IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

MAZ ENCRYPTION TECHNOLOGIES, LLC Plaintiff, v. LENOVO (UNITED STATES) INC., Defendant.	)	C.A. No. 13-303-LPS
MAZ ENCRYPTION TECHNOLOGIES, LLC Plaintiff, v. BLACKBERRY CORPORATION, Defendant.	)	C.A. No. 13-304-LPS
MAZ ENCRYPTION TECHNOLOGIES, LLC Plaintiff, v. TOSHIBA AMERICA INFORMATION, SYSTEMS, INC. Defendant.	)	C.A. No. 13-305-LPS

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MEMORANDUM OPINION

June 30, 2015
Wilmington, Delaware

STARK, U.S. District Judge:

I. BACKGROUND

Plaintiff MAZ Encryption Technologies LLC ("Plaintiff" or "MAZ") filed patent infringement actions against Defendants Lenovo (United States) Inc. ("Lenovo"), BlackBerry Corporation ("BlackBerry"), and Toshiba America Information Systems, Inc. ("TAIS") (collectively, "Defendants"). Plaintiff asserts U.S. Patent No. 6,185,681 ("the '681 Patent") against BlackBerry, and asserts U.S. Patent No. 8,359,476 ("the '476 Patent") against Lenovo and TAIS. The '681 patent and '476 patent relate generally to a method for encrypting and decrypting data. The '476 patent is a descendant of the '681 patent and the two largely share a specification.

Pending before the Court is the issue of claim construction of various disputed terms of the patents-in-suit. The parties completed briefing on claim construction on February 5, 2015. (C.A.13-303 D.I. 58, 62, 67, 70; C.A. 13-304 D.I. 56, 59, 64, 66; C.A. 13-305 D.I. 58, 62, 67, 70) The Court heard argument on claim construction on May 4, 2015. (C.A. No. 13-303 D.I. 93) (hereinafter "Tr.")

II. LEGAL STANDARDS

The ultimate question of the proper construction of the patent is a question of law. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837 (2015) (citing *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 388-91 (1996)). "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). "[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 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 v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996). 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.*

In some cases, "the district court will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science or the meaning of a term in the relevant art during the relevant time period." *Teva*, 135 S. Ct. at 841. Extrinsic evidence "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. Where the intrinsic record unambiguously describes the scope of the patented invention, reliance on any extrinsic evidence is improper. *See Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1308 (Fed. Cir. 1999) (citing *Vitronics*, 90 F.3d at 1583).

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. DISPUTED TERMS

A. The '681 Patent

1. "Crypto module"

Plaintiff's Proposal	Defendant BlackBerry's Proposal	Court's Construction
A software module which transparently handles the encryption of documents and the decryption of encrypted documents	Module - a program unit that is discrete and identifiable with respect to compiling, combining with other units, and loading *Alternatively:* a program unit that is discrete Crypto module - a module functionally disposed between the application and electronic document management system, which transparently handles the encryption of documents and the decryption of encrypted documents	A portion of a software program which transparently handles the encryption of documents and the decryption of encrypted documents

The parties agree that the crypto module "transparently handles the encryption of documents and the decryption of encrypted documents." However, the parties disagree as to whether the "module" portion of this term must be construed and whether the "module" must be discrete and identifiable. BlackBerry asserts that "module" must be construed separately from crypto module in order to provide the jury guidance. The parties further disagree as to whether the crypto module must be located between the application and the electronic document management system (EDMS).

The Court finds that a separate construction of "module" is necessary in order to provide

the jury with appropriate guidance, given that there is a dispute among the parties as to whether a "module" is discrete and identifiable. Unfortunately, Plaintiff does not offer a construction of just "module" and BlackBerry's proposed "program unit" is unhelpful. At the hearing, however, Plaintiff offered a constructive alternative, describing "module" as "a portion of a device and/or software program" and similarly as "just a smaller portion of a program." (Tr. at 24) This description is consistent with the intrinsic evidence, does not improperly import limitations from the specification into the claims, and will be helpful to the jury. Defendants have failed to point to a persuasive basis for requiring that a module be entirely discrete and identifiable, apart from all other portions of a software program. Accordingly, the Court has altered Plaintiff's proposed construction of crypto module to include Plaintiff's description at the hearing of a module.

Although the preferred embodiment depicted in Figure 3 of the patent and in the specification[1] places the crypto module between the application and the EDM client, no persuasive basis has been given for requiring this location as a limitation in the claim language. BlackBerry identifies no disclaimer of alternate embodiments. *See Omega Eng'g, Inc. v. Raytek Corp.*, 334 F.3d 1314, 1325-26 (Fed. Cir. 2003) (stating that disclaimer must be clear and unambiguous). Instead, the specification discloses an alternative embodiment, in which "[a] crypto server is also included ***in*** the electronic document management system of the invention." ('681 Patent, col. 4 ll. 59-60) (emphasis added) This embodiment would be read out of the claims were the Court to accept BlackBerry's construction.

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[1]"In typical prior art systems, the application 350 would communicate directly with the EDM client 310. However, in accordance with the invention, the crypto server 330 is functionally disposed between the application 350 and the EDM client 310." ('681 Patent, col. 7 ll. 47-51)

2. "Electronic document management system"

Plaintiff's Proposal	Defendant BlackBerry's Proposal	Court's Construction
This term does not need further construction.	A combination of databases, indexes, and search engines, which provide organizations with the ability to find any document, created in any application, by anyone, at any time, dealing with any subject, at any place in the world.	A combination of databases, indexes, and preferably search engines, utilized to store and retrieve electronic documents distributed across an organization

The parties dispute whether "electronic document management system" (EDMS) requires construction and whether, if so, the construction must distinguish an "EDMS" from an operating system or file system used to store and organize files locally on a computer. (*See* C.A. No. 13-304 D.I. 56 at 15) The parties additionally dispute the scope of the capability of the EDMS.

The Court finds that the parties' dispute with respect to this term can and should be resolved by claim construction. *See O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co., Ltd.*, 521 F.3d 1351, 1360 (Fed. Cir. 2008) ("When the parties raise an actual dispute regarding the proper scope of these claims, the court, not the jury, must resolve that dispute."). As for the proper construction, the Court is not persuaded by BlackBerry that the claim language or specification requires distinguishing an EDMS from an operating system. Nor does the Court find that a search engine is required to be part of an EDMS, but the Court recognizes it is preferred that this be the case.

The specification states, "An electronic document management system (EDMS) is a

combination of databases, indexes, and search engines utilized to store and retrieve electronic documents distributed across an organization." ('681 Patent, col. 1 ll. 44-47) The Court concludes this is the basis for an appropriate construction of EDMS – although it is not quite a definition, for reasons including that the statement appears in the patent's background and not as part of the section explicitly defining terms for purposes of the patent. BlackBerry proposes incorporating additional language from the specification, particularly that it can "provide organizations with the ability to find any document, created in any application, by anyone, at any time, dealing with any subject, at any place in the world." ('681 Patent, col. 1 ll. 33-36) It is clear that this is an "aim[]" of "Electronic Document Management" as disclosed in the specification (*see id.*), but it does not follow that a system's failure to fully accomplish this ambitious aim renders the system something other than an embodiment of the claimed EDMS.

3. "Table"

Plaintiff's Proposal	**Defendant BlackBerry's Proposal**	**Court's Construction**
This term does not need further construction.	A data structure stored in the EDM database with rows and columns, with data occupying or potentially occupying each cell formed by a row-column intersection	A collection of data in which each item is uniquely identified by a label, by its position relative to other items, or by some other means

The parties dispute whether this term needs any construction and, if so, whether the construction must distinguish a table from a list or other means of organizing information. The parties' dispute here (e.g., whether a "list" is a "table") must be resolved by claim construction. The ordinary meaning of "table" in the context of the patent-in-suit is not quite as plain as Plaintiff insists.

Plaintiff asserts that a table "simply means 'collection of records' or 'collection of data'" (C.A. No. 13-304 D.I. 66 at 7), in contrast to BlackBerry's more limited proposal, which requires "rows and columns." The claim language states that "for each of the names of encrypted documents in the first table, key names [are] associated with the encryption key values for the encrypted documents . . ." ('681 Patent, claim 31) There is nothing in the claims or the specification which define a table as being limited to rows and columns, with data stored only at the appropriate intersections. To the contrary, as Plaintiff points out, the specification discloses: "The crypto server 330 preferably utilizes and updates an encrypted files table in the EDM database 345 which ***lists*** each encrypted file." ('681 Patent, col. 8 ll. 4-6) (emphasis added) While other language in the claim requires data to be "associated" with an encrypted document, the specification seems to contemplate "table" as something broader than BlackBerry's proposal.

While the Court will not import the necessity of rows and columns into the claims, the claim language conveys that a mere "collection of data" is not a table. Instead, a table must be something more than a list, i.e., a way to "associate" the data. What is required is some form of an "association" of data. (*See* Tr. at 49) (Plaintiff explaining that association is needed) The IEEE definition cited by Plaintiff is informative. (*See* D.I. 60-3 at 7)

4. "First table"/"second table"

Term	Plaintiff's Proposal	Defendant BlackBerry's Proposal	Court's Construction
First Table[2]	This term does not need further construction.	A data structure stored in the EDM database with rows and columns, with data occupying or potentially occupying each cell formed by a row-column intersection	A collection of data in which each item is uniquely identified by a label, by its position relative to other items, or by some other means
Second Table	This term does not need further construction.	A data structure stored in a smart card or file server with rows and columns, with data occupying or potentially occupying each cell formed by a row-column intersection	A collection of data in which each item is uniquely identified by a label, by its position relative to other items, or by some other means

Having already construed "table," the remaining dispute in regard to these terms is whether the "first table" must be "stored in the EDM database," and whether the "second table" must be "stored in a smart card or file server." BlackBerry asserts that its proposed constructions do not improperly import limitations from the specification but, rather, "illustrate a practical necessity that helps to establish an effective construction of the term[s]. The first table must be stored somewhere in order to function in the invention, and the specification shows that the only effective space would be within the EDM database." (C.A. No. 13-304 D.I. 64 at 7) Furthermore, BlackBerry argues that its proposed construction distinguishes the location of the

[2]The briefing on "table" and "first table" overlaps at times, and each party's proposals for the two terms are identical (i.e., Plaintiff advocates the same position for "table" and "first table," as does BlackBerry). The Court addresses "first table" separately from "table" based on the parties' dispute as to whether a "first table" must be "stored in the EDM database."

first table from the second table, which is required by the claim language. (*See* C.A. No. 13-304 D.I. 56 at 19) Plaintiff counters that BlackBerry's constructions would improperly import limitations into the claims from preferred embodiments. (*See* C.A. No. 13-304 D.I. 66 at 8)

The specification contains ample information as to the purpose and function of the first and second tables. It is not Plaintiff's burden to show there are other potential locations for the tables; the construction of first table and second table do not necessarily need a location reference at all, especially given the claim language specifying the purpose of each table and outlining methods for using tables to encrypt and decrypt documents. Furthermore, the construction adopted by the Court need not distinguish between the first and second table; the claim language elsewhere does so. Finally, while the preferred embodiment may locate the first table in the EDM database and the second table on a smart card, the claims do not exclude other possibilities. (*See* C.A. No. 13-304 D.I. 66 at 9 (pointing to "disk 280" as additional location for the second table, as alternative to smart cards); '681 Patent, col. 6 ll. 9-13)

Thus, the Court construes "first table" and "second table" consistent with its construction of "table." The Court will not import additional limitations from the specification into these terms and will not read out of the claims an embodiment disclosed in the specification.

5. "Application program"

Plaintiff's Proposal	**Defendant BlackBerry's Proposal**	**Court's Construction**
This term does not need further construction.	A computer software program designed for a specific job, such as word processing, accounting, spreadsheet, etc.	A computer software program designed for a specific job, such as word processing, accounting, spreadsheet, etc.

The parties dispute whether the term "application program" needs construction and, if so,

whether it must be limited to a computer program designed for a specific job. In particular, BlackBerry is concerned that without construction, the claim term could be interpreted to encompass something like an operating system, which, in its view, would be much broader than the intended scope of the term "application program." (Tr. at 60)

The specification states: "The application 350 is a collection of software components used to perform specific types of user-oriented work and may be, for example, a graphic editor, a word processor or a spreadsheet." ('681 Patent, col. 6 ll. 49-52) Based on this guidance, the Court concludes that the application program is something distinct from an operating system, and is, instead, something which performs specific tasks.[3] Additionally, the Court's construction includes BlackBerry's exemplary list, which is not exhaustive of everything that could be an "application program."

6. "Selecting"

Plaintiff's Proposal	**Defendant BlackBerry's Proposal**	**Court's Construction**
This term does not need further construction.	To choose from a number of options or alternatives	To choose from one or more options or alternatives

The parties dispute whether construction of the term "selecting" is necessary and, if so, whether it requires a "number of options or alternatives." The Court concludes it must construe the term "selecting," as the parties dispute whether a system containing only one document – and, therefore, presenting no alternative choices to the user – still involves a user "selecting" a

[3]Plaintiff agreed that an operating system, as a whole, is not an application program in the context of the patent-in-suit, but asserted that application programs could be built into an operating system. (Tr. at 64) The Court's construction is not intended to preclude an application program that is built into an operating system from being an application program as used in the claims.

document to open. BlackBerry's proposed construction, which would appear to take this scenario outside the scope of the claims, is based on an extrinsic dictionary definition, and is unconvincing in the context of the patent-in-suit. In any event, at the hearing BlackBerry agreed to the construction the Court now adopts. (*See* Tr. at 68)

7. **"Key names"**

Plaintiff's Proposal	**Defendant BlackBerry's Proposal**	**Court's Construction**
A descriptor for administering an encryption key value or a decryption key value	An identifier for an encryption key value or decryption key value which is used by the user and/or system administrator for administering the encryption key value or decryption key value[4]	A descriptor for an encryption key value or a decryption key value which may be used by the user and/or system administrator for administering an encryption key value or decryption key value

The parties agree that the key name is an identifier (or descriptor) for an encryption or decryption key value. The dispute is whether the key name must be used by a human user (system administrator). BlackBerry supports its proposed construction, requiring such involvement, by arguing as follows:

> The '681 Patent specification describes the problem with encryption/decryption keys - long, multi digit numbers, "which are difficult to remember and even difficult to transcribe." '681 Patent at 9:20-24. This problem is inherently a human one; a computer does not have difficulty remembering or transcribing multi-digit numbers. Therefore, the specification necessarily implies that the key name may be used by a person (user, system administrator) to administer key values.

[4]Although the joint claim construction chart states "for administering the encryption key value" (C.A. No. 13-303 D.I. 85-1), Defendant's responsive brief states that "BlackBerry will modify its definition by changing the phrase "for administering the encryption key value" to "for administering the encryption key value or decryption key value" (C.A. No. 13-304 D.I. 64 at 12).

(C.A. No. 13-304 D.I. 56 at 22) Plaintiff responds that BlackBerry's proposal "converts a permissive and optional characteristic ('may be used') into a requirement ('is used')." (C.A. No. 13-304 D.I. 66 at 10)

The specification states, "The encryption key name is ***preferably*** an alphanumeric descriptor which ***may be used by the user and/or system administrator*** for administering the encryption key value." ('681 Patent, col. 9 ll. 25-28) (emphasis added) This is not a statement that the key name ***must be used by*** the user and/or system administrator. Therefore, the Court modifies BlackBerry's construction to permit (rather than require) use by a human user and/or system administrator.

8. "Associated"

Plaintiff's Proposal	**Defendant BlackBerry's Proposal**	**Court's Construction**
This term does not need further construction.	A one-to-one correlation between a key name and key value or a key name and names of encrypted files	A correlation between a key name and key value or a key name and names of encrypted files

BlackBerry's proposed construction requires a "one-to-one correlation between a key name and key value or a key name and names of encrypted files," based on statements made by MAZ during reexamination of the '681 Patent. (*See* C.A. No. 13-303 D.I. 61 Ex. 5 ¶ 10 (declaration of software engineer John Cosgrove to U.S. PTO on February 10, 2003, stating that the ordinary computer programmer would recognize "a 'direct' or one-to-one association between the documents and the key names through the 'encrypted files table'"))

Plaintiff contends that the statements by Mr. Cosgrove were in relation to the unasserted, and now cancelled, claim 1, which explicitly stated that the "key name [is] directly associated

with the document." (C.A. No. 13-304 D.I. 66 at 11; *see also* C.A. No. 13-303 D.I. 61 Ex. 5 ¶ 11) In connection with that claim, MAZ argued that a person of skill in the art would recognize the one-to-one association. (C.A. No. 13-303 D.I. 61 Ex. 5 ¶ 10) ("This feature is at least implicit or inherent in the '681 Patent in columns 7-10.") Mr. Cosgrove stated, "If the disclosure had intended anything but a 'direct' or one-to-one association between one key name and one document, it would have been written quite differently." (*Id.* at ¶ 12)

The dispute before the Court arises in the context of claims that do not include a "direct" limitation, but instead claim a general "association." As Plaintiff states, "none of the asserted claims include the phrase 'directly associated.'" (C.A. No. 13-304 D.I. 66 at 11-12) Furthermore, the specification does not disclose that a direct association is required. (*See* '681 Patent, col. 9 ll. 17-19) (" . . . the crypto server preferably obtains an encryption key name which is associated with the document . . . .") In this context, the Court is not persuaded by BlackBerry's reliance on the Cosgrove statement. Instead, based on the entirety of the intrinsic evidence (including prosecution history), and having considered the extrinsic evidence, the Court finds that "associated" is not limited to a one-to-one correlation, and instead construes the term to include the more general phrase "a correlation."

B. The '476 Patent

1. "Encryption and decryption computer"

Plaintiff's Proposal	**Defendants' Proposal**	**Court's Construction**

This term does not need further construction	a computer, including at least a central processing unit (CPU), short-term memory (e.g. RAM), long-term memory (e.g. hard disk drive), and instructions for cryptography, which computer encrypts non-encrypted data and decrypts encrypted data	A computer, including at least a central processing unit (CPU), short-term memory (e.g. RAM), long-term memory (e.g. hard disk drive), and instructions for cryptography, which computer encrypts non-encrypted data and decrypts encrypted data

The parties dispute whether this term needs construction and, if so, whether an "encryption and decryption computer" requires at least the components proposed by Defendants and needs to incorporate a definition of "encryption and decryption." The Court concludes that construction is required, given the parties' dispute as to what the claims mean by "computer" and what functions it must serve. In particular, the parties dispute whether the encryption and decryption computer must have memory components. The Court agrees with Defendants that it must.

Defendants contend that a person of ordinary skill in the art as of May 1998 understood the "customary meaning of 'computer' to include at least a central processing unit (CPU), short-term memory (*e.g.*, RAM), and long-term memory (*e.g.*, hard disk drive)." (C.A. No. 13-303 D.I. 67 at 13) This conclusion is supported by an embodiment of a general purpose computer disclosed in the patent specification:

> FIG. 2 shows a general purpose computer 200 which is representative of the workstations 150 and file servers 120. The computer 200 preferably includes an Intel Corporation (San Jose, Calif.) processor 255 and runs a Microsoft Corporation (Redmond, Wash.) Windows operating system. In conjunction with the processor 255, the computer 200 has a short term memory 250 (preferably RAM) and a long term memory 280 (preferably a hard disk) as known in the art. The computer 200 further includes a

> LAN interface 215, a display 205, a display adapter 220, a keyboard 230, a mouse 240, a smart card reader 260 and a bus 210 as known in the art.

('476 Patent, col. 4 l. 65 - col. 5 l. 8) Plaintiff, however, asserts that "[a] computer generally means a 'machine capable of executing instructions on data,'" which does not require memory. (C.A. No. 13-303 D.I. 62 at 22) Plaintiff points to no persuasive evidence that even such a computer would not require some memory (e.g., to know how to execute instructions). Hence, the Court adopts Defendants' proposal, which is expressly supported by the specification.

2. "Bio-metric user authentication apparatus"

Plaintiff's Proposal	**Defendants' Proposal**	**Court's Construction**
This term does not need further construction. *Alternatively:* A device that accepts biometric data input from a user for authentication	a device, distinct from the encryption and decryption computer, that accepts biometric data input from a user for authentication	A device that accepts biometric data input from a user for authentication

Defendants assert that the "bio-metric user authentication apparatus" must be distinct from the encryption and decryption computer, based on the structure and language of the claims. (*See* C.A. No. 13-303 D.I. 58 at 27) They further insist that for the biometric user authentication apparatus to interface with the encryption and decryption computer, as claimed in Claim 4, the components must be separate. Defendants rely on case law indicating that "[w]here a claim lists elements separately, the clear implication of the claim language is that those elements are distinct components of the patented invention." *Becton, Dickinson and Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010) (internal quotation marks omitted). However, in the Court's view, applying *Becton* here does no more than give rise to a ***presumption*** that the

bio-metric user authentication apparatus and the encryption and decryption computer are distinct. This is the beginning, not the end, of the analysis.

The specification discloses that the smart card reader can be substituted for the bio-metric user authentication apparatus, stating: "Instead of the smart card reader 260 and smart card 265, there could be provided, for example, a biometric recognition system. . . ." ('476 Patent, col. 5 ll. 30-32) The specification further discloses that the smart card reader (or, in an alternative embodiment, the substituted bio-metric user authentication apparatus) is a part of the computer itself. (*See* '476 Patent, col. 5 ll. 5-8) Defendants' proposed construction would read out of the claims this disclosed embodiment (i.e., an embodiment in which the bio-metric user authentication apparatus is not distinct from the encryption and decryption computer). The Court adopts Plaintiff's alternative proposed construction, which avoids importing limitations into the claims.

3. "A computer-readable medium storing bio-metric user identifying information and encryption and decryption data"

Plaintiff's Proposal	Defendants' Proposal	Court's Construction
This term does not need further construction.	a non-volatile storage device, distinct from the encryption and decryption computer, storing both the bio-metric user identifying information and the encryption and decryption data	A storage device storing both the bio-metric user identifying information and the encryption and decryption data

This dispute is identical to that the Court just resolved regarding the construction of "bio-metric user authentication apparatus." The specification discloses that a smart card is the preferred storage device, and in such an embodiment it would be both distinct and non-volatile. (*See, e.g.,* '476 Patent, col. 5 ll. 28-30) ("[A] data reader device and portable data storage device

such as the smart card reader 260 and smart card 265 are preferred."). However, a smart card is just one example of a computer-readable medium. As was just discussed, a bio-metric user authentication apparatus can be substituted for a smart card. Therefore, the Court will not import Defendants' proposed limitations, which are based on a smart card as a preferred embodiment and would read out of the claims an alternative disclosed embodiment.

Defendants also seek by their construction that the use of "and" in the claim term be found to require that the storage device meet the limitations of storing both bio-metric user identifying information and encryption and decryption data. (C.A. No. 13-303 D.I. 58 at 32) This limitation is supported in the '476 specification, which – although it does not refer to bio-metric data – contemplates that the computer-readable medium would hold user identifying information and the encryption keys. ('476 Patent, col. 7 ll. 25-28)

4. "Receive an application programming interface (API) for interfacing with the user authentication apparatus"

Plaintiff's Proposal	**Defendants' Proposal**	**Court's Construction**
This term does not need further construction. *Alternatively:* Receive code for interfacing with the user authentication apparatus.	Indefinite due to recitation of "receive" in this context *Alternatively:* Receive a package of functions, which functions are callable by application programs executing on the encryption and decryption computer for interfacing with any of a variety of different user authentication apparatuses.	The term is not indefinite. Receive code for interfacing with the user authentication apparatus.

Defendants contend claim 1 is indefinite because it is an apparatus claim that simultaneously requires that the computer be configured to "***receive*** an API" (software) and to

"receive from the computer-readable medium ***via*** the API" the data. Defendants argue:

> Claim 1 is not infringed by a system including the API because it is not "configured to receive" the API as required by claim 1. Similarly, claim 1 cannot be infringed by a system without API, because it is not at that time configured to receive information and read data "via the API" as required by claim 1.

(C.A. No. 13-303 D.I. 58 at 37) At bottom, Defendants' argument is that claim 1 fails to inform a person of skill in the art as to ***when*** infringement occurs. (*See id.* at 36) Plaintiff responds that claim 1 is a system or apparatus claim rather than a method claim and, as such, there is no timing requirement and the claim is not indefinite.

Defendants bear the burden of proving by clear and convincing evidence that a claim is indefinite. *See Intel Corp. v. VIA Techs., Inc.*, 319 F.3d 1357, 1366 (Fed. Cir. 2003). "[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention." *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014).

The relevant portion of Claim 1 recites:

> 1. A biometric ***system*** configured to authenticate a user for encryption or decryption, the ***system comprising:***
>
> a bio-metric user authentication apparatus;
>
> a computer-readable medium storing bio-metric user identifying information and encryption and decryption data; and
>
> an encryption and decryption computer communicating with the user authentication apparatus and ***configured to***:
>
> ***receive an application programming***

> ***interface (API)*** for interfacing with the user authentication apparatus;
>
> ***receive from*** the computer-readable medium ***via*** the API the bio-metric user identifying information . . .

('476 Patent, claim 1) (emphasis added) The term in dispute modifies the encryption and decryption computer as part of the system. That the claim language requires the computer to be "configured to . . . receive" certain information does not render the claim a method claim. Defendants argue that this claim is "like a hybrid [apparatus and method] claim" (Tr. at 134; *see also IPXL Holdings, L.L.C. v. Amazon.com, Inc.*, 430 F.3d 1377 (Fed. Cir. 2005) (holding hybrid claim indefinite), however, because the claim does not require the apparatus to "receive," which would imply a method, but instead that the apparatus be "configured to" receive/authenticate/read, it is an apparatus claim, and therefore not indefinite.

Defendants further contend that Claim 1 "claims a system with a computer that at the same time does not yet include an API and does include that API. . . . It is internally contradictory, it is uncertain in scope. And for that reason, it is indefinite." (Tr. at 133) Defendants support their contention with an expert declaration, from Jean Renard Ward, who opines:

> The "configured to: receive" an API language indicates that the computer ***does not yet have*** the API loaded on it. However, other language in claim 1, such as the computer being "configured to: receive . . . information" "via the API" and "configured to: read . . . data" "via the API," indicates that the computer is configured to perform certain functions requiring an API, indicating that the computer ***must already have*** the API loaded on it in order to be configured to perform these functions.

(C.A. No. 13-303 D.I. 59 ¶ 33) (emphasis in original) Plaintiff's expert, Craig Will, counters

with his opinion:

> I disagree with Mr. Ward that "[t]he 'configured to: receive' an API language indicates that the computer does not yet have the API loaded on it." For instance, a computer that had a configuration to receive a software package continues to have a configuration to receive the software package even after the package has been installed on the computer. The fact that a software package was able to be installed on a computer is an indication that the computer had and continues to have configuration to receive the software package. Whether or not a computer has a configuration to receive a particular software package is not dependent on whether or not the computer has the software package already installed. A person of skill in the art would understand that claim 1 of the '476 patent requires only that an encryption and decryption computer be configured to receive an API, as opposed to actually receiving an API.

(C.A. No. 13-303 D.I. 72 ¶ 31) On this record, the Court is not persuaded that Defendants have met their burden to prove by clear and convincing evidence that the claim is indefinite.

The Court reads the "configured to: receive an . . . API" limitation as not requiring any timing element. In other words, if an accused product is found to be receiving information via the API, that product also necessarily is configured to receive such API. The parties further disagree as to the construction of Application Programming Interface (API). Plaintiff's proposed construction replaces the term API with "code." Defendants replace API with "a package of functions, which functions are callable by application programs executing on the encryption and decryption computer." Defendants' proposal additionally allows for interfacing with "any of a variety of different user authentication apparatuses," rather than simply "interfacing with the user authentication apparatus," as called out in the claim language and Plaintiff's proposed construction. Plaintiff's proposal does not import extraneous limitations; it also still encompasses the "code for interfacing," which the Court believes will helpfully and accurately

clarify for the jury what is done by the API.

5. "Receive from the computer-readable medium via the API the bio-metric user identifying information"

Plaintiff's Proposal	Defendants' Proposal	Court's Construction
This term does not need further construction	Receive the biometric user identifying information from the computer-readable medium by an application program calling one or more functions of the API package of functions that interface with the user authentication apparatus.	Receive from the computer-readable medium via the code for interfacing with the user authentication apparatus the bio-metric user identifying information

The parties agree that the construction of this term follows from the discussion of the term "receive an application programming interface (API) for interfacing with the user authentication apparatus." Therefore, consistent with the discussion above, the Court will refrain from importing the specific limitations proposed by Defendants, and instead adopts a broader construction.

6. "Authenticate a user based on the bio-metric user identifying information" (claim 1)

Plaintiff's Proposal	Defendants' Proposal	Court's Construction
This term does not need further construction.	compare inputted biometric data of a user to the biometric user data retrieved from the computer-readable medium to determine whether there is a match	Plain and ordinary meaning.

Defendants contend that a construction is necessary "to ensure that the jury understands that any asserted encryption and decryption computer must perform an actual comparison

between inputted data and reference data to determine if there is a match." (C.A. No. 13-303 D.I. 58 at 43) Plaintiff contends that the claim and specification "use 'authenticate' in a general sense, and do not limit the term or the phrase to a specific type of authentication." (C.A. No. 13-303 D.I. 62 at 28)

As reasonable as Defendants' proposal may otherwise be, it is not based on the specification or the claim language. Rather, Defendants are attempting to limit authentication to a "compare and match" method, which is not described in the specification.

7. "Read via the API the encryption and decryption data once the user is authenticated"

Plaintiff's Proposal	Defendants' Proposal	Court's Construction
This term does not need further construction	once the user is authenticated, read the encryption and decryption data by an application program calling one or more functions of the API package of functions that interface with the user authentication apparatus	Read via the code for interfacing with the user authentication apparatus the encryption and decryption data once the user is authenticated

Defendants' proposed construction for this term imports limitations which the Court has already rejected in connection with other claim terms. For the same reasons, the Court will not import the API-related limitations proposed by Defendants.

8. "Storing user identifying information, encryption and decryption data on a computer-readable medium"

Plaintiff's Proposal	Defendants' Proposal	Court's Construction

This term does not need further construction	storing both biometric data relating to the user and encryption and decryption data on a non-volatile storage device that is distinct from the encryption and decryption computer.	Storing both biometric data relating to the user and encryption and decryption data on a storage device

This limitation in claim 4 is nearly identical to the limitation in claim 1 addressed above, "A computer-readable medium storing bio-metric user identifying information and encryption and decryption data." For the same reasons, the Court construes this term to require storing both the biometric data and encryption/decryption data. The Court also similarly rejects Defendants' position that the storage device must be non-volatile and distinct.

IV. UNDISPUTED TERMS

The briefing on the '681 Patent includes argument on four additional terms: "event," "encryption key value," "decryption key value," and "document." These terms are not, however, listed in the most recent version of the joint claim construction chart. (*See* C.A. No. 13-303 D.I. 85-1) It is the Court's understanding that the parties do not have a dispute as to the proper construction of any of these four terms.

V. CONCLUSION

An appropriate Order follows.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

MAZ ENCRYPTION TECHNOLOGIES, LLC Plaintiff, v. LENOVO (UNITED STATES) INC., Defendant.	)	C.A. No. 13-303-LPS
MAZ ENCRYPTION TECHNOLOGIES, LLC Plaintiff, v. BLACKBERRY CORPORATION, Defendant.	)	C.A. No. 13-304-LPS
MAZ ENCRYPTION TECHNOLOGIES, LLC Plaintiff, v. TOSHIBA AMERICA INFORMATION, SYSTEMS, INC. Defendant.	)	C.A. No. 13-305-LPS

ORDER

At Wilmington this 30th day of June, 2015,

For the reasons set forth in the Memorandum Opinion issued this date, IT IS HEREBY ORDERED that the disputed claim language of U.S. Patent Nos. 6,185,681 ("the '681 Patent") and 8,359,476 ("the '476 Patent") shall be construed as follows:

Claim Term	Court's Construction
crypto module ['681 Patent, claims 31 and 33]	A portion of a software program which transparently handles the encryption of documents and the decryption of encrypted documents
electronic document management system ['681 Patent, claims 31, 33, 35, 37]	A combination of databases, indexes, and preferably search engines, utilized to store and retrieve electronic documents distributed across an organization
table ['681 Patent, claims 31-38]	A collection of data in which each item is uniquely identified by a label, by its position relative to other items, or by some other means
first table ['681 Patent, claims 31, 33, 35, and 27]	A collection of data in which each item is uniquely identified by a label, by its position relative to other items, or by some other means
second table ['681 Patent, claims 31, 32, 33, 34, 35, 36, 37, and 38]	A collection of data in which each item is uniquely identified by a label, by its position relative to other items, or by some other means
application program ['681 Patent, claims 31, 33, 35, and 37]	A computer software program designed for a specific job, such as word processing, accounting, spreadsheet, etc.
selecting ['681 Patent, claims 33 and 37]	To choose from one or more options or alternatives
key names ['681 Patent, claims 31 and 33]	A descriptor for an encryption key value or a decryption key value which may be used by the user and/or system administrator for administering an encryption key value or decryption key value
associated ['681 Patent, claims 31, 33, 35, and 37]	A correlation between a key name and key value or a key name and names of encrypted files
encryption and decryption computer ['476 Patent, claims 1 and 4]	A computer, including at least a central processing unit (CPU), short-term memory (e.g. RAM), long-term memory (e.g. hard disk drive), and instructions for cryptography, which computer encrypts non-encrypted data and decrypts encrypted data

bio-metric user authentication apparatus ['476 Patent, claims 1 and 4]	A device that accepts biometric data input from a user for authentication
a computer-readable medium storing bio-metric user identifying information and encryption and decryption data ['476 Patent, claim 1]	A storage device storing both the bio-metric user identifying information and the encryption and decryption data
receive an application programming interface (API) for interfacing with the user authentication apparatus ['476 Patent, claim 1]	The term is not indefinite. Receive code for interfacing with the user authentication apparatus.
receive from the computer-readable medium via the API the bio-metric user identifying information ['476 Patent, claim 1]	Receive from the computer-readable medium via the code for interfacing with the user authentication apparatus the bio-metric user identifying information
authenticate a user based on the bio-metric user identifying information ['476 Patent, claim 1]	Plain and ordinary meaning.
read via the API the encryption and decryption data once the user is authenticated ['476 Patent, claim 1]	Read via the code for interfacing with the user authentication apparatus the encryption and decryption data once the user is authenticated
storing user identifying information, encryption and decryption data on a computer-readable medium ['476 Patent, claim 4]	Storing both biometric data relating to the user and encryption and decryption data on a storage device

Lewis P. Doa

UNITED STATES DISTRICT JUDGE