IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

INTELLECTUAL VENTURES I LI		•	
INTELLECTUAL VENTURES II L	LC,		
	Plaintiffs,	0 0 0	
v.		•	Civil Action No. 13-cv-440-LPS
SYMANTEC CORP.,		*	
	Defendant.		

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MEMORANDUM OPINION

March 10, 2016 Wilmington, Delaware

STARK, U.S. District Judge:

Plaintiffs Intellectual Ventures I LLC and Intellectual Ventures II LLC (collectively, "IV" or "Plaintiffs") filed this patent infringement action against Defendant Symantec Corp. ("Symantec" or "Defendant"). (D.I. 1) IV asserts U.S. Patent No. 5,537,533¹ ("the '533 patent"), U.S. Patent No. 6,598,131² ("the '131 patent"), and U.S. Patent No. 6,732,359³ ("the '359 patent") (collectively, the "patents-in-suit"). (*Id.*) On May 28, 2015, the parties stipulated to the dismissal of the '359 patent. (D.I. 187)

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 November 21, 2014. (D.I. 79, 82, 91, 94) In addition to the briefing, the parties submitted technology tutorials. (D.I. 108, 109) The Court held a Markman hearing on February 9, 2015. (D.I. 130) ("Tr.") Thereafter, with the Court's permission, the parties filed letter briefs on February 18 and 23, 2015. (D.I. 122, 123)

I. LEGAL STANDARDS

The ultimate question of the proper construction of a patent is a question of law. See 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



¹The '533 patent is entitled "System and Method for Remote Mirroring of Digital Data from a Primary Network Server to a Remote Network Server." It was issued on July 16, 1996. (D.I. 77, Ex. B)

²The '131 patent is entitled "Data Image Management via Emulation of Non-Volatile Storage Device." It was issued on July 22, 2003. (D.I. 77, Ex. C)

³The '359 patent is entitled "Application Process Monitor." It was issued on May 4, 2004. (D.I. 77, Ex. D)

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." *Id.* 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 particulaclaim 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." *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1372 (Fed. Cir. 2014) (quoting *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004)) (internal quotation marks omitted).

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 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) (quoting Modine Mfg. Co. v. U.S. Int'l Trade Comm'n, 75 F.3d 1545, 1550 (Fed. Cir. 1996)).

II. CONSTRUCTION OF AGREED UPON TERMS

The parties have no dispute regarding the following terms. Accordingly, the Court will adopt these agreed-to constructions.

Patent-in-suit	Claim Term	Agreed Construction
'533	bandwidth	rate at which data may be transferred within a particular communication channel or link
'533	claim 23 (as used in claim 27)	claim 25
'131	non-data request	request other than a read or write request

III. CONSTRUCTION OF DISPUTED TERMS

A. The '533 Patent

1. "data transfer unit" / "DTU" (claims 25, 27, 29, 33)

IV

a combination of hardware and software, including a nonvolatile data buffer, with the ability to communicate with the operating system of a network server and to communicate across the communication link

Symantec

a physical unit, separate and distinct from both the primary network server and the remote network server, that includes a server interface for communicating with a network server, and a link interface for communicating over a communication link with another data transfer unit

Court

a combination of hardware and software, including a nonvolatile data buffer, with the ability to communicate with the operating system of a network server and to communicate across the communication link

The parties disagree about whether the data transfer unit ("DTU") must be *physically*

separate and distinct from the network servers. IV contends that Symantec seeks to improperly

limit the claimed invention to a preferred embodiment which depicts the DTUs as physically separate from the servers to which they are connected. (*See* '533 patent at Fig. 1) The Court agrees with IV.

Symantec argues that "[w]here the claim lists elements separately, the clear implication of the claim language is that those elements are distinct components of the patented invention." *Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010) (internal quotation marks and brackets omitted). However, *Becton* involved physical components, whereas the DTU in the present invention undisputedly involves both hardware and software. Here, the claims involve digital, rather than physical separation. For example, claim 1 provides for a component of the data transfer unit – a primary server interface – being "digitally connectable to the primary network server." ('533 patent at col. 15 ll. 23-24) Other claims provide for "a data transfer unit which is digitally connected to the primary network server." (*Id.* at col. 17 ll. 30-31, 55-59, 63-64) Similarly, the specification explains that "[t]he primary DTU includes a primary server interface . . . [which] is digitally connectable to the primary network server.

Contrary to Symantec's arguments, the claim language indicating that data is copied "*from* a primary network server *to* . . . a data transfer unit" (*id.* at col. 17 ll. 29-30; *see also id.* at col. 18 ll. 1-2, 24-25, 27-28, 30-31) does not preclude a DTU being merely a component within the primary network server. Similarly, that in a preferred embodiment, "[e]ach of the DTUs includes at least one microprocessor and a block of RAM which is accessible by the microprocessor" (*id.* at col. 6 ll. 46-48), does not necessarily mean that the DTUs are physically incapable of relying on the network server for these basic features.



2. "substantially concurrent copy of data" (claim 25)

IV

Plain and ordinary meaning, where "substantially concurrent" means "not separated in time except as a result of processing delays."⁴

Symantec

Indefinite under 35 U.S.C. § 112.

Court

Plain and ordinary meaning, where "substantially concurrent" means "not separated in time except as a result of processing delays."

Claim 25 recites "a substantially concurrent copy of data which is being stored by the operating system in the nonvolatile server store." (*Id.* at col. 17 ll. 34-37) Symantec argues that this term is indefinite because it is a temporal limitation lacking any intrinsic evidence regarding how long a delay would be too long to be substantially concurrent. IV responds that the term is not indefinite because it is a causal limitation, intended to distinguish between delays that are designed into the system and delays that merely reflect the time needed to process the data being copied. Both parties offer expert declarations in support of their respective views. (*See* D.I. 83 at ¶¶ 40-44, 46; D.I. 80 at ¶¶ 18-26; D.I. 93 at ¶¶ 4-9)

The Court need not decide which expert is correct, as the intrinsic evidence supports IV's position. *See Vitronics Corp.*, 90 F.3d at 1585 (explaining that expert testimony on claim construction "may only be relied upon if the patent documents, taken as a whole, are insufficient to enable the court to construe disputed claim terms"). The specification clearly distinguishes copying data substantially concurrently through one method, *mirroring*, which is the subject of



⁴This proposed construction is different from IV's position in the Joint Claim Construction Statement, in which IV proposed that "substantially concurrent" means "*separated* in time only as a result of *communication and* processing delays." (D.I. 77, Ex. A at 2) (emphasis added)

the invention, described as, *inter alia*, "a further advancement to provide such a system and method which maintain a substantially current copy of data as that data is committed for storage in open files on disk" ('533 patent at col. 4 ll. 39-42), from copying data through another method, *shadowing*, in which "critical data added after the backup software finishes is not protected until the next backup or shadowing file copy, which may be minutes or hours later" (*id.* at col. 4 ll. 28-31). Symantec's reliance on Federal Circuit cases indicating that "substantially" is a term of degree and therefore indefinite (*see* D.I. 122 at 2-3) is unpersuasive, as here the intrinsic evidence suggests that although substantial concurrence refers to length of delay, whether the length of delay meets the limitation can be ascertained by reference to the cause of delay. As IV points out, interpreting "substantially" as necessarily limited to being either a term of degree *only* or a term of cause *only* is a false dichotomy. (*See* D.I. 123 at 2)

Accordingly, Symantec has failed to present clear and convincing evidence that the claim term fails to inform one of ordinary skill in the art of the scope of the term with reasonable certainty. *See Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120 (2014).

3. "spoof packet" (claims 25, 26, 27)

IV

a message created by a data transfer unit that is in the form of an acknowledgment to the operating system of a successfully completed write request

Symantec

a packet in the format of an acknowledgment that would be sent by a conventional hard disk drive controller when an operating system writes data to the hard disk

Court

a message created by a data transfer unit that is in the format of an acknowledgment to the operating system of a successfully completed write request

The parties disagree about whether this term must precisely track its description in the

specification. The specification provides:

[t]he present invention optionally includes the task of sending a "spoof packet" as an acknowledgment to the primary server 10 indicating that the data has been received. The spoof packet is in the format of an acknowledgment that would be sent by a conventional hard disk drive controller when the operating system writes data to the hard disk.

('533 patent at col. 13 ll. 19-26)

IV argues that here the patentees did not intend to act as lexicographers, unlike in four instances in the specification where the patentees use definitional phrases such as "as used herein, [the term] means" and "[the terms] are synonymous herein." (*See id.* at col. 4 ll. 61-63, col. 5 ll. 5-6, col. 5 ll. 42-45, col. 9 ll. 43-46) The Court agrees that the patentees are not in this portion of the specification defining "spoof packets" and, hence, it would be inappropriate to import limitations from this portion of the specification into the claims.

Accordingly, the Court adopts IV's proposed construction, with the modification that

"form" is changed to "format," consistent with the portion of the specification quoted above, in

the absence of any intrinsic evidence supporting the use of "form." (Id. at col. 13 ll. 23-26)

4. "the group consisting of . . . and . . ." (claim 27)

IV

Plain and ordinary meaning; the requirement is satisfied if the triggering event is any one of the options described in the claim.

Symantec

The limitation is satisfied by a prior art reference or an accused product if the triggering event is any of the options described in the claim.

Court

No construction necessary.

The parties are in agreement about the meaning of this term, and their dispute only



concerns whether the Court's construction should specify that it applies equally to the contexts of

invalidity and infringement. The Court agrees with IV that "points of law should not be injected

into claim construction." (D.I. 82 at 20) Accordingly, the Court need not construe this claim

term.

B. The '131 Patent

1. "local persistent storage device" ("LPSD") / "remote persistent storage device located remotely from the device" ("RPSD") (claims 11, 14, 21, 22, 24)

IV

Plain and ordinary meaning; alternatively, "a nonvolatile storage device, such as a device including one or more hard disks, connected to the computer."

Symantec

a physical device that is physically attached to a local computer and that contains a permanent medium for storing a persistent, consistent cache of a master data image stored on a remote device where "master data image" means "the physical data image against which cached data is compared to determine whether it is up-to-date" / a physical device that is physically attached to a remote computer and that contains a permanent medium for storing a master data image where "master data image" means "the physical data image against which cached data image where "master data image" means "the physical data image against which cached data is compared to determine whether it is up-to-date"

Court

a physical device that is physically attached to a local computer and that contains a permanent medium for storing a persistent, consistent cache of a master data image stored on a remote device where "master data image" means "the physical data image against which cached data is compared to determine whether it is up-to-date" / a physical device that is physically attached to a remote computer and that contains a permanent medium for storing a master data image where "master data image" means "the physical data image against which cached data image where "master data image" means "the physical data image against which cached data is compared to determine whether it is up-to-date"

Symantec's proposed construction is firmly grounded in the intrinsic evidence. The

Background of the Invention states that:

[a] persistent storage device can be defined as follows: (a) *it is a physical device that is physically attached to a computer* using a standard physical interface . . . (b) *it contains a local permanent medium* . . . for storing a sequence of bits . . . (c) it has the ability to selectively read and write any part of the data image; and (d) it

allows the computer to which the device is attached to selectively read and write any part of the data image through a standard set of interface protocols.

(See '131 patent at col. 1 ll. 40-67) (emphasis added) "[T]he inventor's written description of the

invention . . . is relevant and controlling insofar as it provides clear lexicography." C.R. Bard,

Inc. v. U.S. Surgical Corp., 388 F.3d 858, 862 (Fed. Cir. 2004).

The specification further provides that "[t]he data image stored on the RPSD is referred to

as the 'master data image' and the data image cached on the LPSD is referred to as the 'local data

image' or 'cached data image.'" ('131 patent at col. 3 ll. 54-57) Symantec's proposed

construction draws directly from these descriptions, merely adding "local" or "remote" to the

term "computer" depending on whether the persistent storage device being referred to is the

local, as opposed to remote, persistent storage device.

2. "device driver for the LPSD" / "the device driver" (claims 11, 12, 15)

IV

Plain and ordinary meaning based on construction of "device driver" as "a software component that permits a system to control and communicate with a device."

Symantec

component of the operating system installed on a computer for communicating with the LPSD, which receives read or write requests from the operating system and issues the read or write request to the computer's BIOS or disk adapter

Court

Plain and ordinary meaning based on construction of "device driver" as "a software component that permits a system to control and communicate with a device."

IV opposes Symantec's proposed construction due to IV's concern that its adoption

would require the device driver to be a structural, as opposed to functional, component of the

operating system. The Court agrees with IV that the device driver need not necessarily be a

component of the operating system. The specification's parenthetical reference to device drivers

as components of the operating system – "the operating system and all of its components (including device drivers)" (*id.* at col. 5 ll. 32-33) – refers to a possibility, not a rigid requirement of the claims. The treatise incorporated by reference into the patent does not require a different conclusion, as it merely states that the device drivers are "separate module[s] of the operating system . . . [which] present a uniform I/O interface to the main line OS [operating system]." (*See id.* at col. 5 ll. 22-25) (incorporating by reference, *inter alia*, D.I. 77, Ex. Q at 352)

The parties also disagree about whether the term should be construed to function in the precise manner proposed by Symantec, which is one of several objectives of the invention. (*Compare* '131 patent at col. 6 ll. 27-34) ("It is an object of the present invention to implement the LDIM to intercept the request from the disk adapter so that the controller of the local persistent storage device will not receive it. Alternatively, it is an object of the invention to implement the LDIM to intercept the request from the device driver (or BIOS) so that the disk adapter does not receive it.") *with id.* at col. 6 ll. 40-67 (explaining additional objects of the present invention, such as "to provide a transparent mechanism for upgrading software and hardware drivers")) "[I]t is generally not appropriate to limit claim language to exclude particular devices because they do not serve a perceived purpose of the invention." *Praxair, Inc. v. ATMI, Inc.*, 543 F.3d 1306, 1325 (Fed. Cir. 2008) (internal quotation marks omitted).

3. "performed substantially concurrently" (claims 14, 24)

IV

performance not separated in time except as a result of processing delays⁵

⁵This proposed construction is different from IV's position in the Joint Claim Construction Statement, in which IV proposed "*performance separated* in time only as a result of *communication and* processing delays." (*See* D.I. 77, Ex. A at 5) (emphasis added)



Symantec Indefinite under 35 U.S.C. § 112.

Court

performance not separated in time except as a result of processing delays

This term presents largely the same dispute with respect to the '131 patent as the Court previously addressed in the context of the '533 patent. Here, the specification also supports IV's position that this term refers to a causal rather than a temporal limitation. It distinguishes substantially concurrent performance from that which is intended to "wait until some later time (e.g., if the computer is not currently connected to the network or if the network is heavily loaded)" ('131 patent at col. 4 ll. 44-48), or "at some later time (e.g., when network traffic is low)" (*id.* at col. 9 ll. 44-47). For similar reasons as explained above, the Court adopts IV's proposed construction of this term.

IV. CONCLUSION

The Court will construe the disputed claim terms of the patents-in-suit consistent with this Memorandum Opinion. An appropriate Order follows.

IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

INTELLECTUAL VENTURES I LL INTELLECTUAL VENTURES II L		: :	
v.	Plaintiffs,	:	Civil Action No. 13-cv-440-LPS
SYMANTEC CORP.,	Defendant.	:	

<u>O R D E R</u>

At Wilmington this 10th day of March, 2016:

For the reasons set forth in the Memorandum Opinion issued this date, IT IS HEREBY

ORDERED that the claim language of U.S. Patent No. 5,537,533 ("the '533 patent") and U.S.

Patent No. 6,598,131 ("the '131 patent") shall be construed as follows:

I. CONTESTED TERMS

Patent	Claim Term	Court's Construction
'533	data transfer unit / DTU	a combination of hardware and software, including a nonvolatile data buffer, with the ability to communicate with the operating system of a network server and to communicate across the communication link
'533	substantially concurrent copy of data	Plain and ordinary meaning, where "substantially concurrent" means "not separated in time except as a result of processing delays."
'533	spoof packet	a message created by a data transfer unit that is in the format of an acknowledgment to the operating system of a successfully completed write request
'533	the group consisting of and	No construction necessary.

·131	local persistent storage device / LPSD	a physical device that is physically attached to a local computer and that contains a permanent medium for storing a persistent, consistent cache of a master data image stored on a remote device where "master data image" means "the physical data image against which cached data is compared to determine whether it is up-to-date"
'131	remote persistent storage device located remotely from the device	a physical device that is physically attached to a remote computer and that contains a permanent medium for storing a master data image where "master data image" means "the physical data image against which cached data is compared to determine whether it is up-to-date"
'131	device driver for the LPSD / the device driver	Plain and ordinary meaning based on construction of "device driver" as "a software component that permits a system to control and communicate with a device."
'131	performed substantially concurrently	performance not separated in time except as a result of processing delays

II. AGREED UPON TERMS

Patent	Claim Term	Court's Construction
'533	bandwidth	rate at which data may be transferred within a particular communication channel or link
'533	claim 23 (as used in claim 27)	claim 25
'131	non-data request	request other than a read or write request

UNITED STATES DISTRICT JUDGE