

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

NETFLIX, INC.,
Petitioner,

v.

BROADCOM CORPORATION,
Patent Owner.

IPR2020-01423
Patent 6,341,375 B1

Before MELISSA A. HAAPALA, *Vice Chief Administrative Patent Judge*,
and THOMAS L. GIANNETTI and JAMES A. WORTH, *Administrative
Patent Judges*.

GIANNETTI, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

I. INTRODUCTION

Netflix, Inc. (“Petitioner”) filed a Petition pursuant to 35 U.S.C. §§ 311–319 to institute an *inter partes* review of claims 1–6, 9–15, and 17–19 of U.S. Patent No. 6,341,375 B2 (Ex. 1001, “the ’375 patent”). Paper 2 (“Pet.”). Broadband Corp. (“Patent Owner”) filed a Preliminary Response. Paper 6 (“Prelim. Resp.”).

Pursuant to 35 U.S.C. § 314, we instituted this *inter partes* review as to all of the claims challenged and all grounds raised in the Petition. Paper 7 (“Inst. Dec.”).

Following institution, Patent Owner filed a Response. Paper 16 (“PO Resp.”). Subsequently, Petitioner filed a Reply to Patent Owner’s Response (Paper 19, “Pet. Reply”), and Patent Owner filed a Sur-reply (Paper 20, “PO Sur-reply”).

On December 9, 2021, we held an oral hearing. A transcript of the hearing is included in the record. Paper 28 (“Hearing Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This decision is a Final Written Decision, issued pursuant to 35 U.S.C. § 318(a). For the reasons we discuss below, we determine that Petitioner has proven by a preponderance of the evidence that claims 1–6, 9–15, and 17–19 of the ’375 patent are unpatentable.

II. BACKGROUND

A. *The ’375 Patent*

The ’375 patent describes a video on demand system. Ex. 1001, 1:4–5. Figure 2 of the ’375 patent is reproduced below:

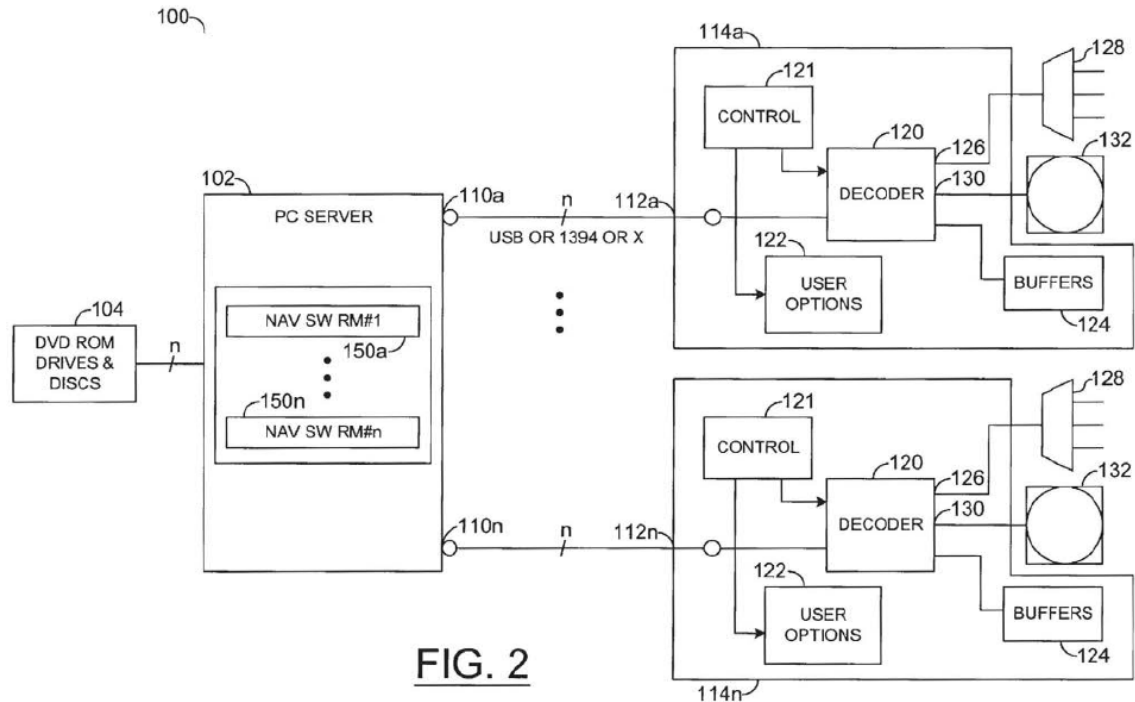


FIG. 2

Figure 2 depicts a DVD video on demand system in accordance with a preferred embodiment. *Id.* at 2:18–19, 2:29–31. Video on demand system 100 comprises server 102, disk library 104, and remote decoders 114a–114n. *Id.* at 2:31–34, 2:43. Disk library 104 includes one or more DVD drives and associated disks that present one or more signals to server 102. *Id.* at 2:34–36. Server 102 presents a number of compressed bitstreams (e.g., DVD bitstreams) at outputs 110a–110n that are received at inputs 112a–112n located in individual remote decoders 114a–114n. *Id.* at 2:39–43. The '375 patent describes that in some embodiments, a single bitstream may be sent to a number of remote decoders 114a–114n. *See id.* at 5:31–32.

Remote decoders 114a–114n may be located in a set-top box or the tuner of a television. *Id.* at 2:43–46. Each remote decoder 114a–114n comprises decoder 120, control 121, user options input interface 122, and one or more buffers 124. *Id.* at 2:53–56. Decoder 120 presents decoded audio signals to one or more speakers 128 via output 126. *Id.* at 2:58–60.

Decoder 120 also presents, via output 130, decoded video signals to video display 132 (e.g., television or computer monitor). *Id.* at 2:60–63.

B. Illustrative Claim

Claims 1, 13, and 15 are independent claims. Claim 1 is illustrative of the subject matter at issue:¹

1. [preamble] An apparatus comprising:

[1a] a drive server configured to present a plurality of compressed data streams in response to one or more first control signals;

[1b] a control server configured to present said one or more compressed data streams received from said drive server in response to one or more request signals; and

[1c] one or more decoder devices, at least one of said one or more decoder devices being disposed in a separate room from said control server and said drive server, each of said one or more decoder devices being configured to (i) decode at least one of said one or more compressed data streams received from said control server and (ii) present at least one signal selected from a decoded video signal and a decoded audio signal in response to decoding said one or more compressed data streams,

[1d] wherein a first portion of a selected one of said compressed data streams is presented to one of said decoder devices and a second portion of said selected compressed data stream is presented to another of said decoder devices.

C. References

Petitioner relies on the following references:

1. U.S. Patent 5,583,561, issued Dec. 10, 1996 (“Baker”) (Ex. 1004).
2. U.S. Patent 5,721,878, issued Feb. 24, 1998 (“Ottesen”) (Ex. 1005).

¹ References in square brackets were added to mirror those provided by Petitioner.

3. U.S. Patent 5,828,370, issued Oct. 27, 1998 (“Moeller”)
(Ex. 1006).

Petitioner further relies on testimony of James A. Storer, Ph.D. (Ex. 1003, “Storer Decl.”; Ex. 1030, “Storer Reply Decl.”). Patent Owner relies on the testimony of Ghassan AlRegib, Ph.D. (Ex. 2001, “AlRegib Decl.”). The parties have submitted deposition transcripts for these declarants.²

D. Grounds Asserted

Petitioner challenges the patentability of the claims of the ’375 patent as obvious over the following references:

Claims Challenged	Statutory Basis 35 U.S.C.³	Reference(s)
1, 2, 4–6, 10, 11, 15, 18, 19	§ 103	Baker
9, 12, 18	§ 103	Baker, Ottesen
3, 13, 14, 17	§ 103	Baker, Moeller

E. Related Proceedings

Petitioner and Patent Owner identify the following district court litigation involving the ’375 patent: *Broadcom Corp. v. Netflix, Inc.*, Case No. 3:20-cv-04677-JD (N.D. Cal.). Pet. 70; Paper 4, 1. Patent Owner additionally identifies the following related litigations: (1) *Broadcom Corp. v. Netflix, Inc.*, Case No. 8:20-cv-00529-JVS-ADS (C.D. Cal.); and (2) *Broadcom Corporation v. Amazon.com, Inc. et al.*, Case No. 8:16-cv-01774-JVS-JCGx (C.D. Cal.). Paper 4, 1.

² Ex. 1009 (“AlRegib Dep.”), Ex. 2002 (“Storer Dep.”).

³ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29 amended 35 U.S.C. §103. Because the application from which the ’375 patent issued was filed before March 16, 2013, the pre-AIA version of 35 U.S.C. §103 applies.

The parties also identify the following PTAB proceeding involving the '375 patent: *Amazon.com, Inc. et al. v. Avago Technologies General IP (Singapore) Pte. Ltd.*, Case No. IPR2017-01112 (filed Mar. 17, 2017; institution denied Aug. 23, 2017). Pet. 70; Paper 4, 1.

F. Real Parties-in-Interest

Petitioner identifies Netflix Streaming Services, Inc. as an additional real party-in-interest. Pet. 70. Patent Owner identifies no additional real parties-in-interest. See Paper 4, 1.

III. PRELIMINARY MATTERS

A. Level of Ordinary Skill

Petitioner contends that “[a] person of ordinary skill in the art . . . of the '375 patent would have been a person with a bachelor’s degree in electrical engineering, computer science, or a similar field with at least two years of experience with video streaming systems or a person with a master’s degree in electrical engineering, computer science, or a similar field with a specialization in data compression and transmission.” Pet. 14. Further, “[a] person with less education but more relevant practical experience may also meet this standard.” *Id.*

Patent Owner responds that “[a person of ordinary skill] at the time of the invention of the '375 Patent would have had a Bachelor's degree in Electrical Engineering, Computer Science, or a similar discipline, with one to two years of experience in this or a related field.” PO Resp. 7 (citing AlRegib Decl. ¶ 23). Patent Owner continues, “[the person of ordinary skill] would also have been familiar with data compression, decoding, and transmission.” *Id.* at 7–8. Patent Owner acknowledges that “Petitioner relies on a similar description of a [person of ordinary skill] in its Petition.” *Id.* at 8.

The descriptions from Petitioner and Patent Owner do not differ materially. Both require bachelor's degrees in the same fields and roughly one to two years of experience in data compression and transmission. Patent Owner would also require experience in decoding.

The arguments presented by Petitioner and Patent Owner do not indicate that the outcome of this case would change depending on the level of ordinary skill in the art. We, therefore, adopt Patent Owner's more specific description, which we determine to be consistent with the level of skill reflected in the asserted prior art references. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001). We note, however, that we would reach the same conclusions under either proposed level of ordinary skill.

B. Claim Construction

In an *inter partes* review, the claims of a patent shall be construed using the same claim construction standard that would be used to construe the claims in a civil action under 35 U.S.C. § 282(b), including construing the claims in accordance with the ordinary and customary meaning of such claims as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent. 37 C.F.R. § 42.100(b); *see also Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005). In determining the meaning of the disputed claim limitations, we look principally to the intrinsic evidence of record, examining the claim language itself, the written description, and the prosecution history, if in evidence. *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 469 F.3d 1005, 1014 (Fed. Cir. 2006) (citing *Phillips*, 415 F.3d at 1312–17).

1. Drive Server

a) Background

The '375 patent describes a video on demand system comprising a drive server, a control server, and decoder devices. PO Resp. 3. The controversy most central to this proceeding is construction of the term “drive server.” *Compare* PO Resp. 8–30, *with* Pet. Reply 6–19. The term “drive server” appears in each independent claim. Moreover, Patent Owner alleges, as its principal argument to rebut the obviousness challenges, that Petitioner has misidentified the Video Library in Baker as a drive server. *See* PO Resp. 31–39 (arguing Baker’s Video Library 10 is not a drive server).

Petitioner contends a person of ordinary skill would have understood drive server as “a ‘device that provides centralized storage services to a VOD [video on demand] system.’” Pet. 14 (citing Storer Decl. ¶ 41). “This would include, for example, disk servers, media libraries, or other multimedia storage devices.” *Id.* Petitioner asserts this construction is supported by the specification of the '375 patent. *Id.* at 14–15. Petitioner contends that “the '375 patent indicates that the ‘drive server’ is a centralized storage device for a VOD system.” *Id.* at 14 (citing Storer Decl. ¶¶ 42–46).

The '375 patent does not expressly define the term “drive server.” Storer Decl. ¶ 42. Apart from the claims and Abstract, the term appears only three times in the '375 patent. Ex. 1001, 1:57, 1:58, 3:26. Petitioner explains that the '375 patent describes the drive server as a device that provides compressed data streams for distribution to viewers. Pet. 14–15 (citing Ex. 1001, Abstract, 1:56–60, 5:46–48). Petitioner further explains that the '375 patent “identifies several central storage devices that perform the function of the ‘drive server.’” *Id.* at 15. Petitioner asserts this

identification includes disk library 104 in Figure 2, which “generally comprises one or more DVD drives and associated disks that present one or more signals to server 102.” *Id.*; Ex. 1001, 2:32–36; *see also* Storer Decl. ¶¶ 42–46, 49–55).

Citing dictionary definitions for “drive” and “server,” Petitioner asserts a person of skill in the art would have understood “drive” to refer to a storage device, and “server” to refer to a device that provides a service to a client, such as a storage service. *Id.* (citing Exs. 1019, 4; 1020, 3 (defining “drive”); Ex. 1018, 4 (defining “server”)).⁴ Petitioner contends that the description of “drive server” in the ’375 patent is consistent with this understanding. *Id.* at 15–16 (citing Storer Decl. ¶¶ 47–48). Petitioner also asserts that its construction is consistent with arguments Patent Owner has made in prior district court litigation. *Id.* at 16 (citing Ex. Storer Decl. ¶¶ 57–58; Ex. 1009, 19; Ex. 1016, 19–20).

In its Preliminary Response, Patent Owner disagrees with Petitioner’s construction, and instead urges that we “follow the Court in *Broadcom Corp. et al. v. Amazon.com, Inc. et al.*, Case No. 8:16-cv-01774 (C.D. Cal. 2016) to construe the term ‘drive server’ in accordance with its plain and ordinary meaning.” Prelim Resp. 19 (citing Ex. 1009, 18). According to Patent Owner, a “server” is “a computer that provides *services* to another computer.” *Id.* at 18 (citing Ex. 1018 (Dictionary of Computer Terms)). Further, Patent Owner contends “a drive server is a server that services another device.” *Id.* at 17.

⁴ Unless otherwise specified, citations to exhibits use the page numbers assigned by the parties and not the original page numbers.

At the institution stage of this proceeding, we were persuaded that Petitioner’s proposed definition of drive server was “mostly correct.” Inst. Dec. 8. We reasoned that the ’375 patent describes that its video on demand system comprises a “disk library 104 [that] generally comprises one or more DVD drives and associated disks that present one or more signals to the server 102.” *Id.* (citing Ex. 1001, 2:32–36) (alteration in original). We further observed also that “[t]he ’375 patent also refers to this element as ‘DVD ROM DRIVES & DISCS’ ‘the DVD drive server,’ and ‘DVD ROM server’” *Id.* (citations omitted).

We noted that the ’375 patent further discloses that the “drive server may be configured to present one or more compressed data streams in response to one or more first control signals.” *Id.* (citing Ex. 1001, Abstract). We were persuaded by Dr. Storer’s testimony that, in view of the specification of the ’375 patent, a person of skill in the art would have understood a drive server to be a device that provides storage services to a VOD system. *Id.* (citing Storer Decl. ¶¶ 41–46).

However, we disagreed with Petitioner that the storage services must be “centralized.” Inst. Dec. 8. Instead, we agreed with Patent Owner that while the specification provides examples in which the drive server is centralized, the ’375 patent does not indicate that centralized storage services are required. *Id.* at 8–9 (citing Prelim. Resp. 18–19).

We were not persuaded by Patent Owner’s assertion that a “drive server” is a “server that services another device.” *Id.* at 9. We concluded that “[t]o the extent Patent Owner argues that the term ‘server’ means that the device must be a ‘computer that provides *services* to another computer,’ we disagree.” *Id.* We reasoned that “[t]he description of the ’375 patent does not indicate the ‘drive server’ (e.g., disc library, DVD ROM DRIVES

& DEVICES) is itself a computer. Rather, the '375 patent generally describes the component as comprising drives and associated disks that provide compressed data streams (storage services) in response to control signals.” *Id.* (citing Ex. 1001, Abstract, 2:32–36). We relied also on Petitioner’s dictionary definitions of “disk server” as a device that provides network disk storage. *Id.* (citing Ex. 1017, 6; Ex. 1019, 3).

Further, we were not persuaded by Patent Owner’s argument that Petitioner’s proposed construction “renders the word ‘server’ surplusage.” *Id.* (citing Prelim. Resp. 17). Rather, we observed that in conjunction with the word “drive,” the description of the '375 patent indicates that the “drive server” provides storage services to the control server. *See id.*

For the foregoing reasons, we construed “drive server” as “a device that provides storage services to a VOD system.” *Id.*

In its post-institution Response (Paper 16), Patent Owner renews its challenge to Petitioner’s construction (and the Board’s pre-institution construction, to the extent that it incorporates Petitioner’s construction). PO Resp. 8. Patent Owner advances four main arguments. *Id.* at 9–30. Patent Owner reprises its argument that Petitioner’s construction of “drive server” improperly renders the “server” portion of this term meaningless. *Id.* at 9. Patent Owner argues that Petitioner’s construction of “drive server” “improperly expands its scope beyond the teachings of the '375 Patent.” *Id.* at 18. Patent Owner again asserts “‘drive server’ should be construed in accordance with its plain and ordinary meaning.” *Id.* at 26. And Patent Owner asserts that we should not credit Petitioner’s construction because Petitioner’s expert, Dr. Storer, “could not answer basic questions concerning the scope of ‘drive server’ under his construction.” *Id.* at 12.

As discussed below, we do not agree with these arguments. Instead, after reviewing the entire record, we are persuaded by Petitioner's arguments in the Petition and Reply to Patent Owner's response, and for the reasons summarized *supra*, to maintain our pre-institution construction of "drive server" as "a device that provides storage services to a VOD system." Inst. Dec. 9. Our reasoning follows.

b) Discussion

As Petitioner recognizes, the "crux" of Patent Owner's argument that the Board's construction renders the word "server" meaningless is the contention that a server *must* include a computer that provides "additional server functionality." *See* Pet. Reply 8. Thus, in its Sur-reply, Patent Owner asserts "the issue boils down to whether a drive server requires some capability (such as processing capability) other than merely the capability to store data." PO Sur-reply 1–2.

We are not persuaded that in the context of the '375 patent, the construction of "drive server" requires a computer, as Patent Owner asserts. In describing the preferred embodiment of Figure 2, the patent itself refers to a "DVD drive server." Ex. 1001, 3:26. Moreover, the claims call for the drive server to be "configured to present a plurality of compressed data streams in response to one or more first control signals." Ex. 1001, 5:46–48. The claims do not call for a computer that provides data storage and "additional server functionality." PO Resp. 26

Patent Owner's construction requiring a server to be a computer providing additional functionality leads Patent Owner to the erroneous conclusion that the preferred embodiment shown in Figure 2 is outside the claims because there is no computer in disk library 104, while the Figure 3 "alternate" embodiment of the '375 patent is the "best example" of an

embodiment claimed by Patent Owner. *See* Ex. 1001, 2:20, 4:17–18; Hearing Tr. 46:1–2. This issue was explored with Patent Owner’s counsel during the oral argument. The Board asked counsel whether the ’375 patent claims read on Figure 2 of the patent, which depicts disk library 104, and counsel responded that they do not:

[THE BOARD]: . . . So your content -- is your contention that your claims read on figure 2 or not?

[COUNSEL]: They read on an aspect of figure 2. If the source devices --

[THE BOARD]: No, wait a minute. They either read on it or they don't. I don't -- what aspect of it do they read on?

[COUNSEL]: Well, so Your Honor, like say for example if you see the disk library 104 and it can be a number of different source devices. And if you look at figure 3 as an example, that provides an alternative embodiment, which is almost the same, and it provides a number of different source devices, right. So if you see source 1, source 104a, 104b, 104n, those are various source devices, right? If one of those source devices is a drive server under its plain and ordinary meaning then that is part of what -- that's what was claimed in claim 1 of the 375 patent.

[THE BOARD]: But not what's shown in figure 2?

[COUNSEL]: In figure 2 -- the description of figure 2 would (inaudible - audio cuts out) comprises and it lists a number of things it comprises. *If what you're saying is it's just figure 2 as drawn then the answer is, no, it's not.*

Hearing Tr. 39:18–40:15 (emphasis added). This is consistent with the testimony of Patent Owner’s expert, Dr. AlRegib. AlRegib Decl. ¶ 53 (“[I]t is my opinion that, while some of the embodiments disclosed in the '375 Patent may not include a drive server, such as those described in Fig. 2, the Challenged Claims are directed to embodiments that require a drive server.”).

In contrast, Patent Owner's counsel asserts that the "alternate" Figure 3 embodiment of the patent is the "best example" of an embodiment within the claims:

[THE BOARD]: . . . Just tell me which of the figures best shows what you think is the claimed embodiment in your patent. Which of the figures would you point to?

[COUNSEL]: I think figure 3 is the best example, Your Honor.

Hearing Tr. 45:23–46:2. Patent Owner recognizes, however, that Figures 2 and 3 use the exact same language in describing the data source alleged by Petitioner to be a data server. Hearing Tr. 54:4–5 ("Figure 3 shows the same words, right, the same words that we're talking about in 104 [in Figure 2], DVD ROMs and DVD ROM drives and disks."). Patent Owner acknowledges that both embodiments refer to the source of signals to the server 102 as "DVD ROM DRIVES & DISCS." Compare block 104 in Fig. 2 to block 104a in Fig. 3. Therefore, Patent Owner's contention that the Figure 2 embodiment is not claimed, while the "alternate" Figure 3 embodiment is claimed, runs counter to the Federal Circuit's observation that "there is a strong presumption against a claim construction that excludes a disclosed embodiment." *Nobel Biocare Servs. AG v Intradent USA, Inc.*, 903 F.3d 1365, 1381 (Fed. Cir. 2018). Patent Owner has identified nothing in the intrinsic record that convinces us this presumption has been overcome with respect to the Figure 2 embodiment.

Patent Owner's explanation for the seeming inconsistency between its position on Figures 2 and 3 relies on a sentence in the '375 patent's specification that we discussed *supra* as supporting Petitioner's construction. The '375 patent, at column 3, lines 23–26, refers to a "DVD drive server." Hearing Tr. 51:25–52:4. Patent Owner contends this relates to Figure 3, and

demonstrates that “the ’375 Patent describes several embodiments of the invention where a “drive server” is expressly a server.” PO Resp. 21. However, we disagree that the discussion of a “DVD drive server” in the specification refers to Figure 3. Hearing Tr. 51:15–22. The discussion of the Figure 3 “alternate embodiment” does not begin until column 4, line 17. We find instead that the “DVD drive server” in column 3 refers to disk library 104 in the Figure 2 embodiment, and supports Petitioner’s contention that a disk library with no computer is a “drive server.”

Patent Owner also points to column 4, lines 19–21 of the ’375 patent specification. There, referring to the “alternate” embodiment of Figure 3, the patent states: “A number of source devices 104*a*–104*n* are shown presented to the server 102. One of the source devices (e.g., 104*a*) *may be a DVD ROM server* as shown in FIG. 1.” Ex. 1001, 4:18–21 (emphasis added). Patent Owner asserts the reference to Figure 1 is a “typo,” and should be Figure 3, because “only figure 3 has a source 104*a*.” Hearing Tr. 52:11–13. We disagree with this assumption on the part of Patent Owner.

While we agree that the reference to “FIG. 1” in the quoted text is an error, we find that the reference to “DVD ROM Server” in the quoted sentence is more likely a description of the disk library in Figure 2. Under conventional rules of grammar, the descriptive phrase “as shown in Fig. 1” modifies the noun in closest proximity, which is “DVD ROM Server.” *See, e.g.,* Brian A. Garner, *Garner’s Modern American Usage* 540 (“When a word . . . points back to an antecedent or some other referent, the true referent should generally be the closest appropriate word.”). Thus, we find that the correct reading of this sentence is “One of the source devices [as shown in FIG. 3] (e.g., 104*a*) may be a DVD ROM server as shown in FIG.

[2].” This reading is confirmed by the mention of a “DVD drive server” in the description of Figure 2. *See* discussion *supra* (citing Ex. 1001, 3:26).

We do not agree with Patent Owner’s reliance on Dr. Storer’s cross-examination to dispute the scope of the claims. PO Resp. 9. His answers to Patent Owner’s hypothetical questions on the scope of the claims, while cautious, do not alter the intrinsic record that supports our construction. “It is well-settled that, in interpreting an asserted claim, the court should look first to the intrinsic evidence of record, *i.e.*, the patent itself, including the claims, the specification and, if in evidence, the prosecution history. Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language.” *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) (citation omitted). We further discuss Patent Owner’s criticisms of Dr. Storer’s testimony, *infra*.

For a similar reason, we find no merit in Patent Owner’s argument based on the presence of the word “comprises” in the ’375 patent’s description of Figure 2, as it is contrary to our findings based on the intrinsic record. *See* discussion of Figure 2, *supra*; *see also* Ex. 1001, 2:30–34; PO Resp. 20–21; Hearing Tr. 37:12–18, 40:11–15, 50:22–51:7. Patent Owner argues the specification of the ’375 patent supports its “plain and ordinary meaning” because the ’375 patent discloses that the drive server can be a “disk library 104” that comprises “one or more DVD drives and associated disks that present one or more signals to the server 102.” PO Resp. 20. Thus, according to Patent Owner, disk library 104 is not limited “to only drives and associated disks.” *Id.* We disagree. The Federal Circuit “has instructed that any such construction [of ‘comprising’] be consistent with the specification.” *In re Suitco Surface, Inc.*, 603 F.3d 1255, 1260 (Fed. Cir. 2010) (emphasis, citations, and internal quotation marks omitted). As

Petitioner points out, “there’s nothing in the ’375 patent that says [a] server has to be a computer.” Hearing Tr. 74:9–10. Thus, we reject the argument that the use of the term “comprising” describing the disk library signifies that the claimed drive server requires a computer, where none is disclosed in the specification.

In sum, we do not agree with the argument that our construction of “drive server” “renders . . . meaningless” the “server” portion of the term “drive server” for failure to require a computer. *See* PO Resp. 9.

We have also considered Patent Owner’s additional arguments and find them lacking. PO Resp. 18–30. Thus, we do not agree that Petitioner’s (or our) construction “improperly” expands the scope of the claims beyond the teachings of the ’375 patent. PO Resp. 18. We have discussed the ’375 specification and how it supports our construction in the previous sections. Under this same heading, Patent Owner repeats many arguments already addressed, including the hypothetical questions on claim scope directed to Dr. Storer and the Figure 2/Figure 3 dichotomy discussed *supra*. *See* PO Resp. 18–26.

Patent Owner’s argument that drive server should be construed in accordance with its “plain and ordinary meaning” (PO Resp. 26–30) repeats the main argument it presented pre-institution. *See* Prelim. Resp. 18–19. This section largely pits Dr. Storer’s testimony against that of Patent Owner’s expert, Dr. AlRegib. *See. e.g.*, PO Resp. 27–29. We do not find this discussion helpful, as it is not grounded in the ’375 patent specification or claims, which we find to be more instructive on the meaning of the term. *See* discussion *supra*.

Finally, we address Patent Owner’s misguided attack on Dr. Storer’s testimony. While we agree Dr. Storer was understandably cautious in

answering open-ended hypothetical questions directed to matters he had not considered (e.g., “[D]o you have an opinion about whether or not your definition of ‘drive server’ has any outer bounds to what would constitute and what would not constitute storage services, a device that provides storage services to a video-on-demand system?”), he nevertheless answered the questions directed to the opinions expressed in his expert declaration. *See, e.g.*, Storer Dep. 18:15–19:10 (answering questions about Video Library 10 in Baker), 27:7–28:–8 (discussing drive server in connection with Baker), 62:10–64:9 (same). As Petitioner points out, Dr. Storer testified that several specific devices would qualify as a drive server and some would not. For example, he testified that a “mass storage device” would certainly qualify as a “drive server,” but a single DVD drive would also be sufficient given the disclosures of the ’375 patent. *See* Storer Dep. 144:10–145:8. Dr. Storer testified also that buffers and floppy disk drives are most likely outside the bounds of a “drive server.” *Id.* at 157:8–159:22; 161:13–163:17. Dr. Storer also explained that whether any such component ultimately qualify as a “drive server” would require knowing details of the hypothetical VOD system. *Id.*

We do not regard Dr. Storer’s reluctance to provide answers to open ended hypothetical questions on what would or would not qualify as a drive server any indication that Petitioner’s construction “is unworkable.” PO Sur-reply 10–18.

Finally, we do not find support in the specification for Patent Owner’s argument equating the “plain and ordinary meaning” of drive server with “a bulk drive on a capable server.” PO Resp. 29 (citing Ex. 1001, 4:14–16); PO Sur-reply 4–5. This description from the ’375 patent specification does not mean a drive server is a type of computer. *See* Pet. Reply 15. We agree

with Petitioner and find that the specification is explaining that drive servers can be implemented as “bulk drives.” Pet. Reply 15–16; Storer Reply Decl. ¶ 10.

c) Conclusion

For the foregoing reasons, we construe “drive server” as “a device that provides storage services to a VOD system.”

2. Other Terms

We only construe terms that are necessary to resolve disputed disputes. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017); *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (“[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.”). To the extent we need to construe any other terms, we will do so in the context of the analysis of the prior art that follows.

C. Description of Principal Prior Art References

Petitioner relies on Baker as its principal prior art reference. *See supra*.

1. Overview of Baker (Ex. 1004)

Baker describes the interactive delivery of digital video data on demand from a video library, which is referenced by a digital video data server for real-time distribution to multiple display systems controlled by viewers. Ex. 1004, 1:10–14. Figure 1 of Baker is reproduced below:

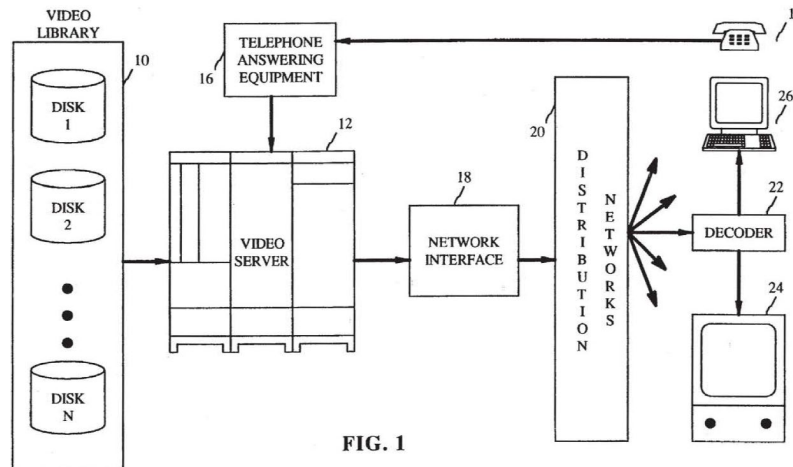


Figure 1 depicts a diagram illustrating the Video Server system architecture of Baker. *Id.* at 6:38–39. The system includes Video Library 10, which constitutes the primary mass storage capability for digital video data in the system and can include magnetic or optical disks. *Id.* at 6:39–42. Encoded and compressed full motion digital video is stored in files on the disks. *Id.* at 6:58–60. The system further includes Video Server 12, which coordinates the various requests for service from multiple viewers, retrieves appropriate video data from Video Library 10 and forwards it to Network Interface 18. *Id.* at 7:47–50. Network Interface 18 facilitates the transfer of video data from Video Server 12 to Distribution Networks 20. *Id.* at 7:56–59. Many viewers can receive data from the Distribution Networks 20; at each viewer site there is a display device and a Decoder 22. *Id.* at 8:18–19. Decoder 22 decodes and compresses the digital video data received over Distribution Networks 20 and sends it to conventional Television Set 24 or Computer Display 26. *Id.* at 8:20–23. Decoder 22 also decodes digitized audio data included in the compressed video signal. *Id.* at 8:23–24.

Baker describes that multiple viewers can request digital video from titles stored on the same disk by providing concurrent access to the disk through multiplexing. *Id.* at 12:47–49. Baker further describes the use of

synchronization groups that allows the re-use of video data through the multi-casting of separate events by adjusting video data streams for events that are close to each other in time to use the same data at the same time. *Id.* at 13:39–47. As viewer requests to commence service for a particular title are received by Video Server 12, responsive service is delayed until the next “synchronization point” (i.e., start of next video data stream for the requested program). *Id.* at 14:21–24. Viewers synchronized to a given video data stream, or point within a stream, are considered to be grouped. *Id.* at 14:25–26. The synchronization of viewer requests into groups allows a single copy of video data to be read from Video Library 10 and sent to all members of a group. *Id.* at 15:10–12.

IV. ANALYSIS

A. Obviousness over Baker

Petitioner contends that claims 1, 2, 4–6, 10, 11, 15, 18, and 19 would have been obvious under 35 U.S.C. § 103(a) over Baker. Pet. 16–48. Petitioner provides testimony from Dr. Storer to support its element-by-element analysis of the claims in relation to Baker. Storer Decl. ¶¶ 86–243.

1. Claim 1

Petitioner asserts Baker teaches the limitations recited in claim 1. Pet. 16–34. Petitioner provides supporting testimony from Dr. Storer. Storer Decl ¶ 87–182.⁵ A detailed analysis of Petitioner’s assertions is set forth below.

⁵ Dr. Storer combines his analysis of claim 1 with claim 15, which is similar to claim 1.

1. *[preamble] An apparatus comprising:*
 - [1a] a drive server configured to present a plurality of compressed data streams in response to one or more first control signals;*

Petitioner asserts Baker teaches such an apparatus with the claimed drive server. *See* Pet. 17–20.⁶ Specifically, Petitioner asserts Baker teaches the drive server through its description that its Video Library (drive server) provides a plurality of compressed video streams to the Video Server in response to software commands (control signals) from the Video Server. *Id.* at 17 (citing Storer Decl. ¶ 97). Petitioner further asserts that Baker’s Video Library is “nearly identical to the ’375 patent’s ‘disk library 104.’” *Id.* at 18–19 (citing Storer Decl. ¶¶ 101–103; Ex. 1004, 6:38–49; Ex. 1001, 2:32–36).

Patent Owner asserts Baker’s Video Library is not the claimed drive server because “it is not a server that provides services to another computer.” PO Resp. 31–32. In addition, Patent Owner contends that Baker’s Video Library “is not configured to ‘present’ a ‘plurality of compressed data streams.” *Id.* at 32. Finally, Patent Owner argues that “Baker discloses that a *single copy* of the video data is retrieved by Video Server 12—not a *plurality* of compressed data streams as required by Claim 1.” *Id.* at 33. We discuss these arguments in turn.

Patent Owner asserts that Baker’s Video Library is not a drive server because it does not meet the “plain and ordinary meaning” of that term. PO Resp. 31–32. In other words, Patent Owner contends that Baker’s Video Library does not meet its proposed construction of drive server as “a server

⁶ Because we find that Baker teaches the preambles of the challenged claims, we do not express a view on whether those preambles are limiting.

that provides services to another computer,” which we did not adopt. Inst. Dec. 9; *see also supra*, Section III.B.1. We find that for the reasons given by Petitioner and summarized above, Baker’s Video Library meets the construction of drive server that we did adopt, which is “a device that provides storage services to a VOD system.” *See supra*, Section III.B.1.

Claim 1 calls for the drive server “to present a plurality of compressed data streams in response to one or more first control signals.” Ex. 1001, 5:46–48. Patent Owner equates “presents” in the claim to “transmits,” and argues that Baker does not meet this limitation. PO Resp. 33–39. Patent Owner asserts “nothing in Baker states that Video Library 10 transmits anything to Video Server 12 in response to commands from Video Server 12.” *Id.* at. 33. We disagree.

Petitioner points out that Baker teaches that the Video Library presents video streams in response to commands from the Video Server. Pet. Reply 21 (citing Storer Decl. ¶¶ 123–130). This operation mirrors the language of the claim. *Id.* (citing Ex. 1001, 5:47–48). Moreover, the ’375 patent uses the term “present” in describing a similar functionality by disk library 104. Ex. 1001, 2:34–36. The patent describes the operation of the disk library as being comprised of “one or more DVD drives and associated disks that *present* one or more signals to the server 102.” *Id.* (emphasis added).

We do not agree with Patent Owner’s argument that the transfer of data from the Video Library in Baker “is accomplished in a very different way” from that of the ’375 patent. PO Resp. 39–40. Patent Owner elaborates that in Baker, “the disks making up Video Library 10 are merely passive participants that allow the Video Server 12 to fetch or retrieve data under the control of the Video Server’s own Instruction Processor 40.” *Id.* at

40. This argument is unavailing because it is not grounded in the language of the claim or the specification, which do not require the disk server to “take an action” on its own, as Patent Owner’s argument suggests, but to respond to signals from the control server. *See* Pet. Reply 20–22; PO Resp. 39. For at least these reasons we find that the Video Library in Baker presents a data stream in response to a control signal from the Video Library, and therefore teaches this aspect of claim 1.

Finally, Patent Owner argues that “nothing in Baker teaches that Video Library 10 is configured to present a ‘plurality’ of compressed data streams to Video Server 12.” PO Resp. 42. Patent Owner continues, “[r]ather, Baker states throughout that only a single copy of the video data is retrieved from the Video Library 10 by Video Server 12.” *Id.* We disagree.

Petitioner points out that Baker’s Video Library is configured to provide a plurality of data streams. Pet. Reply 23–25. Baker teaches that the Video Library is configured to simultaneously transmit multiple data streams. *See* Ex. 1004, Fig. 5. Each of those streams originates from a copy of video data on disk. Pet. Reply 24 (citing Ex. 1004, 13:62–64); Storer Reply Decl. ¶ 32. Baker discloses that each disk in the Video Library can be configured to concurrently transmit up to eight streams. Pet. Reply 24 (citing Ex. 1004, 13:9–25; Storer Reply Decl. ¶ 27). More specifically, Figure 6B of Baker shows “multi-casting,” where five multiple streams support twelve multiple users. *Id.* at 25.

Dr. Storer confirms that “[a person of ordinary skill] would have understood that Baker’s Video Library is ‘configured to present a plurality of data streams’ because it maintains a large number of video files that can be transmitted in response to control commands from the Video Server.” Storer Reply Decl. ¶ 32. He continues, “even if ‘configured to present a

plurality of data streams’ were interpreted to mean ‘configured to *simultaneously* present a plurality of data streams,’ Baker teaches that each disk in the Video Library can be configured to simultaneously transmit up to eight video streams.” *Id.* (citing Ex. 1004, 13:24–25). Referring to Figures 5 and 6B of Baker, he explains “Baker teaches simultaneously transmitting multiple streams to multiple synchronization groups, with *each* of those streams ‘originat[ing] from a copy of video data on disk.’” *Id.* at 33 (citing Ex. 1004, 13:64–65, Figs. 5, 6B) (alteration in original). We credit this testimony as consistent with our understanding of Baker, specifically, Figures 5 and 6B and their accompanying description.

Patent Owner responds that Baker does not disclose “a plurality of compressed data streams” because “the data streams generated by the Video Server [in Baker] originated from a *single* copy of the video obtained from a disk.” PO Sur-reply 22. We disagree with this argument. The claim does not require multiple copies of the video, only multiple streams. Instead, we credit Dr. Storer’s testimony that “Baker teaches simultaneously transmitting multiple streams to multiple synchronization groups, with *each* of those streams originat[ing] from a copy of video data on disk.” Storer Decl. ¶ 33 (citing Ex, 1004, 13:64–65, Figs 5, 6B) (internal quotation marks omitted) (alteration in original).

Nor do we credit Patent Owner’s argument that Baker’s Figure 6B “has nothing to do with data obtained from the Video Library but rather pertains to how Baker’s Video Server transmits multiple streams to different synchronization groups.” PO Sur-reply 22. Instead, we credit Dr. Storer’s explanation that “Baker teaches simultaneously transmitting multiple streams to multiple synchronization groups.” Storer Reply Decl. ¶ 33. He explains that Baker discloses “*each* of those streams ‘originat[ing] from a

copy of video data on disk.” *Id.* (alteration in original); Ex. 1004, 13:62–63; Ex. 1001, Figs. 5. 6B. Furthermore, “each disk in the Video Library can be configured to simultaneously transmit up to eight video streams.” Storer Reply Decl. ¶ 32 (citing Ex. 1004, 13:24–25). This configuration would be unnecessary if all data streams in Baker originate from one disk copy. We find that Dr. Storer’s testimony on this issue is supported by Baker’s disclosure, and therefore we credit his testimony on this issue.

We find, for the reasons given, that Petitioner has demonstrated that Baker teaches the preamble and limitation 1a of claim 1.

[1b] a control server configured to present said one or more compressed data streams received from said drive server in response to one or more request signals; and

Petitioner contends that Baker discloses the claimed “control server” through its description that the Video Server presents data streams received from the Video Library in response to a request for service from a viewer. Pet. 21–25 (citing e.g., Ex. 1004 Fig. 1, Storer Decl. ¶¶132–134). Petitioner explains that “Video Server 12 qualifies as a ‘control server’ because it is a high performance enterprise computer server that is configured to control the operation of a VOD system.” *Id.* at 21 (citing Ex. 1004, 4:50–57).

In claim 1, both the drive server and control server are described as “configured to present” data. Ex. 1001, 5:46, 5:49. In the context of discussing the drive server limitation 1a, Patent Owner argues that the term “configured to present” should have “the same meaning in the context of both the ‘drive server’ and the ‘control server’ elements of Claim 1 in that both servers are configured to take an action (e.g., distribute or transfer) with respect to compressed data streams.” PO Resp. 39.

While we agree with this statement as a general principle, we do not find it supportive of Patent Owner's position that "the Video Library 10 of Baker does not present anything." *Id.* at 41. Patent Owner compares the descriptions of the Video Library and Video Server in Baker, and concludes that "the transfer of data from the disks of the Video Library 10 to the Video Server 12 is accomplished in a very different way than the transfer of data from the Video Server 12 to the decoders." PO Resp. 40. This argument is unavailing because it does not take into account the totality of claim 1.

We find that the claim does not describe the operation of the two servers as being the same. Thus, in context, the claimed drive server is "configured to present a plurality of compressed data streams [from the disk library] in response to one or more first control signals," while the claimed control server is "configured to present [to the decoders] said one or more compressed data streams received from said drive server in response to one or more request signals." Thus, we see no inconsistency in referring to both the Video Library and Video Server in Baker as "presenting" data, because just as in the claim, in each instance, the data is presented to a different destination.

We find, therefore, for the reasons given by Petitioner and summarized *supra*, that Petitioner has demonstrated that Baker teaches limitation 1b of claim 1.

[1c] one or more decoder devices, at least one of said one or more decoder devices being disposed in a separate room from said control server and said drive server, each of said one or more decoder devices being configured to (i) decode at least one of said one or more compressed data streams received from said control server and (ii) present at least one signal

selected from a decoded video signal and a decoded audio signal in response to decoding said one or more compressed data streams,

Petitioner contends that Baker teaches the claimed “one or more decoder devices” recited in this claim limitation through its description of viewer decoder devices. Pet. 25–27 (citing, e.g., Ex. 1004, Fig. 1). Petitioner asserts that “Baker teaches: (i) that each viewer has a decoder device (Decoders 22); (ii) that these Decoders 22 are each located at different sites remote from Video Library 10 and Video Server 12 (i.e., “in a separate room”); and (iii) Decoders 22 decode compressed video streams in response to receiving those streams from Video Server 12 and present those decoded streams for display.” *Id.* at 25–26 (citing Storer Decl. ¶ 152).

Patent Owner contends that Baker does not disclose this limitation. PO Resp. 43–49. Patent Owner asserts that in Baker, the decoders do not receive compressed data streams from the control server (Video Server 12), but from intermediary Network Interface 18. *Id.* at 43–44. Petitioner responds that the claims do not require that the data stream be “received *directly* from” the control server. Pet. Reply 26.

We agree with Petitioner that such a limitation would be contrary to the claim language, which does not require direct receipt. *Id.* Furthermore, Patent Owner points out that the Network Interface is an I/O (input/output) sub-system that operates under control of the Video Server in Baker. *Id.* at 27 (citing Ex. 1004, 13:49–51). We agree with Petitioner and find that Baker’s teaching of transferring streamed data from the Video Server to each viewer’s decoder through an intermediary Network Interface meets this limitation.

For the reasons given, we find that that Petitioner has demonstrated that Baker teaches limitation 1c of claim 1.

[1d] wherein a first portion of a selected one of said compressed data streams is presented to one of said decoder devices and a second portion of said selected compressed data stream is presented to another of said decoder devices.

Petitioner asserts Baker teaches this limitation through its description that blocks (portions) of a video stream are separately presented (“multi-cast”) to decoder devices of viewers. *See* Pet. 27–34. To facilitate multi-casting, Baker discloses using two Frame Buffers (Frame Buffers A and B) that use two destination lists (Destination Lists A and B). *Id.* at 30 (citing Ex. 1004, Fig. 7, 15:22–42). Petitioner asserts that Baker’s technique of multi-casting a stream of data to multiple viewers teaches the “wherein” limitation 1d in at least two ways. *Id.* at 31 (citing Storer Decl. ¶¶172–174).

The first is by replicating blocks of a video stream loaded into Frame Buffers A and B and presenting those replicated blocks to multiple viewers on a first destination list (e.g., Destination List A) and second destination list (e.g., Destination List B). In this scenario, a first portion of the video stream (a block of data replicated from Frame Buffer A) is presented to one decoder device (e.g., the decoder of viewer R1) while a second portion of the video stream (another block of data replicated from Frame Buffer A) is presented to another decoder device (e.g., the decoder of viewer R2). *Id.* at 31; *see also* Ex. 1004 Fig. 6B, Storer Decl. ¶ 172.

The second way is by replicating different blocks of the same video stream loaded into different frame buffers and sending a first portion of the data stream (a block from Frame Buffer A) to one decoder device and subsequently a second portion of the data stream (a block from Frame Buffer B) to another decoder device. *Id.* at 32.

Patent Owner argues that Baker fails to disclose the “wherein” limitation. PO Resp. 49–58. Patent Owner argues the use of the term

“portion” means “separate portions of a single data stream.” *Id.* at 51. Patent Owner contends that the ’375 patent “specifically refers to two portions (a video portion and an audio portion) of a single DVD bitstream.” *Id.* at 51–52. Patent Owner contends that Baker fails to disclose or suggest two portions of one data stream being presented to two decoders. *Id.* at 52–54. Patent Owner asserts that “[a]t best, Baker discloses a first compressed data stream being sent to a first decoder and a second compressed data stream being sent to a second decoder.” *Id.* at 54.

Patent Owner asserts that the multi-cast technique used by Baker to send data to a synchronization group (Petitioner’s first reason) does not present portions of the same data stream to different decoder devices. *Id.* at 54. “Instead, Baker teaches that the data stream is replicated (copied), and that these copies are sent to individual users.” *Id.* (citing Ex. 1004, 15:17–21).

Petitioner responds that Patent Owner’s “theory is based on the assertion that replicating a block of a video stream for transmission to viewers creates a new stream for each viewer (rather than presenting portions of the same stream to those viewers).” Pet. Reply 28–29. Petitioner refers to Baker’s Figure 6B, following:

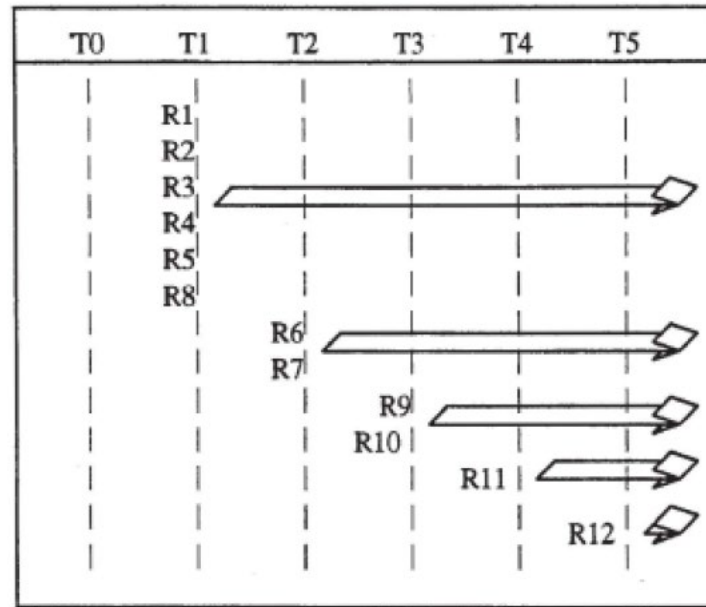


FIG. 6B

Figure 6B is a diagram illustrating the concept of combining randomly arriving viewer requests into synchronization groups. Ex. 1001, 14:28–30.

Requests R1, R2, R3, R4, R5, and R8 are all received by the Video Server after time T0, but before time T1. *Id.* at 14:33–35. The requests are grouped into a synchronization group starting transmission at time T1 as shown in Figure 6B. Similarly, requests R6 and R7 are grouped into the synchronization group starting transmission at time T2, and so on. *Id.* at 14:35–38. Petitioner asserts (and we agree) that Figure 6B depicts sending the same stream to the viewers in a synchronization group. Pet. Reply 29. It follows that the blocks of data in that stream are sent to the viewers’ decoders in that synchronization group. Thus, we do not agree with Patent Owner that Baker fails to teach “two portions of one data stream being presented to two decoders.” PO Resp. 52.

Patent Owner addresses the second multi-casting technique in Baker by asserting that “[i]n that technique, Baker teaches that two different frame buffers are used to send data streams to users on two different destination

lists.” PO Resp. 55 (citing Ex. 1004, 15:22–24). Patent Owner contends that “[w]hile each synchronization group receives the same *content*, each member of the group receives a different data *stream*.” *Id.* at 56.

Petitioner replies that Patent Owner’s description of Baker “is wrong” because it is “based on a misunderstanding of Baker’s multiple buffering scheme.” Pet. Reply 30. According to Petitioner, “Frame Buffers A and B work in tandem to send consecutive blocks of *the same stream* to members of the same synchronization group.” *Id.* (citing Storer Reply Decl. ¶¶ 36–37).

We agree that Patent Owner’s argument misapprehends Baker. As Dr. Storer explains, Baker describes that “the two frame buffers operate in tandem to send blocks for successive time periods of ‘the current video data stream.’” Storer Reply Decl. ¶ 36 (citing Ex. 1004, 15:44–47).

We find that Baker teaches this limitation for the following reasons. We agree with Petitioner that Baker describes a video stream that is divided into portions (blocks) and multi-cast to each viewer in the synchronization group by loading a block of data from a video stream into a Frame Buffer A, replicating the block, and then sending the replicated portions of data to each viewer on the destination list (Destination List A). *See* Pet. 29–30; *see also* Ex. 1004, 15:22–42, Fig. 7 (describing loading a block of video data into Frame Buffer and transferring the block to each viewer in Destination List A). Baker further describes Frame Buffer B is loaded with video data for the next time period in the current video data, along with network destination IDs for its corresponding Destination List B. Ex. 1004, 15:43–47.

We find that Baker’s description of sending the block of data to multiple viewers in a destination list teaches a first portion of a selected data stream is presented to one decoder device (block of data in Frame Buffer A

is sent to first viewer in Destination List A) and a second portion is presented to another decoder device (block of data in Frame Buffer A is sent to second viewer in Destination List A). We agree with Dr. Storer that the limitation does not require the “first” and “second” portions to be different blocks of data. *See* Ex. 1003 ¶ 173.

Patent Owner’s argument that this disclosure in Baker does not meet the claim limitation is not persuasive. The ’375 patent does not support Patent Owner’s assertion that the claimed “portion” means a component of a data stream (e.g., audio or video component). The ’375 patent does not describe sending different components of a stream to different decoders; rather, the ’375 patent describes the same decoder (decoder 120) decodes the video and audio portions of a DVD bitstream. *See* Ex. 1001, 3:9–10.

Petitioner also demonstrates, alternatively, that Baker’s description of sending a block of data in Frame Buffer A to a first viewer and sending a block of data in Frame Buffer B to a second viewer teaches that a first portion of a selected data stream is presented to one decoder device (block of data in Frame Buffer A sent to viewer on Destination List A) and a second portion is presented to another decoder device (block of data in Frame Buffer B sent to viewer on Destination List B). Patent Owner’s assertion that the block of data in Frame Buffer B is a different data stream is unpersuasive because Baker specifically discloses the block of data loaded is the “next time period in the *current* video data stream.” *See* Ex. 1004, 15:43–47 (emphasis added); *see also id.* at 14:25–26 (describing that viewers can be synchronized to a given video data stream or *point within a stream*).

d. Conclusion

For the foregoing reasons, we find that Petitioner has demonstrated that claim 1 would have been obvious over Baker.

2. Claims 2, 4–6, 10, 11, 15, 18, and 19

Independent claim 15 is a method claim that sets forth limitations substantially similar to claim 1. Petitioner analyzes this claim together with claim 1, and relies on substantially the same arguments discussed above with respect to claim 1. *See* Pet. 16–34. Patent Owner does not present separate arguments for this claim. *See* PO Resp. 58. For the reasons discussed above in our analysis of claim 1, we determine that Petitioner has demonstrated that claim 15 would have been obvious over Baker.

Claims 2, 4–6, 10, and 11 depend from claim 1; claims 18 and 19 depend from claim 15. Petitioner presents evidence that Baker teaches the limitations recited in each of these dependent claims. *See* Pet. 35–48. For example, Petitioner shows that Baker teaches “said plurality of compressed data streams are presented to said decoder devices in response to navigation software” (as recited in claim 5) through its description that its system “provides VCR-type control over the display of the video data to each viewer” and that Video Server retrieves and presents video streams to decoder devices in response to viewer navigation commands (e.g., play a selected program.) *See* Pet. 38–39 (citing, e.g., Ex. 1004, 4:62–63, 12:13–27). Patent Owner does not present separate arguments for these claims. *See* PO Resp. 58.

Accordingly, we conclude for the reasons given in the Petition, Petitioner has demonstrated that claims 2, 4–6, 10, 11, 15, 18, and 19 would have been obvious over Baker.

*B. Obviousness over Baker and Ottesen;
Obviousness over Baker and Moeller*

Petitioner contends claims 9, 12, and 18 would have been obvious under 35 U.S.C. § 103(a) over Baker and Ottesen. Pet. 48–60. Petitioner further contends claims 3, 13, 14, and 17 would have been obvious under 35 U.S.C. § 103(a) over Baker and Moeller. *Id.* at 60–69.

Ottesen describes a system for locally controlling multimedia programming received from a remote media-on-demand communication system server. Ex. 1005, 1:27–30. In particular, a multimedia set-top control system provides local VCR-type control of the presentation of selected multimedia programs received in a customized format from a remote multimedia server, preferably on an on-demand, pay-per-view basis. *Id.* at 5:60–65. The system has VCR-type presentation control functionality, including rewind, fast forward, pause, and other presentation modes, which are locally coordinated directly by the set-top control system. *Id.* at 6:53–56. The intelligent set-top control system preferably performs a self-diagnostic routine to determine its internal configuration. *Id.* at 40:25–27.

Moeller describes a video delivery system, which includes a media server that is capable of transferring or playing a plurality of video or multimedia streams. Ex. 1006, 6:19–20, 6:32–33. The compressed play streams may be comprised on a storage media in the media server, such as a RAID disk array, CD-ROM or Digital Video Disk (DVD). *Id.* at 8:42–45.

1. Claims 9, 12, and 18

Petitioner presents evidence that the combination of Baker and Ottensen teaches the limitations recited in dependent claims 9, 12, and 18. *See* Pet. 48–60; Storer Decl. ¶¶ 272–299. Petitioner also presents evidence of a motivation to combine Baker and Ottesen with a reasonable expectation

of success. Pet. 49–54; Storer Decl. ¶¶ 247–271. Patent Owner does not present separate arguments for these claims. See PO Resp. 58–59.

For the reasons given by Petitioner, we find that the combination of Baker and Ottesen teaches the limitations recited in these claims. See Pet. 54–60. We also find that Petitioner presents reasoning with rational underpinning to support combining the references in the proposed manner. See *id.* at 49–54. Accordingly, Petitioner has demonstrated that claims 9, 12, and 18 would have been obvious over Baker and Ottesen.

2. Claims 3, 13, 14, and 17

Independent claim 13 is substantially similar to claim 1, but recites “DVD bitstreams” instead of “compressed data streams.” Claim 3 depends from claim 1, and claim 17 depends from claim 15; these claims similarly set forth the “one or more compressed data streams” comprise “one or more DVD bitstreams.” Claim 14 depends from claim 13.

Petitioner asserts that the Baker-Moeller combination teaches the limitations in these claims. See Pet. 60–69. Petitioner also presents evidence of a motivation to combine Baker and Moeller with a reasonable expectation of success. *Id.* at 60–64; Storer Decl. ¶¶ 303–323. Patent Owner does not present separate arguments for these claims. See PO Resp. 58–59.

For the reasons discussed in our analysis of claim 1, *supra*, we find that Baker teaches the similarly recited limitations in claim 13. See Pet. 66. We find for the reasons given by Petitioner, that Baker alone, or in combination with Moeller, teaches “DVD bitstreams,” as recited in claims 3, 13, and 17. See Pet. 65–69 (citing, e.g., Ex. 1001, 1:10, Ex. 1004, 6:39–42, 6:50–54; Ex. 1006, 8:23–48; Storer Decl. ¶¶ 317, 328–334). We find also that Petitioner demonstrates a rationale to combine Baker and Moeller in the

proposed manner with a reasonable expectation of success. *See id.* at 60–64. With respect to dependent claim 14, we find that for the reasons given by Petitioner, Baker teaches the additional limitation recited in this claim. *See id.* at 67–68.

Accordingly, we conclude Petitioner has demonstrated that claims 3, 13, 14, and 17 would have been obvious over Baker and Moeller.

V. CONCLUSION

Petitioner has demonstrated by a preponderance of the evidence that claims 1–6, 9–15, and 17–19 of the '375 patent would have been obvious and therefore are unpatentable under 35 U.S.C. § 103(a).

In summary:

Claims	35 U.S.C. §	Reference(s)/ Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1, 2, 4–6, 10, 11, 15, 18, 19	103	Baker	1, 2, 4–6, 10, 11, 15, 18, 19	
9, 12, 18	103	Baker, Ottesen	9, 12, 18	
3, 13, 14, 17	103	Baker, Moeller	3, 13, 14, 17	
Overall Outcome			1–6, 9–15, 17–19	

VI. ORDER

It is, therefore,

ORDERED claims 1–6, 9–15, and 17–19 of the '375 patent are unpatentable;

FURTHER ORDERED that, because this is a Final Written Decision, the parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

IPR2020-01423
Patent 6,341,375 B1

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