of "as soon as." Moreover, looking to the specification of the '861 Patent, the essence of the disclosed invention is speed. Indeed, the specification itself repeatedly uses "as soon as" synonymously with "immediately after." See, e.g., '861 Patent, cols. 2:55-62, 3:22-26, 4:57-67. Thus, whatever "shortly after" means, it is not consistent with the specification's emphasis on speed – the critical aspect of the '861 Patent – and therefore is not a proper construction of "as soon as." See generally Phillips, 415 F.3d at 1314 (holding that claim terms are given the meaning with which they are used in the specification); Osram GmbH v. Int'l Trade Comm'n, 505 F.3d 1351, 1358 (Fed. Cir. 2007) (holding that a construction was erroneous where it was "at odds with the purposes of the invention.").

As to GSI's proposal, to include "without delay" in the construction would impermissibly adopt a limitation that is not present in the claims. Phillips, 415 F.3d at 1312. Further, Cypress is correct that there is some inherent delay between amplification of the read data and the appearance of write data, as shown in figure 4 of the specification. Though this delay is minimal, it is not entirely absent, and the Court will not construe the disputed term to be inconsistent with the specification. See Fujitsu Ltd. v. Netgear, Inc., 620 F.3d 1321, 1335 (Fed. Cir. 2010). Thus, the Court finds that the "without delay" portion of GSI's proposed construction is inconsistent with the patent and its specification and should not be included in the Court's construction of the term.

The Court adopts a modified version of GSI's proposed construction, and construes "as soon as" to mean "immediately after." Accordingly, the Court finds that "as soon as" / "as soon as

read data . . . is amplified" means "immediately after" / "immediately after read data . . . is amplified."

"Amplified by a sense amplifier"

Disputed Claim Term	Cypress's Proposal	GSI's Proposal
"amplified by a sense amplifier"	Plain meaning, which is "detected and captured by a sense amplifier"	"detected by a sense amplifier"

Cypress contends that this term does not require construction but that if the Court decides to construe the term, it should conclude that "amplified" means "detected and captured" by a sense amplifier. ECF No. 68 at 14. GSI contends that "detected and captured" is redundant because "captured" is subsumed within "detected" and that Cypress is attempting to apply an overly broad construction to the disputed term. ECF No. 74 at 24.

Because the parties agree that "detected" should be included in the construction, the Court focuses on the disputed portion of the proposed constructions—i.e., "and captured." Looking to the claims and specification, "captured" is used as a synonym for "detected" and refers to the sensing, by the sense amplifier, of the low-voltage data signal that transmits read or write memory information. See, e.g., '861 Patent, col. 3:44; claim 1, col. 5:37-55. Thus, the use of "capture" in this context is redundant and would only confuse the jury's understanding of the '861 Patent. The Court rejects Cypress' proposal that "amplified by a sense amplifier" means "detected and captured by a sense amplifier."

Thus, the Court adopts GSI's proposed construction: "detected by a sense amplifier."

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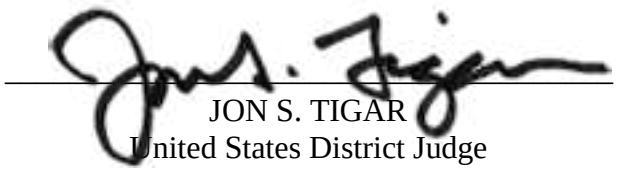
V. CONCLUSION

For the foregoing reasons, the Court construes the disputed claim terms as follows:

Term	Construction
"as soon as" / "as soon as read data . . . is amplified"	"immediately after" / "immediately after read data . . . is amplified"
"amplified by a sense amplifier"	"detected by a sense amplifier"

IT IS SO ORDERED.

Dated: November 25, 2014



JON S. TIGAR
United States District Judge