

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

SOUND VIEW INNOVATIONS, LLC,)	
)	
Plaintiff,)	
)	
v.)	Civil Action No. 19-659-CFC-CJB
)	
DELTA AIR LINES, INC.,)	
)	
Defendant.)	
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SOUND VIEW INNOVATIONS, LLC,)	
)	
Plaintiff,)	
)	
v.)	Civil Action No. 19-660-CFC-CJB
)	
WALMART INC. and VUDU, INC.,)	
)	
Defendants.)	
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SOUND VIEW INNOVATIONS, LLC,)	
)	
Plaintiff,)	
)	
v.)	Civil Action No. 19-964-CFC-CJB
)	
CIGNA CORP. and CIGNA HEALTH AND LIFE INSURANCE CO.,)	
)	
Defendants.)	
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REPORT AND RECOMMENDATION

In these three actions filed by Plaintiff Sound View Innovations, LLC (“Plaintiff”) against Defendants Delta Air Lines Inc., Defendants Walmart Inc. and Vudu, Inc., and Defendants Cigna Corp. and Cigna Health and Life Insurance Co. (collectively “Defendants”), presently before the Court is the matter of claim construction. The Court recommends that the District Court adopt the constructions as set forth below.

I. BACKGROUND

Plaintiff filed these cases in April and May of 2019. (Civil Action No. 19-659-CFC-CJB (the “Delta Action”), D.I. 1; Civil Action No. 19-660-CFC-CJB (the “Walmart Action”), D.I. 1; Civil Action No. 19-964-CFC-CJB (the “Cigna Action”), D.I. 1)¹ These cases have been referred to the Court to hear and resolve all pretrial matters, up to and including expert discovery. (Civil Action No. 19-659-CFC-CJB, D.I. 6; Civil Action No. 19-660-CFC-CJB, D.I. 7; Civil Action No. 19-964-CFC-CJB, Docket Item, June 5, 2019)

Plaintiff is an intellectual property licensing company, and it owns various United States Patents. It asserts several of them in these cases; relevant to this opinion are asserted United States Patent Nos. 6,708,213 (the “’213 patent”), 6,502,133 (the “’133 patent”) and 7,426,715 (the “’715 patent”) (collectively, the “patents-in-suit”). (Civil Action No. 19-660-CFC-CJB, D.I. 1 at ¶¶ 1, 3)

The ’213 patent is titled “Method for Streaming Multimedia Information Over Public Networks[.]” (’213 patent, Title, col. 1:10-15)² The ’213 patent improves upon prior art methods of providing audio or video content over the internet by using “helper servers” within the network to store and stream audio and/or video to multiple clients. (*See id.*, cols. 2:64-3:5, 4:16-25)

The ’133 patent, titled “Real-time Event Processing System with Analysis Engine Using Recovery Information[.]” relates to processing certain events and storing the data related to those events. (’133 patent, Title, Abstract) An exemplary embodiment is a debit-based billing system

¹ Unless otherwise noted, the Court will refer to the docket filings in the Delta Action.

² Plaintiff does not assert the ’213 patent in the Delta Action or the Cigna Action. (Civil Action No. 19-659-CFC-CJB, D.I. 1 at ¶ 3; Civil Action No. 19-946-CFC-CJB, D.I. 1 at ¶ 3)

for telephone calls; this embodiment generates “events” upon the connection and completion of telephone calls, then determines how to calculate and debit charges from the customer’s account. (*Id.*, col. 8:46-59)

Lastly, the '715 patent is titled “Shutting Down a Plurality of Software Components in an Ordered Sequence[.]” ('715 patent, Title) A stated goal of the invention is to shut down software in a particular order so as to “store[] state information, release[] system resources, and/or leave[] the system resources in a consistent state.” (*Id.*, col. 2:27-30) Further details concerning the patents-in-suit will be addressed below in Section III.

The parties filed joint claim construction briefs for, *inter alia*, the '213 and '133 patents on February 27, 2020. (D.I. 88) On April 1, 2020, the parties filed their joint claim construction brief for the '715 patent. (D.I. 101) The Court conducted a *Markman* hearing by video conference on April 22, 2018. (D.I. 107 (hereinafter, “Tr.”))

II. STANDARD OF REVIEW

It is well-understood that “[a] claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using, or selling the protected invention.” *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257 (Fed. Cir. 1989). Claim construction is generally a question of law, although subsidiary fact finding is sometimes necessary. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 837-38 (2015).

The Court should typically assign claim terms their ““ordinary and customary meaning[.]”” which is “the meaning that the term[s] 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.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (citations

omitted). However, when determining the ordinary meaning of claim terms, the Court should not extract and isolate those terms from the context of the patent; rather it should endeavor to reflect their “meaning to the ordinary artisan after reading the entire patent.” *Id.* at 1321; *see also Eon Corp. IP Holdings LLC v. Silver Spring Networks, Inc.*, 815 F.3d 1314, 1320 (Fed. Cir. 2016).

In proceeding with claim construction, the Court should look first and foremost to the language of the claims themselves, because “[i]t 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*, 415 F.3d at 1312 (internal quotation marks and citations omitted). For example, the context in which a term is used in a claim may be “highly instructive.” *Id.* at 1314. In addition, “[o]ther claims of the patent in question, both asserted and unasserted, can . . . be valuable” in discerning the meaning of a particular claim term. *Id.* This is “[b]ecause claim terms are normally used consistently throughout the patent, [and so] the usage of a term in one claim can often illuminate the meaning of the same term in other claims.” *Id.* Moreover, “[d]ifferences among claims can also be a useful guide[,]” as when “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.

In addition to the words of the claims, the Court should look to other intrinsic evidence. For example, the Court should analyze the patent specification, which “may reveal a special definition given to a claim term . . . that differs from the meaning [that term] would otherwise possess” or may reveal an intentional disclaimer of claim scope. *Id.* at 1316. Even if the specification does not contain such revelations, it “is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a

disputed term.” *Id.* at 1315 (internal quotation marks and citation omitted). That said, however, the specification “is not a substitute for, nor can it be used to rewrite, the chosen claim language.” *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004). And a court should also consider the patent’s prosecution history, if it is in evidence, because it “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[.]” *Phillips*, 415 F.3d at 1317.

Extrinsic evidence, “including expert and inventor testimony, dictionaries, and learned treatises[.]” can also “shed useful light on the relevant art[.]” *Id.* (internal quotation marks and citations omitted). Overall, while extrinsic evidence may be useful, it is “less significant than the intrinsic record in determining the legally operative meaning of claim language.” *Id.* (internal quotation marks and citations omitted); *accord Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 981 (Fed. Cir. 1995).

In utilizing these resources during claim construction, courts should keep in mind that “[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).

III. DISCUSSION

The parties presented 11 disputed terms/term sets (“terms”) requiring construction. As to two of the terms, the Court determined at the *Markman* hearing (and the parties agreed) that there was no ripe dispute, and therefore no claim construction was needed.³ Additionally, after

³ These claim terms were “adjusting a data transfer rate at said one of said plurality of HSs for transferring data from said one of said plurality of helper servers to said one of said

considering the record from the *Markman* hearing, the Court has concluded that as to two additional terms, the parties did not present a clear, live dispute as to claim scope; thus, the Court also declines to engage in claim construction regarding those terms.⁴ See *O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1360-63 (Fed. Cir. 2008); *Guardant Health, Inc. v. Found. Med., Inc.*, Civil Action No. 17-1616-LPS-CJB, 2019 WL 8370808, at *2-3 (D. Del. Sept. 11, 2019) (citing cases), *report and recommendation adopted*, 2020 WL 1329513 (D. Del. Mar. 23, 2020). This leaves seven terms, which the Court will analyze in turn below.

A. “streaming multimedia (SM) objects”/“streaming media (SM) objects”/“SM object[s]”

The first disputed term, “streaming multimedia (SM) objects”/“streaming media (SM) objects”/“SM object[s,]” which the Court will refer to as the “SM objects” term below, is found

plurality of clients[,]” (Tr. at 108-13), and “real time analysis engine[,]” (Tr. at 138-39; *see also* D.I. 88 at 14). The former is found in the '213 patent and the latter is found in the '133 patent.

⁴ The first of these terms is “system application,” a term found in the '133 patent. During the *Markman* hearing, Plaintiff’s counsel suggested there could be a dispute about the meaning of this term either because: (1) Defendants’ use of the word “associated” in their proposed construction might imply an unduly “direct or close” connection between the “system application” and the real-time analysis engine; or (2) Defendants’ construction might read on applications that were *outside* of the system. (Tr. at 130-32, 135-36) But as to the former, Defendants confirmed that they were not suggesting that “associated” requires any particular type of “close relationship.” (*Id.* at 134) And as to the latter, Defendants confirmed that they did not intend their proposal to embrace such an application. (*Id.* at 136)

The second of these terms is “recovery information regarding a recovery point for the real-time analysis engine[,]” a term also found in the '133 patent. During the *Markman* hearing, the focus of the parties’ dispute was on the portion of Defendants’ proposed construction that referred to the information about a “recovery point” as that information necessary to return the real-time analysis engine to a “*previously established* consistent state.” Plaintiff was concerned that this “previously established” language was meant to signal something other than that such information had been “stor[ed.]” (Tr. at 167-69, 177) But after hearing Defendants’ argument during the hearing, Plaintiff’s counsel agreed that he did not see a real dispute between the parties as to this point, and that there did not seem to be a difference between the parties’ respective concepts of “storing and establishing[.]” (*Id.* at 182-83). The Court agrees and cannot discern a live dispute here.

in claims 1, 8 and 16 of the '213 patent. Claim 1 and claim 16 are representative. Claim 1 recites:

1. In a network having a content server which hosts a plurality of *streaming multimedia (SM) objects* which comprise a plurality of time-ordered packets for distribution over said network through a plurality of helper servers (HS) to a plurality of clients, a method of reducing latency associated with distributing said plurality of *SM objects* from said content server and said plurality of helper servers HSs to said plurality of clients, said method comprising:

servicing a first request received from one of said plurality of clients, including a requested starting position of said *SM object*, for one of said plurality of *SM objects* by allocating a first ring buffer in a memory associated with said one of said plurality of HSs for storing data representing a first portion of one of said plurality of *SM objects*, wherein said first portion includes a packet having an associated time-stamp approximately equal to the requested starting position;

maintaining the first ring buffer in the memory as a sliding window by replacing stored data with data representing successive portions of said one of said plurality of *SM objects*; and

allocating a second ring buffer to service a further request for said one of said plurality of *SM objects* received at said one of said plurality of helper servers, if it is determined that said further request cannot be serviced from said first ring buffer, otherwise servicing said further request from said first ring buffer.

('213 patent, col. 12:12-39) Claim 16 recites:

16. A method of reducing latency in a network having a content server which hosts *streaming media (SM) objects* which comprise a plurality of time-ordered segments for distribution over said network through a plurality of helpers (HSs) to a plurality of clients, said method comprising:

receiving a request for an *SM object* from one of said plurality of clients at one of said plurality of helper servers;

allocating a buffer at one of said plurality of HSs to cache at least a portion of said requested *SM object*;

downloading said portion of said requested *SM object* to said requesting client, while concurrently retrieving a remaining portion

of said requested *SM object* from one of another HS and said content server; and

adjusting a data transfer rate at said one of said plurality of HSs for transferring data from said one of said plurality of helper servers to said one of said plurality of clients.

(*Id.*, col. 14:31-48 (emphasis added)) The parties’ proposed constructions are as follows:

Term	Plaintiff’s Proposal	Defendants’ Proposal
“streaming multimedia (SM) objects”/“streaming media (SM) objects” /“SM object[s]”	“a type of multimedia data object whose transmission has temporal characteristics such that the data may become useless unless the transmission rate is regulated in accordance with predetermined criteria (e.g., audio and video files)”	“a multimedia data file whose transmission has temporal characteristics such that the data may become useless unless the transmission rate is regulated in accordance with predetermined criteria (e.g., audio and video files)”

(D.I. 88 at 21) The parties’ dispute is over whether this term necessarily refers to an entire “file,” as Defendants assert, or whether it can also refer to some portion of (or something less than) an entire “file,” as Plaintiff asserts. (Tr. at 15) The parties each primarily rely upon two forms of evidence—the patent specification and technical dictionaries—in support of their positions. The Court will analyze these in turn.

With regard to the specification, it expressly defines an SM object:

Streaming multimedia object (SM object): a type of data whose transmission has temporal characteristics such that the data may become useless unless the transmission rate is regulated in accordance with predetermined criteria (e.g., audio and video files). Transmission can start at any point within the object and can be terminated by the receiver at any time.

(’213 patent, col. 4:9-15) Two things about this definition favor Plaintiff’s proposed construction. First, the definition defines an “SM object” as a “type of data.” “Data” is a broad term, and nothing about it limits an object to being an entire “file.” The specification could have just as easily stated that an SM object was “a file” or “a type of data file,” but it did not. Second,

this definition implies that something other than a file could be an “SM object.” This is because the definition provides two examples of “SM objects”—“audio and video files”—which are non-limiting examples, as signified by the use of “e.g.” (Tr. at 16-17) Counsel for both parties confirmed at the *Markman* hearing that they are not aware of other types of *files*, apart from audio and video files, that would be utilized by this invention. (*Id.* at 17-18, 34) Thus, if (1) audio and video files are but two examples of an “SM object,” but (2) there are no media *files* apart from audio and video files that could fit this definition, then (3) the implication is that there must be some other form of data that is an “SM object” but that is something other than a “file.” What could such data be, other than some lesser portion of a file?⁵

⁵ Defendants base their argument that an “SM object” must be a complete file on a portion of the specification that reads:

Streaming multimedia data like video objects, for example, are usually too large to be cached *in their entirety*. . . . A natural solution would be to break video objects into smaller pieces for the purpose of caching. This solution is deficient, however, in that existing caching systems will treat different chunks from the same video object independently, while it might be desirable to consider the logical relationship among the various pieces.

(’213 patent, col. 2:25-36 (emphasis added) (*cited in* D.I. 88 at 23)) In Defendants’ view, this passage suggests that an SM object is an “entire[.]” file, not something less than that (i.e., “smaller pieces” of a file). (D.I. 88 at 23-24, 27; Tr. at 33) Yet to the Court, that is not clear at all. The excerpt above does not use the term “file.” (Tr. at 20) And it is not evident to the Court why, in light of this excerpt, one could not utilize an “SM object” that is something less than an entire file, so long as one maintains the “logical relationship” among the portions of that data object (i.e., the time order). (*See id.* at 20-21, 25, 40; D.I. 88 at 25; *see also* ’213 patent, col. 12:12-16 (describing a method for distributing SM objects “which comprise a plurality of time-ordered packets”))

For similar reasons, the Court is not persuaded by Defendants’ reliance on the decision in *Sound View Innovations, LLC v. Hulu, LLC*, Case No. LA CV17-04146 JAK (PLAx), D.I. 148 (C.D. Cal. Sept. 4, 2018) (“*Hulu*”) (D.I. 89, ex. B). There, the *Hulu* Court construed this “SM object” term in the ’213 patent and in another related patent to mean “a multimedia data *file* whose transmission has temporal characteristics such that the data may become useless unless the transmission rate is regulated in accordance with predetermined criteria (e.g., audio and video files).” (*Id.* at 17 (emphasis added)) In coming to this construction, the *Hulu* Court relied upon

The Court additionally assesses the extrinsic dictionary definitions put forward by the parties. These definitions demonstrate that in this context, an “object” tends to be defined expansively—a fact that provides additional support to Plaintiff’s proposed construction. For example, even a dictionary cited by Defendants—*Newton’s Telecom Dictionary* (16th ed. 2000)—defines “object” by stating “[i]n its simplest form in computing, an object is a *unit of information*. It can be used much more broadly, depending on the application.” (D.I. 89, ex. 5 at 630 (emphasis added)) Surely a “unit of information” could be something less than a complete file. (Tr. at 38)

The Court suspects that in the context of the patent, an “SM object” is *typically* what any skilled artisan might consider to be an entire “file,” like an entire audio file or video file. But it also suspects that what constitutes an entire “file” and what does not may be less than clear in the art. (Tr. at 18-19) And in light of the intrinsic and extrinsic evidence set out above, the Court cannot conclude that the term could never refer to a data object that is something less than an entire “file.” For these reasons, the Court recommends that the “SM object” term be construed to mean “a type of multimedia data object whose transmission has temporal characteristics such that the data may become useless unless the transmission rate is regulated in accordance with predetermined criteria (e.g., audio and video files).”

B. “buffer”

The word “buffer” appears, one way or another, in all asserted claims of the '213 patent. But while that word is often found in the claims as part of a narrower term like “ring buffer”

language in the related patent’s specification that was the same as or similar to the “in their entirety” language excerpted above from the '213 patent, concluding that the “patent disclosure shows that an ‘object’ must be an entire file, not a portion.” (*Id.* at 15-16) For the reasons set out above, however, the Court respectfully disagrees that the '213 patent specification makes clear that an SM object cannot be something less than an entire “file.”

(discussed further below), there is only one claim, claim 16, that recites “buffer” alone. The parties’ proposed constructions for “buffer” are as follows:

Term	Plaintiff’s Proposal	Defendants’ Proposal
“buffer”	“temporary storage for data being sent or received”	“a type of short term storage for data being sent or received” ⁶

(D.I. 88 at 31; Tr. at 43) The parties’ dispute here is over whether “buffer” should be construed as “temporary” storage (Plaintiff’s view) or “short term” storage (Defendants’ view). More specifically, Plaintiff clarified that its use of “temporary” was not meant to connote some “specific time,” but rather to reflect the idea that the invention would only store data in a buffer until it was no longer needed (i.e., that such storage was non-“permanent”). (Tr. at 45, 47-48, 51-52) Therefore, pursuant to Plaintiff’s proposed construction, it could be possible for the buffer to store data for longer than a “short term” period—possibly up to a year or more—so long as the buffer did not store such data permanently. (Tr. at 48-49) For the reasons that follow, the Court recommends adopting Plaintiff’s proposed construction (with a slight alteration).

The Court starts with the specification, which offers something for both sides. As Defendants point out, two portions of the specification discuss the nature of storage in a “buffer”; in both cases, the type of buffer discussed is a “ring buffer.” And in both cases, the ring buffer is described as allowing for “short term” storage of data. (213 patent, col. 5:57-63 (“The ring buffers represent a type of *short term* storage to service multiple requests for the same object

⁶ Defendants had originally proposed that this term be construed with the following additional limitation: “in which data is temporarily held while waiting to be transferred between two locations or devices[.]” (D.I. 88 at 31, 33, 37) However, during the *Markman* hearing, Defendants dropped this portion of their proposed construction. (Tr. at 43-44)

which occur within a certain time range.”) (emphasis added); *id.*, col. 7:20-26 (“As such, the ring buffer . . . operates as a type of *short term* cache which stores a portion of an SM object for a *fixed time interval*.”) (emphasis added))⁷ On the other hand, there are portions of the specification that describe how a buffer stores and transfers data in terms that appear to emphasize client need, not temporality. For example, the specification describes a “garbage collector, . . . which is an event which frees [real-time protocol] packets from the buffer” when they are “no longer *needed by any of the consumers*[.]” (’213 patent, col. 11:57-59 (emphasis added))

If there was doubt as to which side has the better argument based on the intrinsic evidence, the extrinsic evidence tips the scales in Plaintiff’s favor. Plaintiff cites to two technical dictionaries from during or prior to the time period in question that define “buffer” as “temporary” storage. *Newton’s Telecom Dictionary* 121 (15th ed. 1999) (defining a buffer as “a temporary storage location for information being sent or received”) (D.I. 89, ex. F); *IBM Dictionary of Computing* 75 (10th ed. 1993) (defining a buffer as “[a] portion of storage used to hold input or output data temporarily”) (D.I. 89, ex. G). And even Defendants’ cited technical dictionary, the *Microsoft Computer Dictionary* 64-65 (4th ed. 1999) (D.I. 89, ex. 6), provides the definition for buffer as, “[a] region of memory for use as an intermediate repository *in which*

⁷ That said, these portions of the specification relate to what a “ring buffer” is, not what a “buffer” is more generally. And so they may well be less describing what a “buffer” *must be*, and instead be more describing *examples* of what a buffer can do. (See Tr. at 46; D.I. 88 at 36); *see also GE Lighting Sols., LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1309 (Fed. Cir. 2014) (“To act as its own lexicographer, a patentee must clearly set forth a definition of the disputed claim term, and clearly express an intent to define the term.”) (internal quotation marks and citation omitted).

data is temporarily held[,]” *id.* (emphasis added).⁸ See also *Atofina v. Great Lakes Chem. Corp.*, 441 F.3d 991, 996 (Fed. Cir. 2006) (“Because there is no suggestion that the intrinsic evidence defines the term ‘catalyst,’ one may look to technical dictionaries for assistance in determining that term’s meaning to a person of ordinary skill in the art.”); *Sepracor Inc. v. Dey, L.P.*, 590 F. Supp. 2d 649, 660 (D. Del. 2008) (same).

Viewing this evidence together, then, the Court finds it favors Plaintiff’s construction of “buffer.” Accordingly, the Court recommends adopting a slightly altered version of that construction that better represents Plaintiff’s position: “temporary (i.e., non-permanent) storage for data being sent or received.”

C. “ring buffer”

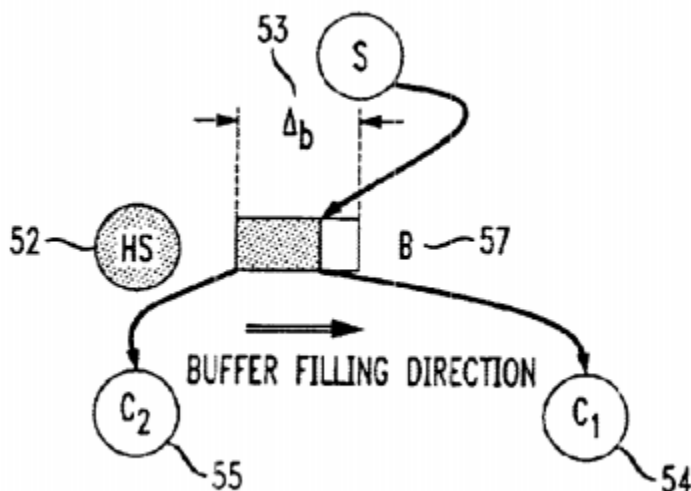
The term “ring buffer” appears in various claims of the '213 patent, including claims 1, 8 and 9. The parties’ proposed constructions are as follows:

Term	Plaintiff’s Proposal	Defendants’ Proposal
“ring buffer”	No construction necessary.	“a type of short term storage to service multiple requests of the same SM object within a certain fixed time interval, which advances and stores successive portions of the SM object”

(D.I. 88 at 37) The parties have one substantive point of dispute. This concerns the “within a certain fixed time interval” requirement found in Defendants’ proposed construction. (Tr. at 60) To understand this issue, a bit of background is in order.

⁸ The Court notes that non-technical dictionaries demonstrate that “temporary” can mean “not permanent” or “to supply a passing need[.]” which is what Plaintiff intends “temporary” to signal here. See *OED Online*, <https://www.oed.com/view/Entry/198959> (last visited May 12, 2020).

The specification explains how a ring buffer is allocated in the memory of a helper server: “It is . . . convenient to view the ring buffer 57 as a sliding window in the sense that portions of an SM object are initially cached in the ring buffer 57 and then deleted to store successive portions of the SM object.” (’213 patent, col. 7:22-26) The ring buffer is depicted in Figure 5(a):



(*Id.*, FIG. 5(a)) The specification explains that once the ring buffer is created, it “stores a moving window of Δ_b seconds of the SM object stream, where Δ_b is a measure of the buffer size in time units.” (*Id.*, col. 6:56-58) The specification refers to “ Δ_b ” as a “buffer temporal distance” or “fixed time interval.” (*See id.*, col. 7:17-22) And the specification further teaches that once the ring buffer is allocated to the memory of a helper server, it is “available to service additional [client] requests for that SM object which occur within a time interval defined by the buffer temporal distance, Δ_b .” (*Id.*, col. 6:59-62)⁹ In other words, the “fixed time interval” is a

⁹ Other portions of the specification describe this time interval similarly. (’213 patent, col. 5:57-65 (“The ring buffers represent a type of short term storage to service multiple requests for the same object which occur within a certain time range. . . . That is, [they] are allocated in anticipation of other clients requesting the same SM object from an HS within a

measure of both the data that the buffer holds and also the time during which it can service client requests. (Tr. at 62; 67-68)¹⁰

Turning then to the parties' dispute, Defendants assert that this "fixed time interval" concept is a necessary feature of the ring buffers in the '213 patent, (Tr. at 68), while Plaintiff argues that Defendants are improperly trying to import a limitation from the specification into the claims, (Tr. at 70-71). For the two reasons set forth below, the Court agrees with Defendants.

First, every example of a "ring buffer" in the specification describes it as servicing requests within a "fixed time interval" or some similar variant of that concept. (*See, e.g.*, '213 patent, cols. 5:57-65, 6:59-62, 7:17-20) Although this is not dispositive, it certainly aids Defendants' position.

Second, when the specification describes this aspect of a ring buffer, it does so in a way that strongly indicates that it is an important part of the invention. The specification recites that "[i]n accordance with the teachings of *the present invention*, the buffering scheme . . . utilizes ring buffers . . . [which] *represent* a type of short term storage to service multiple requests for the same object *which occur within a certain time range.*" ('213 patent, col. 5:55-60 (emphasis added)) In the Court's view, this language operates as a definitional statement, defining the

certain time range."); *id.* col. 7:17-20 ("[T]he first ring buffer **57** is capable of servicing any number of requests for the stored SM object which may occur within the time interval defined by the buffer temporal distance, Δ_b ."))

¹⁰ Plaintiff's counsel explained that if you have a ring buffer with a "fixed time interval" for each segment, this determines how much time the buffer has before it needs to "serve something up again[.]" (Tr. at 62) Said differently, "[t]he amount of time that you've stored in the ring before you get to the next segment you need to play is directly related to the amount of time that it will take before you run out." (*Id.*) Defendants' counsel agreed, acknowledging that a "fixed time interval" means "how many minutes . . . or seconds . . . of content [the ring buffer] can hold" at any given point. (*Id.* at 66)

invention of the '213 patent as utilizing a ring buffer that services requests that occur within a fixed time interval. *See SciMed Life Sys., Inc v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343 (Fed. Cir. 2001) (“[T]he characterization of the coaxial limitation as part of the ‘present invention’ is strong evidence that the claims should not be read to encompass the opposite structure.”); *Princeton Digital Image Corp. v. Amazon.com, Inc.*, C.A. No. 13-237-LPS, 2019 WL 351258, at *5 (D. Del. Jan. 29, 2019) (concluding that the specification “explicitly define[d]” the terms “value” and “condition” as “represent[ing] different conditions or states of the signal”) (citation omitted)).¹¹

For these reasons, the Court concludes that Defendants’ proposal is the correct one. *See Edwards Lifesciences LLC v. Cook Inc.*, 582 F.3d 1322, 1329-30 (Fed. Cir. 2009) (holding that “graft” was to be construed more narrowly as “intraluminal graft” because the only devices described in the specification were intraluminal and because the specification repeatedly referred to intraluminal grafts as “the present invention”). Thus, it recommends that “ring buffer” be construed to mean “a type of short term storage to service multiple requests of the same SM object within a certain fixed time interval, which advances and stores successive portions of the SM object.”

D. “downloading said portion of said requested SM object to said requesting client, while concurrently retrieving a remaining portion of said requested SM object from one of another HS and said content server”

The next term appears only in claim 16 of the '213 patent, in the penultimate clause. The relevant text recites:

receiving a request for an SM object from one of said plurality of clients at one of said plurality of helper servers;

¹¹ The Court also notes that the *Hulu* Court adopted the same construction. *Hulu*, D.I. 148 at 22 (D.I. 89, ex. B at 22).

allocating a buffer at one of said plurality of HSs to cache at least a portion of said requested SM object;

downloading said portion of said requested SM object to said requesting client, while concurrently retrieving a remaining portion of said requested SM object from one of another HS and said content server; . . .

(’213 patent, col. 14:36-44 (emphasis added)) The parties’ proposed constructions are as follows:

Term	Plaintiff’s Proposal	Defendants’ Proposal
“downloading said portion of said requested SM object to said requesting client, while concurrently retrieving a remaining portion of said requested SM object from one of another HS and said content server”	No construction necessary.	“downloading said portion of said requested SM object to said requesting client from said buffer while concurrently retrieving a remaining portion of said requested SM object from one of another HS and said content server to store on said buffer”

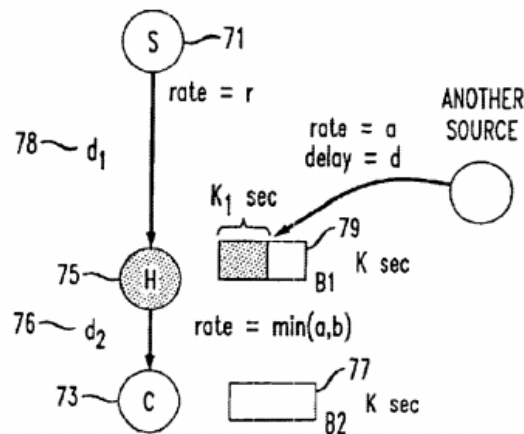
(D.I. 88 at 41) The parties’ dispute relates to Defendants’ assertion that the portion of the SM object that is being downloaded to a client is stored in the same buffer (on the helper server) as the portion of the SM object that is being concurrently retrieved. (D.I. 88 at 42-43) Plaintiff asserts that this additional requirement is not called for. For the two reasons set forth below, the Court agrees with Plaintiff.

First, the claim language favors Plaintiff’s position. The claim reads, “allocating *a buffer* at one of said plurality of HSs to cache *at least a portion* of said requested SM object” and then downloading “*said portion*” to the client. (’213 patent, col. 14:39-42 (emphasis added)) The claim could also have easily been written to additionally specify that the “remaining portion” of

the SM object must be retrieved to the *same* buffer (such as by using the phraseology “concurrently retrieving a remaining portion of said requested SM object *to the same buffer*,” or something like that). But the patentee chose not to do so. That choice is telling. See *Howmedica Osteonics v. Wright Med. Tech.*, 540 F.3d 1337, 1344-45 (Fed. Cir. 2008) (holding, where the claims recited “at least one condylar element” and further required that condylar element to have a particular geometry, that a second condylar element was *not* required to have that geometry); (Plaintiff’s *Markman* Presentation at Slides 33-34).

Now it is true, as Defendants point out, that Figure 7(b) in the patent represents an embodiment where the *same* buffer on the helper server from which the first portion of the SM object was downloaded also concurrently receives the second portion of the SM object. Figure 7(b) is depicted in the patent as follows:

FIG. 7B



(‘213 patent, FIG. 7(b)) The specification describes Figure 7(b) by stating that “[a] first process is to download the existing K_1 seconds of data stored in *the playout buffer B1 79* associated with the [helper server] 75 to the client C 73[,]” and that “[t]he second concurrent process is for the [helper server] 75 to request $K - K_1$ seconds of data from either its local disk, or another [helper

server], or the content server S 71 so that the client's C 73 playout buffer B2 77 may be completely filled.” ('213 patent, col. 8:51-61 (emphasis added)) And the specification goes on to state how “[u]pon completion of processes one and two, described above, *the buffer [B1] 79*[¹²] at the HS 75 is filled at a rate ‘a’ and drained with an average rate of ‘b’ with the remaining K-K₁ seconds of data.” (*Id.*, col. 9:8-11) Plaintiff does not dispute that this embodiment describes a single buffer (B1 79) that is associated with both portions of data. (Tr. at 78-79; *see also* D.I. 88 at 46-47) But just because a single embodiment in the patent describes the invention as working in a certain way, that does not necessarily mean that the claims are “limited to that embodiment.” *See, e.g., Liebel-Flarshiem Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004); *see also Nevro Corp. v. Stimwave Techs., Inc.*, Civil Action No. 19-325-CFC, 2019 WL 3322368, at *7 (D. Del. July 24, 2019).

Second, the Court does not find Defendants' prosecution history estoppel argument to be persuasive. During the prosecution of the '213 patent, the Examiner rejected what became claim 16 as being anticipated by a reference known as “DeMoney.” Like the '213 patent, DeMoney disclosed a method for sending multimedia data to a user. (D.I. 88 at 44) But it differed from the '213 patent in a number of ways. Most importantly here, the '213 patent teaches that the first portion of the SM object is downloaded and the second portion is retrieved *concurrently*, while DeMoney taught that downloading the first portion of the SM object and retrieving the second portion were performed *sequentially*. (D.I. 88 at 44, 48; D.I. 89, ex. H at 16) Thus, in overcoming the rejection based on DeMoney, the patentee wrote:

¹² The specification here actually recites “the buffer B2 79 at the HS 75[.]” ('213 patent, col. 9:9 (emphasis added)) But because Figure 7(b) and the remainder of the text indicate that this has to be a reference to the buffer B1, the “B2” notation must be a typographical error. (Tr. at 107)

By contrast, the applicants' invention allocates a buffer at one of the plurality of helpers to cache at least a portion of the requested SM object, and downloads the portion of the SM object to the requesting client, while concurrently retrieving a remaining portion of the requested SM object from another [helper server] or a content server. That is, the applicants' invention concurrently empties and fills the buffer, while the DeMoney reference teaches filling the buffer only after the buffer is empty. Furthermore, the buffer of the applicants' invention may be filled by information stored in another [helper server], which is also not taught by the DeMoney reference[.]

(D.I. 89, ex. H at 16 (underlining in original) (citation omitted)) It seems pretty obvious (as can be seen from the underscoring the patentee liberally used), that the patentee was distinguishing itself from DeMoney in two ways—with the principal way being that DeMoney did not teach *concurrent* downloading and retrieving (and the other way being that DeMoney did not teach filling a buffer with information stored in another helper server). (Tr. at 98)

Yet with their prosecution history estoppel argument, Defendants seize upon the patentee's use of a term that the patentee did *not* underscore: the term “the buffer” in the second sentence excerpted above. There, they argue that by referring to this (single) buffer, the patentee was making it clear that its invention requires that the *same* buffer be both emptied and filled with SM object content (and disclaiming the use of multiple buffers for this concurrent process). (D.I. 88 at 44-45)

However, to constitute disclaimer, the patentee must have made “clear and unmistakable prosecution arguments limiting the meaning of a claim term in order to overcome a rejection[.]” *SanDisk Corp. v. Memorex Prods., Inc.*, 415 F.3d 1278, 1286 (Fed. Cir. 2005). Arguments made in prosecution fail to rise to the level of “clear and unmistakable” disclaimer when they are “subject to more than one reasonable interpretation, one of which is consistent with a proffered meaning of the disputed term.” *Id.* at 1287. With regard to the prosecution history excerpt above, it is of course *possible* that the patentee was there intending to state that the invention

must only use one buffer for this process. (See Defendants' *Markman* Presentation at Slide 26) But it is also very possible that the patentee was just making reference to *one embodiment* of the invention that used one buffer—all in order to make *different, essential points* about why the invention should be distinguished from DeMoney. (D.I. 88 at 43; Tr. at 85, 91) Given these competing reasonable interpretations, the patentee's words here do not amount to "clear and unmistakable" disclaimer. Cf. *Cadence Pharms. Inc. v. Exela PharmSci Inc.*, 780 F.3d 1364, 1373 (Fed. Cir. 2015).

Accordingly, having recommending resolving this dispute in Plaintiff's favor, the Court also recommends that the term simply be afforded its plain and ordinary meaning.

E. "events"

The first term of the '133 patent, "events," is found in claims 1, 13 and 21. Claim 1 recites:

1. An apparatus for processing events generated by at least one system application, the apparatus comprising:

a processor for executing code to implement at least a portion of at least one real-time analysis engine, wherein the real-time analysis engine processes the *events*, and wherein associated with the real-time analysis engine in a main-memory database system is recovery information regarding a recovery point for the real-time analysis engine.

('133 patent, col. 32:23-31 (emphasis added)) Claim 13 recites:

13. A method of processing *events* generated by at least one system application, the method comprising the steps of:

processing the *events* in at least one real-time analysis engine; and
storing in a main-memory database system associated with the real-time analysis engine recovery information regarding a recovery point for the real-time analysis engine.

(*Id.*, col. 33:7-14 (emphasis added)) Finally, claim 21 recites similar language to claim 13, but claims an article of manufacture "for processing *events* generated by at least one system

application[.]” (*Id.*, col. 34:16-24 (emphasis added)) The parties’ proposed constructions are as follows:

Term	Plaintiff’s Proposal	Defendants’ Proposal
“events”	No construction necessary.	“any type of transaction involving contents of a database system, such as, for example, a group of read, update, delete and/or modify operations”

(D.I. 88 at 1) The parties’ dispute over this term is whether it is limited to “transaction[s],” as Defendants assert, (D.I. 88 at 5-6), or whether it extends more broadly to “occurrences[.]” as Plaintiff asserts, (*id.* at 4). For the reasons set forth below, the Court recommends Defendants’ proposed construction.

A good starting (and ending) point is the definitional language found in the specification regarding this term, which recites: “[t]he term ‘event’ as used herein *is intended to include any type of transaction* involving contents of a database system, such as, for example, a group of read, update, delete and/or modify operations.” (‘133 patent, col. 3:46-49 (emphasis added)) *See The Medicines Co. v. Teva Parenteral Medicines, Inc.*, C.A. No. 09-750-RGA, 2013 WL 3658020, at *5 (D. Del. July 11, 2013) (identifying the language “as used herein” as explicit definitional language); *see also Aventis Pharms. Inc. v. Impax Labs., Inc.*, No. 02-1322 (GEB), 2011 WL 94188, at *9 (D.N.J. Jan. 11, 2011) (same). That definition includes, word for word, the entirety of Defendants’ proposed construction here. Why need the Court go any further?

Plaintiff suggests the Court *does* need to go further, noting that this definition contained the words “intended to include.” Plaintiff asserts that this “intended to include” phraseology

means that while “events” *include* “transactions,” they are not *limited to* “transactions.” (D.I. 88 at 1-2)

The Court does not find this argument persuasive. Here, the specification provides a term (“event”) followed by a transitional phrase (“intended to include”) followed by a broad descriptor (“any type of transaction”) and ending with a non-limiting list of examples (“read, update, delete . . .”). This broad descriptor signals to the Court that the patentee’s focus here was to alert the reader that events are “transactions,” but to also make the point that “*any* type of transaction” (not just *some* types of transactions) are “include[d]” in the definition of “events.”¹³ (Tr. at 121) And what follows “any type of transaction” are non-limiting examples of such transactions. (*Id.*) After all, it would be strange to reference a term (“events”), then to give a first non-limiting example of that term (“transaction”), only to further provide *another* set of non-limiting examples of *that first example* (“a group of . . .”). Additionally, the Court’s conclusion here is bolstered by the fact that the specification does not describe any “events” that are *not* transactions. (D.I. 88 at 5-6 (citing '133 patent, cols. 8:62-65, 12:46-63, 27:39-56)¹⁴

Accordingly, the Court recommends that “events” be construed as “any type of transaction involving the contents of a database system, such as, for example, a group of read, update, delete and/or modify operations.”

¹³ This is not a situation where the patentee wrote that “the term ‘event’ as used herein includes transactions . . .” or “the term ‘event’ as used herein can include transactions” Had it done so, Plaintiff would have had a much better argument that an “event” included, but was not limited to, “transactions.” *See Sunoco Partners Mktg. & Terminals L.P. v. Powder Springs Logistics, LLC*, Civil Action No. 17-1390-LPS-CJB, 2019 WL 4072311, at *5 (D. Del. Aug. 29, 2019); *Aventis Pharms. Inc.*, 2011 WL 94188, at *3.

¹⁴ (*See also* Tr. at 119 (Plaintiff’s counsel agreeing that the claim language “lends itself to a transactionalness”))

F. “software components”

The next disputed term, “software components,” is found in claim 19 of the '715 patent.

Claim 19 recites:

19. A method, comprising the steps of:

obtaining one or more dependency relationships among a plurality of *software components* that run within one or more executables of a distributed software application;

establishing an ordered sequence for shutdown of the plurality of software components based on one or more of the one or more dependency relationships; and

shutting down the plurality of software components according to the ordered sequence;

tearing down any communication channels between the plurality of software components upon deactivation of each of the plurality of software components.

(’715 patent, col. 13:22-33 (emphasis added)) The parties’¹⁵ proposed constructions are as follows:

Term	Plaintiff’s Proposal	Defendants’ Proposal
“software components”	No construction necessary.	“sub-entities of an executable such as a logical block”

(D.I. 101 at 2) During the *Markman* hearing, it took a while to figure out if there was a dispute about this term’s meaning, and if so, what it was. (Tr. at 148-51) Eventually, it became clear that the dispute was as to whether a software component could “run simultaneously within multiple executables” or simultaneously be “shared” between one or more executables

¹⁵ The Walmart Action Defendants did not take a position regarding construction of this term. (D.I. 101 at 2 n.5)

(Plaintiff’s position) or whether it cannot and instead must only run within one executable at a time (Defendants’ position). (*Id.* at 149-53, 162)¹⁶

The Court declines to adopt Defendants’ position because it seems to run contrary to the plain text of the claim. Claim 19 recites “a plurality of software *components* that run within *one or more* executables[.]” (’715 patent, col. 13:23-25) This language conveys that software *components*—plural—can run within one or more *executables*—also plural. Nothing in that language confines a software component to running within only one single executable at a time. (*See* Tr. at 153, 163-64; *see also* ’715 patent, col. 1:62-63 (the specification broadly stating that “software components are *distributed among* a plurality of executables”) (emphasis added))

Defendants’ arguments to the contrary were not persuasive. For example, Defendants pointed to Figure 1 of the patent, which depicts an executable 106 that encapsulates software components 124 and 126, an executable 107 that encapsulates software component 127, and an executable 108 that encapsulates software component 128. (’715 patent, FIG. 1; *id.*, col. 4:17-25; *see also* D.I. 101 at 5; Defendants’ *Markman* Presentation at Slides 58-59) Defendants correctly note that in this figure, the software components in question do not seem to be depicted as being “shared” by multiple executables at the same time. But Figure 1 is simply an “exemplary” embodiment of the invention, (’715 patent, col. 3:9), and nothing in the patent clearly indicates that Plaintiff’s understanding of the term is beyond claim 19’s scope. *See Liebel-Flarsheim Co.*,

¹⁶ At some points in the briefing, it seemed like there might be a dispute here about the “hierarchy” component of this term—that is, whether a software component necessarily is *contained within* an executable. (*See* D.I. 101 at 7 (Defendants explaining that the jury must understand that “[e]ach of the executables *contains* one or more software components”) (internal quotation marks and citation omitted, emphasis and alteration in original)) However, it is clear from the claim’s language (“software components that *run within* one or more executables”) that this must be the case, and indeed, during the *Markman* hearing, both sides agreed that software components are contained within executables. (Tr. 150-51, 153, 159)

358 F.3d at 913; *see also Nevro Corp.*, 2019 WL 3322368, at *7. Additionally, Defendants argued that were Plaintiff’s position to prevail, this would contravene the patent’s key purported innovation—shutting down the distributed software application “at the level of the software components[,] rather than . . . at the executable level.” (D.I. 101 at 7 (internal quotation marks, citations and emphasis omitted)) But during the *Markman* hearing, the Court asked Defendants’ counsel whether, from a technical perspective, it would be impossible to shut down the system “at the component level if executables shared components” in some way; in response, Defendants’ counsel could not say that it would be. (Tr. at 165) Nor does the record show that it would be.

With the Court having recommended resolving the dispute in Plaintiff’s favor, and not seeing a need to add words to describe the meaning of an otherwise understandable term, the Court recommends adopting Plaintiff’s proposal that “software components” be given its plain and ordinary meaning.

G. “deactivation”

The last disputed term, “deactivation,” is found in the final step of the method of claim 19. Again, this step recites, “tearing down any communication channels between the plurality of software components upon *deactivation* of each of the plurality of software components.” (’715 patent, col. 13:31-33 (emphasis added)) The parties’ proposed constructions are as follows:

Term	Plaintiff’s Proposal	Defendants’ Proposal
“deactivation”	“software component no longer takes on new tasks”	“a state prior to shutdown where the software component no longer takes on new tasks” or “a state prior to termination where the software component no longer takes on new tasks”

(D.I. 101 at 7, 10) The Court understands “shutdown” or “termination” to be the *endpoint* of a *process* of shutting down or terminating software applications. And the parties agree that “deactivation” is “a step” in such a process, in which the software component no longer takes on new tasks. (D.I. 101 at 9-11) The parties’ dispute is over whether “deactivation” may occur simultaneously with the endpoint of the shutdown process (Plaintiff’s position), (Tr. at 189), or whether “deactivation” must be followed by certain “termination” steps in order to reach completion or the endpoint (i.e., “shutdown” or “termination”) of the process (Defendants’ position), (Tr. at 192, 201-02). For two primary reasons, the Court recommends adopting Defendants’ proposed construction.

First, the structure of claims 19 and 20 is supportive of Defendants’ view that “deactivation” does not occur simultaneously with the endpoint. Claim 19 recites that the method at issue comprises the steps of “shutting down the plurality of software components according to the ordered sequence” and “tearing down any communication channels between the plurality of software components upon deactivation of each of the plurality of software components.” (’715 patent, col. 13:22-33) And claim 20, which depends on claim 19, recites “wherein the step of shutting down the plurality of software components according to the ordered sequence comprises” a series of steps, including “sending, after deactivation of the first and second software components, a termination message . . . to terminate the first and second software components.” (*Id.*, col. 14:18-33) Thus, claim 20 narrows claim 19 by further articulating *how* the method shuts down the plurality of software components, and requires that *after* deactivation, there are further steps that occur, which include sending of a “termination message” (a step that has to precede actual “termination” itself). This all suggests that: (1) claim 19 claims a “deactivation” of the software components, which is part of the process of “shutting

down” (or terminating) those components; and (2) claim 20 indicates that “deactivation” is a separate step from “shutdown” (or termination), in that it requires that further activity can and does occur between “deactivation” and final “shutting down” or termination.

Second, two embodiments in the specification support Defendants’ position. In the first of these, Figure 2 shows that certain “termination” steps follow “deactivation.” The specification describes how “[a]t STEP 210 [of Figure 2] the manager component 104 deactivates the software components 124, 126, 127, and 128 . . . [f]or example, [by] send[ing] deactivation messages” to the software components. (’715 patent, col. 7:49-52; *see also id.*, FIG. 2) These “deactivation messages indicate to the software components to wrap up any current tasks and to not take on any new tasks.” (*Id.*, col. 7:54-57; *see also* Tr. at 198) Thereafter, the “manager component 104 then may *terminate* each of the software components” such as by “[a]t STEP 214 [of Figure 2, wherein] the manager component 104 sends termination messages . . . [that] instruct the software components 124, 126, 127 and 128 to *stop running*.” (*Id.*, cols. 8:52-9:2 (emphasis added)) The fact that the deactivation messages tell the software components to “wrap up any current tasks”—but that only upon the sending of the termination messages does the software component “stop running”—indicates that after “deactivation” a software component must still be “running” (i.e., it is not in a fully “shutdown” state). In the second embodiment, the software components are terminated without going through any deactivation step. (’715 patent, col. 9:29-36 (stating that the manager component “may just terminate” the software components)). The above embodiments, particularly the first one, thus further make clear that *termination* and not *deactivation* brings these components to a fully shutdown state—and that deactivation does not happen simultaneously with termination.

Accordingly, the Court recommends that “deactivation” be construed as “a state prior to shutdown where the software component no longer takes on new tasks.”

IV. CONCLUSION

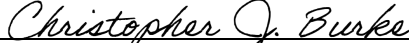
For the foregoing reasons, the Court recommends that the District Court adopt the following constructions:

1. “streaming multimedia (SM) objects”/“streaming media (SM) objects”/“SM object[s,]” should be construed to mean “a type of multimedia data object whose transmission has temporal characteristics such that the data may become useless unless the transmission rate is regulated in accordance with predetermined criteria (e.g., audio and video files)”
2. “buffer” should be construed to mean “temporary (i.e., non-permanent) storage for data being sent or received”
3. “ring buffer” should be construed to mean “a type of short term storage to service multiple requests of the same SM object within a certain fixed time interval, which advances and stores successive portions of the SM object”
4. “downloading said portion of said requested SM object to said requesting client, while concurrently retrieving a remaining portion of said requested SM object from one of another HS and said content server” should be afforded its plain and ordinary meaning
5. “events” should be construed to mean “any type of transaction involving the contents of a database system, such as, for example, a group of read, update, delete and/or modify operations”
6. “software components” should be afforded its plain and ordinary meaning
7. “deactivation” should be construed to mean “a state prior to shutdown where the software component no longer takes on new tasks”

This Report and Recommendation is filed pursuant to 28 U.S.C. § 636(b)(1)(B), Fed. R. Civ. P. 72(b)(1), and D. Del. LR 72.1. The parties may serve and file specific written objections within fourteen (14) days after being served with a copy of this Report and Recommendation. Fed. R. Civ. P. 72(b)(2). The failure of a party to object to legal conclusions may result in the loss of the right to *de novo* review in the district court. *See Sincavage v. Barnhart*, 171 F. App’x 924, 925 n.1 (3d Cir. 2006); *Henderson v. Carlson*, 812 F.2d 874, 878-79 (3d Cir. 1987).

The parties are directed to the Court's Standing Order for Objections Filed Under Fed. R. Civ. P. 72, dated October 9, 2013, a copy of which is available on the District Court's website, located at <http://www.ded.uscourts.gov>.

Dated: May 15, 2020



Christopher J. Burke
UNITED STATES MAGISTRATE JUDGE