

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LENOVO (UNITED STATES) INC., DELL INC.,
DELL TECHNOLOGIES, INC., and HP INC.,
Petitioner,

v.

UNIVERSAL CONNECTIVITY TECHNOLOGIES, INC.,
Patent Owner.

IPR2024-01482
Patent 7,856,520 B2

Before KARL D. EASTHOM, THOMAS L. GIANNETTI, and
SHARON FENICK, *Administrative Patent Judges*.

GIANNETTI, *Administrative Patent Judge*.

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

Lenovo (United States), Dell Technologies Inc., Dell Inc., and HP Inc. (collectively, Petitioner) filed a Petition (Paper 1, “Pet.”) requesting an *inter partes* review of claims 1, 2, 4, 8–10, 12, 13, 15, 18–20, and 25 (the “challenged claims”) of U.S. Patent No. 7,856,520 B2 (Ex. 1001, the “’520 patent”). Pet. 1. Universal Connectivity Technologies Inc. (Patent Owner) filed a Preliminary Response (Paper 10, “Prelim. Resp.”). Subsequently, with Board authorization, the parties filed additional briefing. Paper 14 (“Prelim. Reply”); Paper 16 (“Prelim. Sur-reply”).

We have authority to determine whether to institute an *inter partes* review. 35 U.S.C. § 314 (2018); 37 C.F.R. § 42.4(a) (2023). The standard for instituting an *inter partes* review is set forth in 35 U.S.C. § 314(a), which provides that an *inter partes* review may not be instituted unless “there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” However, institution of *inter partes* review is discretionary. *See Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1367 (Fed. Cir. 2016) (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”). For the reasons stated below, we exercise our discretion not to institute *inter partes* review.

II. BACKGROUND

A. Related Proceedings

This proceeding is one of seven involving the same parties and the same underlying district court litigation that is the focus of our analysis. The ’520 patent at issue here is involved in three parallel district court cases: *Universal Connectivity Technologies Inc. v. Lenovo Grp. Ltd.*, No. 2:23-cv-

00449 (E.D. Tex., Sept. 28, 2023) (the “Lenovo Group case”); *Universal Connectivity Technologies Inc. v. HP Inc.*, No. 4:24-cv-04097 (N.D. Cal., July 8, 2024) (the “HP case”); *Universal Connectivity Technologies Inc. v. Dell Techs. Inc.*, No. 1:23-cv-01506 (W.D. Tex., Dec. 12, 2023) (the “Dell case”). Pet. 1–2; Paper 6, 2.

Petitioner identifies the following IPR proceedings as concurrent proceedings involving the same parties: IPR2024-01428, IPR2024-01429, IPR2024-01478, IPR2024-01479, IPR2024-01480, and IPR2024-01481. Pet. 2.¹

In addition, the parties identify other actions involving the ’520 patent: *Lenovo (United States) Inc. v. Universal Connectivity Technologies Inc.*, No. 1:24-cv-01126 (Del.) (“Lenovo (US) case”); and *Universal Connectivity Technologies Inc. v. HP Inc.*, No. 1:23-cv-01177 (W.D. Texas, Sept. 28, 2023) (terminated). Pet. 1; Prelim. Resp. 15; Paper 6, 2. These cases are not identified by the parties as relevant to the issues before us.

B. Real Parties-in-Interest

Petitioner names Lenovo (United States) Inc., Dell Inc., Dell Technologies Inc., and HP Inc. as real parties-in-interest, and further identifies Lenovo Group Ltd. (“Lenovo Group”) as a real party-in-interest “solely because it is named as a defendant in a co-pending district court case.” Pet. 1. Lenovo US is a wholly-owned subsidiary of Lenovo Group. Prelim. Resp. 15 n.1.

¹ The Petition identifies a seventh related petition (IPR2024-01484) believed to be an error. See Pet. 2.

C. The '520 Patent

The '520 patent is titled “Control Bus for Connection of Electronic Devices.” Ex. 1001, code (54). The '520 patent relates to a method and apparatus for a control bus for connection of electronic devices. *Id.* at code (57). The patent describes connecting a control bus between a transmitting device and a receiving device, with the control bus being a bi-directional, single-line bus. *Id.* One or more control signals are converted to one or more data packets, with each of the one or more control signals representing one of multiple different types of control signals. *Id.*

According to the '520 patent, “[m]ultiple electronic devices are increasingly connected together to communication date.” Ex. 1001, 1:14–15. In one example, entertainment and multi-media devices may be interconnected to transfer or share digital information. *Id.* at 1:15–17. The connection of such devices generally requires some form of standard bus or interface to allow the devices to easily connect communicate with each other. *Id.* at 1:17–20.

In one example, data being transferred between devices may be multimedia data and associated commands, including HDMI (High Definition Multimedia Interface) data and commands. Ex. 1001, 1:22–40. In this example, HDMI control signals are multiplexed together on a control bus. For example, control signals CEC, DDC, and private channel instructions are multiplexed together on the bus. *Id.* at 7:31–34. If there is a control signal to be transmitted, the signal is converted into a data packet for transmission. *Id.* at 7:34–36. The receiver will read the header of each received data packet to determine the control type and will handle each

command as required under the standard HDMI protocol. *Id.* at 7:45–47. The patent discloses that this technique can be used to connect HDMI protocol devices to USB (Universal Serial Bus) protocol devices. *See, e.g., id.* at 1:46–50.

D. Illustrative Claim

The Petition challenges claims 1, 4, 8–10, 12, 13, 15, 18–20, and 25. Claim 1 is illustrative of the claimed subject matter and is reproduced below:

1. A method comprising:
 - coupling a first device to a second device, the first device being one of a transmitting device or a receiving device and the second device being the other of a transmitting device or a receiving device, coupling of the first and second devices including connecting a first control bus between the first device and the second device, the first control bus being a bi-directional, single-line bus;
 - determining whether the first control bus is in use by the second device;
 - if the first control bus is not in use by the second device, conducting arbitration for control of the first control bus; and
 - if the first device obtains control of the first control bus through the arbitration for control of the first control bus, the first device becoming an initiator and the second device becoming a follower, then further comprising:
 - converting one or more control signals for a standard protocol to one or more data packets, each of the one or more control signals representing one of a plurality of different types of control signals, each data packet including a plurality of bits to be transmitted; and
 - transmitting the generated data packets from the first device to the second device via the first control bus, and

wherein the receiving device is a device utilizing the standard protocol and the transmitting device is a mobile device utilizing a modified protocol, the modified protocol being a modification of the standard protocol that is not included in the standard protocol.

Ex. 1001, 11:13–41.

E. Prior Art and Other Evidence

The Petition relies on the following references:

Name	Reference	Publication/Issue Date	Exhibit(s)
Yung	US 2006/0095596 A1	May 4, 2006	Ex. 1005
HDMI 1.3	HDMI Specification Version 1.3	June 22, 2006	Ex. 1006
Al-Alawi	Journal of Circuits, Systems, and Computers	Feb. 2006	Ex. 1007

In addition, Petitioner submits the Declaration of Brian A. Berg (Ex. 1003, “Berg Decl.”).

F. Asserted Grounds of Unpatentability

Petitioner asserts the challenged claims are unpatentable on the following grounds:

Claims Challenged	35 U.S.C. § ²	References
1, 4, 8–10, 12, 15, 18, 19, 25	103	Yung, HDMI 1.3
2, 13, 20	103	Yung, HDMI 1.3, Al-Alawi

See Pet. 8.

III. REQUEST FOR DENIAL UNDER 35 U.S.C. § 314(a)

Institution of an *inter partes* review is discretionary. See 35 U.S.C. § 314(a) (authorizing institution of an *inter partes* review under particular circumstances, but not requiring institution under any circumstances); *Cuozzo Speed Techs., LLC v. Lee*, 579 U.S. 261, 273 (2016) (“[T]he agency’s decision to deny a petition is a matter committed to the Patent Office’s discretion.”); *SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1356 (2018) (“[Section] 314(a) invests the Director with discretion on the question whether to institute review” (emphasis omitted)); *Harmonic*, 815 F.3d at 1367 (Fed. Cir. 2016) (“[T]he PTO is permitted, but never compelled, to institute an IPR proceeding.”).

In exercising the Director’s discretion under § 314(a), the Board may consider “events in other proceedings related to the same patent, either at the Office, in district courts, or the ITC.” Patent Trial and Appeal Board

² Because the earliest application for the ’520 patent was filed before March 16, 2013 (Ex. 1001, (22)), the pre-AIA (“America Invents Act”) version of § 103 applies. Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 285–88 (2011).

Consolidated Trial Practice Guide, 58 & n.2 (Nov. 2019).³ *NHK Spring* explains that the Board may consider the advanced state of a related district court proceeding, among other considerations, as a “factor that weighs in favor of denying the Petition under § 314(a).” *NHK Spring Co. v. Intri-Plex Techs., Inc.*, IPR2018-00752, Paper 8 at 20 (PTAB Sept. 12, 2018) (precedential). Additionally, the Board’s precedential order in *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 at 5–16 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”) identifies several factors (“*Fintiv* factors”) for analyzing issues related to the Director’s discretion to deny institution in view of related litigation, with the goal of balancing efficiency, fairness, and patent quality.

When determining whether to exercise discretion to deny institution in view of a parallel proceeding, we consider the following *Fintiv* factors:

1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;
2. proximity of the court’s trial date to the Board’s projected statutory deadline for a final written decision;
3. investment in the parallel proceeding by the court and the parties;
4. overlap between issues raised in the petition and in the parallel proceeding;
5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
6. other circumstances that impact the Board’s exercise of discretion, including the merits.

Fintiv, Paper 11 at 5–6. “These factors relate to whether efficiency, fairness, and the merits support the exercise of authority to deny institution in view of

³ Available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

an earlier trial date in the parallel proceeding.” *Id.* at 6. In evaluating the *Fintiv* factors, we take “a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review,” recognizing that “there is some overlap among these factors” and that “[s]ome facts may be relevant to more than one factor.” *Id.*

In the analysis that follows, we first consider whether the *Fintiv* factors weigh in favor of denying institution.

A. Evidence of a Stay (Factor 1)

A district court stay of parallel litigation pending resolution of an *inter partes* review “allays concerns about inefficiency and duplication of efforts,” and strongly weighs against exercising our authority to deny institution. *Fintiv*, Paper 11 at 6. Of the three district court proceedings, the Lenovo Group case, pending in the Eastern District of Texas, is the most significant to our analysis here. In the Lenovo Group case, Lenovo Group has not requested a stay. Prelim. Resp. 16. Patent Owner argues that the Lenovo Group case is not likely to be stayed based on that court’s low grant rate in other cases and the progress of that case in particular. *Id.* at 17. The district court in the HP case denied a stay without prejudice and stated that a stay could be reconsidered in the future depending on the outcome at the PTAB. Prelim. Reply 3. The Dell case has been stayed. *Id.*

On this record, we decline to speculate as to how any of the involved district courts where no stay is pending might rule on any future motion to stay. Thus, we determine that, while one stay has been granted, the lack of a stay in the other underlying district court cases, especially the Lenovo Group case, is not sufficiently persuasive to weigh this factor against exercising

discretion. *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 15 at 12 (PTAB May 13, 2020) (informative), cautions against speculating whether the district court would grant a stay if one were requested. Therefore, this factor has a neutral effect on the overall balancing of the *Fintiv* factors.

B. Proximity of Trial Date to Projected Statutory Deadline (Factor 2)

The scheduled trial date for the Lenovo Group case is November 3, 2025, which is about six months prior to the expected date for the final written decision here (i.e., late April 2026). *See* Prelim. Resp. 20; IPR2024-01429, Ex. 2002 (Lenovo Group case Docket Control Order), 1. Petitioner argues this trial date is uncertain. Prelim. Reply 3. Further, Petitioner focuses its argument on what it terms a “growing backlog” in the Eastern District of Texas and “associated scheduling uncertainty.” *Id.* at 4. Petitioner refers to the status of the HP case, which is currently set for trial on September 21, 2026, and the stay in the Dell case. *Id.*

Patent Owner responds that “[b]oth the scheduled trial date and the date of trial [in the Lenovo Group case] based on median time-to-trial statistics occur months before a final written decision would be expected here.” Prelim. Sur-reply 4. Patent Owner asserts that the time-to-trial statistics for the Eastern District of Texas project a median time-to-trial of 21.9 months. Prelim. Resp. 20–21 (citing Ex. 2007, U.S. District Courts Federal Court Management Statistics—Profiles—September 30, 2024). This projection yields a trial date that is prior to the expected final written decision date of April 2026. Prelim. Sur-reply 4.

As with the previous factor, the status of the Lenovo Group case is our focus here. As stated, that trial is set to occur about six months before a

final written decision would issue in this proceeding. The district court has stated that this trial date setting “cannot be changed without an acceptable showing of good cause.” Prelim. Resp. 20. We are not persuaded by Petitioner’s unsupported argument that the trial date is uncertain. We also consider the fact that the median time-to-trial statistic discussed by both parties projects a trial date earlier than the actual date set by the district court. Ex. 2007; Prelim. Sur-reply 1. The fact that the time-to-trial statistic is earlier than the trial date set in the Lenovo Group case confirms that the schedule set by the district court is credible and should be given weight.

From this evidence, we are persuaded that we should rely on the trial date in the Lenovo Group case as the main indicator of a trial court reaching the merits of the invalidity of the patent-at-issue before we issue a final written decision. Accordingly, this factor strongly favors discretionary denial of the Petition.

C. Investment in the Parallel Proceeding (Factor 3)

This factor relates to the “amount and type of work already completed in the parallel litigation by the court and the parties at the time of the institution decision.” *Fintiv*, Paper 11 at 9.

As for the amount and type of work expended by the parties, we understand that Patent Owner has “conducted extensive third-party discovery from [Lenovo Group’s] suppliers.” Prelim. Resp. 22. In addition, by the time the institution decisions in these cases issue, the parties will have completed the claim construction briefing, with a *Markman* hearing scheduled soon. *Id.*; Prelim. Sur-reply 4. This activity is all in connection with the Lenovo Group case; the Dell and HP cases have had no significant

activity of note. Prelim. Reply 4. As for the district court's work in the Lenovo Group case, although there have been discovery motions and other activity in connection with claim construction, the amount of work that has been performed to date does not raise a concern for the investments made in that litigation.

Balancing the evidence before us, we are persuaded that the Lenovo Group case activity by the court and the parties has little impact to no impact on our analysis of the third *Fintiv* factor. Accordingly, this factor is neutral.

D. Overlap of Issues (Factor 4)

Under the fourth *Fintiv* factor, we consider “overlap between issues raised in the petition and in the parallel proceeding.” *Fintiv*, Paper 11 at 12 (citing *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 (PTAB Dec. 1, 2020) (precedential)). Lenovo, Lenovo Group, HP, and Dell have each stipulated that if we institute trial, they “will not pursue in District Court litigation the specific grounds asserted in [this] inter partes review . . . , or on any other ground that was raised or could have been reasonably raised in an IPR.” Ex. 1014 (Lenovo (US) stipulation), and; Ex. 1015 (identical stipulation by Lenovo Group); Ex. 1016 (identical stipulation by Dell); Ex. 1017 (identical stipulation by HP).

Patent Owner asserts the “overlap with respect to the arguments and evidence presented” between this proceeding and the litigation is “complete,” and “the Petitioners are asserting the same prior art in the district court and the PTAB.” Prelim. Resp. 24–25. Patent Owner contends that the *Sotera* stipulations do not “remove all concerns” of overlap because the stipulations “expressly reserved the right to challenge invalidity at the

district court based on the same references relied upon here in combination with ‘any system, product, or public knowledge or use that embodies’ any of the identified prior art patents or printed publications.” *See* Prelim. Sur-reply 5 (quoting Ex. 1017). We do not agree with Patent Owner. Patent Owner does not identify any prior art asserted in litigation that falls within this reservation. Although we acknowledge Patent Owner’s concern stemming from Petitioner’s reservation of rights in the *Sotera* stipulations, our evaluation at this juncture is based on the facts before us, not on how Petitioner might challenge the validity of the patent at trial. On the present record, Petitioner’s broad stipulation mitigates certain concerns of duplicative efforts between the district court and the Board, as well as concerns of potentially conflicting decisions. *Sotera*, Paper 12 at 19. Accordingly, factor 4 strongly favors not exercising discretionary denial.

E. Identity of Parties (Factor 5)

Under the fifth *Fintiv* factor, we consider “whether the petitioner and the defendant in the parallel proceeding are the same party.” *Fintiv*. Paper 11 at 13. If the parties are the same in the *inter partes* proceeding and in the parallel proceeding, this factor supports denying institution. *Sotera*, Paper 12 at 19.

The parties disagree on this factor. Patent Owner states that “[t]here is no dispute that real party-in-interest [Lenovo Group], parent of Lenovo US, is the defendant in the [Lenovo Group case].” Prelim. Resp. 26. Patent Owner also states that there is “no dispute” that Lenovo (US) is the plaintiff in the Lenovo (US) case, or that Dell and HP are defendants in the Dell case

and the HP case, respectively. *Id.* Patent Owner contends this factor weighs in favor of discretionary denial. *Id.*

Petitioner responds that Factor 5 “is, at worst, neutral.” Prelim. Reply 5. Petitioner contends that “*Fintiv* did not suggest Factor 5 favors denial when the petitioner and the defendant in the parallel proceeding are the same, instead noting that ‘if a petitioner is unrelated’ the Board has weighed that ‘fact against exercising discretion.’” *Id.* (quoting *Fintiv*, Paper 11 at 13–14).

Patent Owner responds that Petitioner “provide[s] no support” for its contention that this factor is “neutralized” because the Lenovo Group case involves less than all parties to this proceeding. Prelim. Sur-reply 5.

On the record before us, we discern no reason to treat Lenovo (US) and its parent Lenovo Group as separate parties for the purpose of this *Fintiv* analysis. Lenovo Group has submitted a *Sotera* stipulation in this case. Ex. 1014. Lenovo (US) identifies Lenovo Group, as well as Dell and HP, as a real parties-in-interest. Pet. 1. Therefore, all defendants in the parallel district court litigations, including the Lenovo Group case, are parties to this *inter partes* review or are real parties-in-interest.

Accordingly, factor 5 weighs in favor of discretionary denial.

F. Other Circumstances, Including the Merits (Factor 6)

This sixth *Fintiv* factor takes into account other circumstances that may bear on the decision to exercise discretion to deny, such as the merits of the patentability challenges. *Fintiv*, Paper 11 at 14–16. This factor also supports the exercise of discretion because on the merits of the case, on the present record, there are significant weaknesses that call into question the

strength of the Petition. *See id.* at 15–16 (“[I]f the merits of the grounds raised in the petition are a closer call, then that fact has favored denying institution when other factors favoring denial are present. . . there may be strengths or weaknesses regarding the merits that the Board considers as part of its balanced assessment”). We therefore turn to a discussion of the merits.

IV. MERITS ANALYSIS

A. Claim Construction

We construe claim terms only as relevant to the parties’ contentions and only to the extent necessary to resolve the issues in dispute. *See Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999); *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017).

Neither party proposes claim constructions for our consideration. Petitioner submits that it “for the purposes of this proceeding, the terms of the challenged claims should be given their plain and ordinary meaning, and no terms require specific construction.” Pet. 8. Patent Owner does not dispute Petitioner’s position that no terms require construction. Prelim. Resp. 11–12. We determine there are no claim terms that need to be expressly construed for this Decision.

B. Level of Ordinary Skill in the Art

Petitioner contends a person of ordinary skill in the art of the ’520 patent “would have had a bachelor’s degree in electrical engineering, computer engineering, computer science, or equivalent training, and three years of experience with data communications systems or interfaces,

including at least some experience with serial or display data communications systems or interfaces.” Pet. 7 (citing Berg Decl. ¶¶ 100–102).

Patent Owner states that a person of ordinary skill “would have the equivalent of a bachelor’s degree in electrical engineering, computer engineering, computer science, or equivalent training and three years of work experience with data communications systems or interfaces, including at least some experience with serial or display data communications systems or interfaces.” Prelim. Resp. 12.

The differences between these nearly-identical definitions are minor and immaterial to our decision. We regard either description as consistent with the challenged patent and the prior art before us. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (prior art itself may reflect an appropriate level of skill).

C. Overview of the Principal Prior Art

1. Yung (Ex. 1005)

Yung is the primary reference in each of Petitioner’s two grounds of challenge. *See* Pet. 8. Yung discloses a command control unit for use in connection with HDMI devices. Ex. 1005 ¶ 8. Yung discloses that under the HDMI standard, there is an optional protocol, the consumer electronic control (CEC) protocol, that provides high-level control functions between audio visual appliances interconnected in the HDMI environment. *Id.* ¶ 4. In addition, the HDMI protocol defines a display data channel (DDC). *Id.* ¶ 27. DDC information is used for configuration and status exchange between HDMI nodes. *Id.*

2. *HDMI 1.3 (Ex. 1006)*

This document is a specification for version 1.3 of the HDMI protocol. Ex. 1006, 17. Petitioner relies on HDMI 1.3 in combination with Yung in each of its challenges. Pet. 8.

D. Analysis of the Challenges

Petitioner challenges independent claims 1, 12, and 19 as obvious over Yung and HDMI 1.3. Pet. 2. Patent Owner contests this contention on two grounds, as discussed *infra*.

1. *The Bus Limitation*

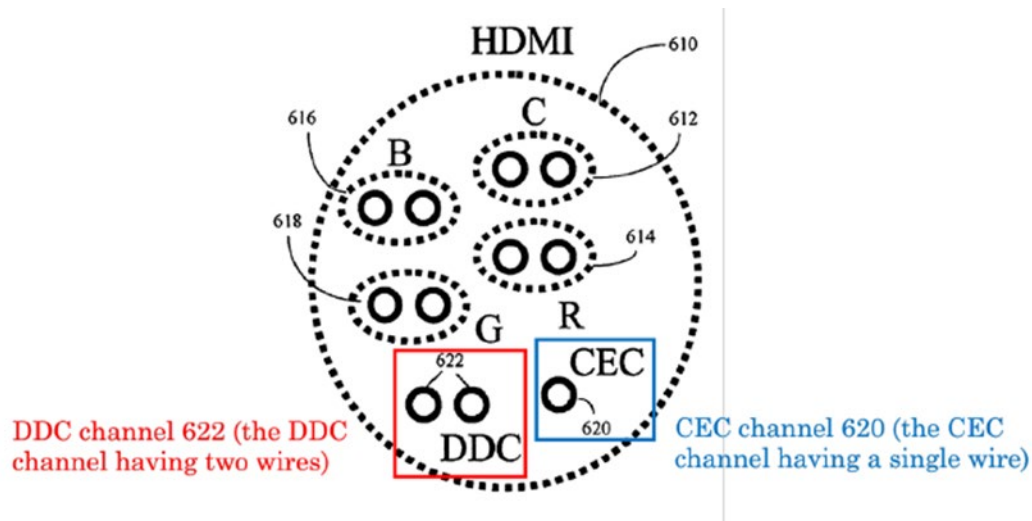
Claim 1 recites “converting one or more control signals for a standard protocol to one or more data packets” and “transmitting the generated data packets from the first device to the second device via the first control bus.” Ex. 1001, 11:30–41.⁴ Petitioner identifies the recited “control bus” as the standard HDMI-compliant cable containing a “CEC bus” that interconnects a display device, a content playback device, and other CEC-compliant devices. Pet. 14–15.

Patent Owner responds that “[t]he combination of Yung and HDMI 1.3 does not disclose how DDC commands and CEC commands can be converted into data packets and transmitted on a single-bit control bus.” Prelim. Resp. 31. Patent Owner continues, “[a]s shown in the ’520 Patent,

⁴ Independent claims 12 and 19 recite similar limitations. *See* Ex. 1001, 12:33–39 (claim 12), 13:12–17 (claim 19).

in HDMI, the DDC and CEC each have their own busses and interconnects.”
Id. (citing Ex. 1001, 8:55–58, Fig. 6).

In support of its position, Patent Owner presents an annotated version of Figure 6 of the ’520 patent, reproduced below.



Prelim. Resp. 32. Figure 6 is a cross-section of an HDMI cable annotated by Patent Owner. The annotated figure shows the wires carrying the DDC information (DDC channel) in red and the separate, single wire carrying the CEC information (CEC channel) in blue. *Id.* at 31 (citing Ex. 1001, 8:55–58). Patent Owner explains that “Yung similarly shows that, in HDMI, the DDC and CEC each have their own busses and interconnects.” *Id.* at 32-33 (citing Ex. 1005, Fig. 1B, ¶ 27).

Focusing on the claim language calling for “one or more control signals,” Petitioner responds that “only one control signal representing one of a plurality of types need [sic] be converted to ‘one or more’ packets and then transmitted to the second device.” Prelim. Reply 2. Petitioner continues: “Thus, converting only one control signal of one of a plurality of

types (i.e., a CEC control signal as opposed to another type of control signal, such as a DDC signal) to generate one packet that is transmitted satisfied this claim language.” *Id.*

In reply, Patent Owner explains that “[a]t most, Yung and HDMI 1.3 disclose different types of control signals being transmitted on different control busses.” Prelim. Sur-reply 3.

2. *The Modified Protocol Requirement*

Claim 1 recites “wherein the receiving device is a device utilizing the standard protocol and the transmitting device is a mobile device utilizing a modified protocol.” Ex. 1001, 11:37–39.⁵ In the ’520 patent, HDMI is given as an example of a standard protocol and USB as an example of a modified protocol. *Id.* at 1:21–50.

Petitioner’s analysis of this claim limitation identifies HDMI 1.1 and 1.2 as the recited “standard” protocols. Pet. 36. Petitioner identifies HDMI-C, a protocol available under HDMI 1.3 but not previous versions of HDMI, as the “modified” protocol. *Id.* at 36–37. Petitioner describes HDMI-C as supporting a more compact connector intended for mobile applications that “carries the same signals” as the larger, standard “Type A” connector. *Id.* at 37.

Patent Owner responds that “HDMI-C merely provides a cable variant to earlier versions of the HDMI specification.” Prelim. Resp. 35. Patent Owner explains that “HDMI-C, like the HDMI-A associated with the earlier

⁵ Independent claims 12 and 19 recite similar limitations. *See* Ex. 1001, 12:46–49 (claim 12), 13:24–14:1 (claim 19).

versions of HDMI and Yung, only support separate CEC and DDC busses.”
Id. at 35–36 (reproducing Ex. 1006, Tables 4-1, 4-3)).

E. Conclusion Regarding the Merits

Petitioner does not present particularly strong merits. Petitioner’s arguments on the “bus limitation,” to succeed at trial, would require addressing a claim construction issue that was never addressed in the Petition and is arguably contradicted by the ’520 patent, which discloses transmitting packets representing a plurality of different control signals on a single bus. *See* Prelim. Sur-reply 2 (citing Ex. 1001, 7:34–38, 9:23–25, 9:50–54). Similarly, prevailing on the “modified protocol” issue would require proving that the HDMI–C protocol, which uses the same separate channel arrangement for CEC and DDC as standard HDMI, is sufficiently “modified” to meet the claim. Taking into account Patent Owner’s persuasive arguments *supra* in response, and for the reasons given, we do not find the merits of Petitioner’s position on either of these dispositive issues to be particularly strong.

V. CONCLUSION

We have considered the facts and circumstances before us in view of the *Fintiv* factors. We take “a holistic view of whether efficiency and integrity of the system are best served by denying or instituting review” when evaluating these factors. *Fintiv*, Paper 11 at 6. Because of the *Sotera* stipulation, factor 4 weighs strongly in favor of not exercising discretion. However, two other factors weigh in favor of exercising discretion, especially the trial date factor. The merits of Petitioner’s challenges are not particularly strong. A balanced assessment of the factors leads us to exercise

discretion under 35 U.S.C. § 314(a) to deny institution of an *inter partes* review challenging claims 1, 2, 4, 8–10, 12, 13, 15, 18–20, and 25 of the '520 patent.

VI. ORDER

For the foregoing reasons, it is hereby:

ORDERED that the Petition is *denied*, and no trial is instituted.

For PETITIONER:

W. Karl Renner
Adam Shartzer
Karan Jhurani
Robert Devoto
Rishi Gupta
Alex Yu
FISH & RICHARDSON P.C.
axf-ptab@fr.com
shartzer@fr.com
jhurani@fr.com
devoto@fr.com
rgupta@fr.com
yu@fr.com
Counsel for Petitioner LENOVO (UNITED STATES) INC.

Wonseon Kiersten Choi
COVINGTON & BURLING LLP
wchoi@cov.com

Jason R. Mudd
Lauren E. Douville
Paul M. Vogel
SHOOK, HARDY & BACON L.L.P.
jmudd@shb.com
ldouville@shb.com
pvogel@shb.com
Counsel for Petitioner HP INC.

IPR2024-01482
Patent 7,856,520 B2

Brian W. Oaks
Nicholas A. Schuneman
Tessa M. Kroll
MCDERMOTT WILL & EMERY LLP
boaks@mwe.com
nschuneman@mwe.com
tkroll@mwe.com
Counsel for DELL INC. and DELL TECHNOLOGIES INC.

For PATENT OWNER:

Brett Cooper
Seth Lindner
BC LAW GROUP, P.C.
bcooper@bc-lawgroup.com
slindner@bc-lawgroup.com

Robert A. Auchter
AUCHTER PLLC
robert@auchterlaw.com