IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

ENOVA TECHNOLOGY CORPORATION,	:	
	:	
Plaintiff,	:	
	:	
v.	:	C.A. No. 10-04-LPS
	:	
INITIO CORPORATION, ET AL.,	:	
	:	
Defendants.	:	

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MEMORANDUM OPINION

December 28, 2012
Wilmington, Delaware.

STARK, U.S. District Judge:

I. INTRODUCTION

Plaintiff Enova Technology Corporation ("Plaintiff" or "Enova") filed suit against defendants Initio Corporation, Initio Corporation (California), Western Digital Corporation, Buffalo Inc., and Buffalo Technology (USA), Inc.[1] (collectively, "Defendants"), alleging infringement of U.S. Patent Nos. 7,136,995 ("the '995 patent"), entitled "Cryptographic Device," and 7,900,057 ("the '057 patent"), entitled "Cryptographic Serial ATA Apparatus and Method" (collectively, the "patents-in-suit").[2] (*See* Docket Item ("D.I.") 1) Previously, there was a third patent-in-suit – U.S. Patent No. 7,386,734 – but, on December 3, 2012, the Court granted the parties' requests to dismiss claims relating to this patent. (D.I. 359; D.I. 360)

The Court held a *Markman* hearing on December 13, 2011. (*See Markman* Hr'g Tr., Dec. 13, 2011 (D.I. 190) (hereinafter "Tr.")) The Court now construes the disputed claims in the two patents for which infringement claims remain pending.[3]

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[1]On September 10, 2012, the Court granted a joint motion to dismiss and dismissed without prejudice all claims as between Enova and Defendants Buffalo Inc. and Buffalo Technology (USA), Inc. (D.I. 271)

[2]The '995 and '057 patents are in the record at D.I. 116 Exs. C & E.

[3]In their claim construction briefs, the parties addressed in excess of 30 disputed terms (among the then three patents-in-suit). (D.I. 129; D.I. 139) By Order following the *Markman* hearing, the Court directed the parties to reduce the number of disputes they wished the Court to resolve to no more than 10. (D.I. 166) On December 19, 2011, the parties provided the Court with their list of 10 terms for construction. (D.I. 168) Following the elimination of the '734 patent from the case, the Court ordered and received a joint status report with the parties' proposals for which disputed claim terms the Court should now address. (D.I. 361; D.I. 374) Under the circumstances, the Court agrees with Enova that "the proper set of terms for the Court to prioritize in claim construction are those terms left at issue from the set of terms the parties agreed were most important as submitted after the parties completed the claim construction process last year, removing only those terms which were unique to the now-dismissed '734

II. LEGAL STANDARDS

"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) (internal quotation marks omitted). Construing the claims of a patent presents a question of law. *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 977-78 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370, 388-90 (1996). "[T]here is no magic formula or catechism for conducting claim construction." *Phillips*, 415 F.3d at 1324. Instead, the court is free to attach the appropriate weight to appropriate sources "in light of the statutes and policies that inform patent law." *Id.*

"[T]he words of a claim are generally given their ordinary and customary meaning . . . [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 1312-13 (internal citations and quotation marks omitted). "[T]he ordinary meaning of a claim term is its meaning to the ordinary artisan after reading the entire patent." *Id.* at 1321 (internal quotation marks omitted). The patent specification "is always highly relevant to the

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Patent claims." (D.I. 374 at 1) Seven such disputed terms remain. (*Id.* at 2-3) The Court rejects Defendants' request that the Court now construe approximately 29 claim terms, including many whose meaning was never previously disputed and have not been the subject of *Markman* briefing or argument at the *Markman* hearing. (*See id.* at 12) To the extent additional claim terms require construction, the Court will provide such constructions no later than in connection with preparation of the final jury instructions. *See generally AFG Indus., Inc. v. Cardinal IG Co., Inc.*, 239 F.3d 1239, 1247 (Fed. Cir. 2001) ("It is critical for courts to set forth an express construction of the material claim terms in dispute, in part because the claim construction becomes the basis of the jury instructions, should the case go to trial."). To the extent any party believes that additional claim terms still need to be construed, it shall provide its proposed constructions, and support for them, in the proposed final pretrial order. (*See generally* Tr. at 107-08) (discussing with defense counsel how claim construction might proceed)

claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

While "the claims themselves provide substantial guidance as to the meaning of particular claim terms," the context of the surrounding words of the claim also must be considered. *Phillips*, 415 F.3d at 1314. Furthermore, "[o]ther claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment . . . [b]ecause claim terms are normally used consistently throughout the patent . . . ." *Id.* (internal citation omitted).

It is likewise true that "[d]ifferences among claims can also be a useful guide . . . . For example, the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim." *Id.* at 1314-15 (internal citation omitted). This "presumption is especially strong when the limitation in dispute is the only meaningful difference between an independent and dependent claim, and one party is urging that the limitation in the dependent claim should be read into the independent claim." *SunRace Roots Enter. Co., Ltd. v. SRAM Corp.*, 336 F.3d 1298, 1303 (Fed. Cir. 2003).

It is also possible that "the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." *Phillips*, 415 F.3d at 1316. It bears emphasis that "[e]ven when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (internal quotation marks omitted), *aff'd*, 481 F.3d 1371 (Fed. Cir. 2007).

In addition to the specification, a court "should also consider the patent's prosecution history, if it is in evidence." *Markman*, 52 F.3d at 980. The prosecution history, which is "intrinsic evidence," "consists of the complete record of the proceedings before the PTO [Patent and Trademark Office] and includes the prior art cited during the examination of the patent." *Phillips*, 415 F.3d at 1317. "[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Id.*

A court also may rely on "extrinsic evidence," which "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Markman*, 52 F.3d at 980. For instance, technical dictionaries can assist the court in determining the meaning of a term to those of skill in the relevant art because such dictionaries "endeavor to collect the accepted meanings of terms used in various fields of science and technology." *Phillips*, 415 F.3d at 1318. In addition, expert testimony can be useful "to ensure that the court's understanding of the technical aspects of the patent is consistent with that of a person of ordinary skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field." *Id.* Nonetheless, courts must not lose sight of the fact that "expert reports and testimony [are] generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in intrinsic evidence." *Id.* Overall, while extrinsic evidence "may be useful" to the court, it is "less reliable" than intrinsic evidence, and its consideration "is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." *Id.* at 1318-19.

Finally, "[t]he construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Renishaw PLC v. Marposs Societa' Per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998). It follows that "a claim interpretation that would exclude the inventor's device is rarely the correct interpretation." *Osram GmbH v. Int'l Trade Comm'n*, 505 F.3d 1351, 1358 (Fed. Cir. 2007).

III. CONSTRUCTION OF DISPUTED TERMS

A. "encrypted" (and variations, including "encryption," "encrypt," "encrypting") ('995 patent claims 1, 5, 9, 13 and 14; '057 patent claims 1, 33, 40, 42, 45 and 48)[4]

1. Plaintiff's Proposed Construction: "transformed plain text into cipher text using an algorithm"

2. Defendants' Proposed Construction: "processed in such a way as to change the form of the data to prevent unauthorized access to the data"

3. Court's Construction: "transformed plain text into cipher text using an algorithm"

The Court will adopt Plaintiff's construction. As Plaintiff explains, "[t]o encrypt a set of data, one applies an encryption algorithm, or cipher algorithm, to the data, or text, which turns it into cipher text, unreadable to anyone without the key to decrypt it." (D.I. 129 at 8; *see also* '995 patent col.5 ll.6-23 ("Cipher engine 436 is . . . programmed to transparently encrypt/decrypt streaming data . . . . Cipher engine 436 may include a 64-bit, 128-bit, or other data width interface depending on the ciphering algorithm being used."))

The Court does not find support for Defendants' suggestion that encryption must always

[4]The parties agreed that "encrypted" and related terms should be construed consistently across the patents-in-suit. (*See* D.I. 116 Ex. B at 3; D.I. 129 at 8 n.3; Tr. at 51; D.I. 168 at 2; D.I. 374 at 2)

"prevent" unauthorized access.[5] Even if this is the intended purpose of the invention, the Court is not persuaded that this purpose needs to be incorporated into the construction of the claim term "encrypted." Nor is it clear precisely what Defendants mean by their proposed "change the form of the data" language.

B. "passed through" ('995 patent claims 1, 5, 9, 13 and 14)

1. Plaintiffs' Proposed Construction: "not encrypted or decrypted"

2. Defendants' Proposed Construction: "forwarded without encryption or decryption or transformation"

3. Court's Construction: "not encrypted or decrypted"

Again, the Court will adopt Plaintiff's proposed construction. The specification provides:

> Main controller 432 receives input from data stream interceptor 431 and determines whether an incoming data stream, which may include command/control and/or data signals, is to be encrypted, decrypted or passed through unmodified.

('995 patent col.4 ll.55-58) The parties' dispute is whether data in the third of these categories – "passed through unmodified" data – can undergo any modification at all (such as may occur with a protocol translator, given that a data generator and a data storage device may be "speaking different languages"). (*See, e.g.,* D.I. 137 at 10-11; Tr. at 73-75) The Court is not persuaded by Defendants' proposal that such data must be forwarded without any transformation whatsoever. Instead, "passed through" as used in the patent claims means simply that the data is not encrypted nor decrypted.

[5]Defendants represented at the hearing that their construction is not intended to require "perfect" prevention of "all" unauthorized access to data. (Tr. at 56-57)

C. "a data stream interceptor that distinguishes between command/control and data signal transfers" ('995 patent claims 1, 5, 9, 13 and 14)

1. Plaintiff's Proposed Construction: "one or more components adapted to intercept at least one data stream and distinguish between command/control signal transfers and data signal transfers"

2. Defendants' Proposed Construction: "a unit that intercepts signals that would otherwise be communicated between the 'data generating device' and the 'data storage device' and distinguishes between transfers of command and control signals and transfers of data signals"

3. Court's Construction: "one or more components adapted to intercept at least one data stream and distinguish between command/control signal transfers and data signal transfers"

For their proposed construction, Defendants rely primarily on their contention that there was a prosecution history disclaimer. (*See* Tr. at 66; D.I. 131 at 10-12; D.I. 139 at 5) The Court does not agree. Defendants have failed to meet their heavy burden of showing a "clear and unmistakable" disavowal. *Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1325-26 (Fed. Cir. 2003). Moreover, as Plaintiff points out, the specification discloses an embodiment in which the patented cryptographic device "may be integrated in ASIC chip form" ('995 patent col.4 ll.6-7); an "ASIC" (i.e., an "Application Specific Integrated Circuit") is a "single integrated chip customized for a particular use." (D.I. 138, Wann Decl. ¶ 2; *see also* D.I. 137 at 9) Defendants' construction would limit the claims to such a single, integrated "unit," which is unwarranted given the permissive "may" language in the specification and the broad "a data stream interceptor" language of the claims. *See generally KCJ Corp. v. Kinetic Concepts, Inc.*, 223 F.3d 1351, 1356 (Fed. Cir. 2000) (stating "a" usually means "one or more" in patent claims).

D. "transparently" ('995 patent claims 1, 5, 9, 13 and 14)

1. Plaintiff's Proposed Construction: "functionally, data transfers appear to be performed directly between the data generating device and the data storage device"

2. Defendants' Proposed Construction: "the 'data generating device' and 'data storage device' appear to each other to be directly connected"

3. Court's Construction: "functionally, data transfers appear to be performed directly between the data generating device and the data storage device"

The Court's decision to adopt the Plaintiff's proposed construction for this term follows from its earlier decisions to adopt Plaintiff's proposed constructions of the other disputed terms.[6] Additionally, Plaintiff's proposed construction is more consistent with the patent's teaching that the data generating device and the data storage device may "speak different languages," provided there is a protocol translator assisting them.

E. "cryptographic Serial ATA (SATA) apparatus" ('057 patent, preamble to claim 1)

1. Plaintiff's Proposed Construction: This is not a claim limitation (preamble).

2. Defendants' Proposed Construction: "an apparatus with interfaces that comply with the SATA standard that encrypt or decrypt data"

3. Court's Construction: The preamble is not a claim limitation; needs no construction.

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[6]At the hearing, Defendants referred to the relatedness of several of the disputed terms, arguing, for instance: "Well, we know from our prior discussion that the interceptor can't be part of this cipher engine because of the way in which the data stream interceptor was characterized and argued during the prosecution history. . . . So with the cryptographic device being invisible and with the storage device and host device perceiving themselves to be directly interacting, 'transparently' in our view must mean that the recited elements appear to each other to be directly connected." (Tr. at 75-76)

The parties disagree as to whether this disputed term, appearing in the preamble of claim 1, is a limitation of the claim. The Court agrees with Plaintiff that it is not. Therefore, this term does not require construction.

Generally a preamble does not limit the claims. *See Allen Eng'g Corp. v. Bartell Indus., Inc.*, 299 F.3d 1336, 1346 (Fed. Cir. 2002). However, language in a preamble is construed as limiting "if it recites essential structure or steps, or if it is necessary to give life, meaning, and vitality to the claim." *Catalina Mktg. Int'l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir. 2002) (internal quotation marks omitted). Consistent with *Catalina*, a preamble term is limiting if it: (1) provides antecedent basis for a claim term, (2) is essential to help understand the claim terms, (3) provides any additional steps or structure that is underscored as important by the specification, or (4) was relied on during prosecution. *See id.*

Defendants' contention that construing this claim term in the manner they propose would breath life into claims 13-15 is unpersuasive. (*See* D.I. 139 at 2 n.1) Defendants' primary contention is that there cannot be a protocol translator inside the device. (*See* Tr. at 92-100) But Defendants have not persuaded the Court that a device containing a protocol translator is excluded from the scope of the claims.

F. "host" ('057 patent claims 1, 42 and 48)

1. Plaintiff's Proposed Construction: Ordinary meaning

2. Defendants' Proposed Construction: "A SATA host adapter, which may be provided on a host PC (Personal Computer)"

3. Court's Construction: Ordinary meaning

The Court agrees with Plaintiff that "non-SATA host embodiments are disclosed in the

specification." (Tr. at 35; *see also* D.I. 137 at 2-3; '057 patent col.8 l.66 - col. 9 l.3)[7] The Court finds no basis to adopt Defendants' construction, which would narrow the "host" in the claims to only SATA hosts.

G. "said SATA protocol stack is operatively coupled to a USB (Universal Serial Bus) interface via a SATA-to-USB protocol translator" ('057 patent claim 6)

1. Plaintiff's Proposed Construction: Ordinary meaning

2. Defendants' Proposed Construction: "the interface that complies with the SATA standard (from claim 1) communicates with an external USB interface of a device via a SATA-to-USB protocol translator"

3. Court's Construction: Ordinary meaning

Defendants' proposal is supported by neither the specification nor the claim language. Claim 6 provides: "The cryptographic SATA apparatus of claim 1, wherein said SATA protocol stack is operatively coupled to a USB (Universal Serial Bus) interface via a SATA-to-USB protocol translator." ('057 patent, claim 6, col.13 ll.40-43) Claim 6 depends from claim 1, which describes the SATA protocol stack as a "SATA protocol stack for communicating with an interface of a device." (*Id.* at claim 1, col.13 ll.8-9) Further, the specification states, for example:

> FIG. 7 is a partial (one side only) schematic representation of one embodiment of cryptographic SATA apparatus 20 (FIG. 1) in accordance with the present invention. A person of skill in the art would recognize that other alternative configurations (such as a parallel ATA interface and/or a USB interface) may be provided on

[7]To the extent Plaintiff is correct that there is but "a single core issue" presented by the various disputes arising under the '057 patent – "whether or not the patent can rightly have a non-SATA side to it" (Tr. at 43) – the Court agrees with Plaintiff that the patent can have a non-SATA side to it. Defendants agreed that resolution of this single issue would resolve much, but not necessarily all, of the parties' claim construction disputes relating to the '057 patent. (*Id.* at 46-47)

the other side of cryptographic SATA apparatus 20.

(*Id.* at col.8 l.64 - col.9 l.3) As Plaintiff observes, such a disclosure "clearly demonstrates to one of skill in the art that the invention encompasses embodiments where one side of the invention uses a SATA protocol and the other side uses another protocol, with given examples of parallel ATA and USB." (D.I. 137 at 14)

IV. CONCLUSION

For the reasons given above, the Court will construe the terms of the patents-in-suit consistent with this Memorandum Opinion. An appropriate Order will be entered.