

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PELOTON INTERACTIVE, INC.,
Petitioner,

v.

NEC CORPORATION,
Patent Owner.

Case No. IPR2023-01240
Patent No. 9,769,427

PATENT OWNER'S SUR-REPLY

LIST OF EXHIBITS	
Exhibit	Document
2001	Expert Declaration of Dr. Jeremy Cooperstock
2002	CV of Dr. Jeremy Cooperstock
2003	Joint Claim Construction Chart
2004	Excerpts of Prosecution History of U.S. Patent No. 9,769,427
2005	U.S. Patent Publication No. 2008/0256216 (“Aarts”)
2006	Complaint for Patent Infringement (Case No. 1:22-cv-00987)
2007	Notice of Allowance
2008	Oxford Dictionary Definition
2009	<i>Masahiro Miyasaka, Noritaka Horkome, and Koji Kishida</i> , Bandwidth Management and Control Technology in the NGN (July 2009)
2010	Supplemental Declaration of Dr. Jeremy R. Cooperstock
2011	Declaration of Inventor Kunihiro Taniguchi
2012	Presentation dated August 6, 2008 by inventor
2013	Certified English Translation of Ex[2012]
2014	Metadata of Ex[2012]
2015	English translation of Ex[2014]
2016	Draft Specification of Nov. 6, 2008, Prepared by Inventor Taniguchi
2017	Certified English Translation of Ex[2016]
2018	Patent Owner Work Request to Baba International of Nov. 6, 2008
2019	Certified English Translation of Ex[2018]
2020	Specification of JP2008-294270, as filed on Nov. 18, 2008
2021	Certified English Translation of Ex[2020]
2022	Declaration of Shunsuke Chishiro
2023	Declaration of Motohiro Baba
2024	GMI 2008 Xc Implementation Agreement between UE and Video Media Server (SS-MCF) (MSF-IA-RTSP.001-FINAL), Aug. 25, 2008, available from the CiteSeerX scientific digital library of The Pennsylvania State University at https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=1d360c021e838cd1fd073facbc72c1689551a084
2025	NEC press release dated December 3, 2008, available at http://www.nec.co.jp/press/ja/0812/0301.html
2026	Certified translation of Ex[2025]
2027	Table of Contents of Information Processing Society of Japan (IPSJ) Magazine, November 2008 issue, available at https://ipsj.ixsq.nii.ac.jp/ej/?action=repository_uri&item_id=62939&file_id=1&file_no=1

2028	Comparison of Specification of '427 Patent and corresponding segments of Ex[2021] (English translation of Ex[2020], the JP'270 priority application)
2029	Transcript of Deposition of Clifford Reader, PhD (Apr. 19, 2024)
2030	J.D. Day & H. Zummermann, <i>The OSI Reference Model</i> , 71(12) Proceedings of the IEEE 1334-1340 (1983)
2031	Merriam Webster Dictionary Definition
2032	Default Protective Order

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I. INTRODUCTION

Contrary to Petitioner's assertion, Patent Owner directly disputes and addresses patentability of the disputed claims over the disputed combinations. Additionally, Petitioner incorrectly assumes that the Board's decision granting institution of the present IPR Petition necessarily requires invalidation of the claims, failing to counter NEC's arguments. Finally, Petitioner fails to address the clear errors and failures within the Petition identified in the Patent Owner Response. For these reasons, as explained in further detail below, the Board should reject each of Petitioner's arguments.

II. CLAIM CONSTRUCTION

A. **“the one or more connection control servers executes a process for guaranteeing a communication bandwidth . . . as a process for establishing the connection” (“bandwidth limitation”)**

Petitioner pivots its proposed construction to suggest that Peloton “did not suggest limiting the term to the phrase ‘a standard process performed by SIP servers using SIP messages’.” Reply at 1. This is in contradiction with the Petition, which states that “[t]he specification does not elaborate further on what is meant by ‘a process to guarantee a communication bandwidth,’ indicating that this process *is* a standard process performed by SIP servers using SIP messages.” Pet. at 10 (citing Ex[1008] ¶64). While the Petition does suggest that the claim should be construed to “cover at least the preferred (and only) embodiment described in the ’427 Patent,” Pet. at 10,

Peloton's construction is contrary to the actual embodiment described in the patent, whereby "the transport functions part 80 execute a process to guarantee the communication bandwidth," Ex[1001] at 15:35-37, and thus is specifically *not* performed by SIP messages. The SIP Standard distinguishes itself from the transport protocols which actually execute processes on behalf of the system—a mechanism which the SIP Standard itself is unable to do. As noted within the SIP Standard itself, the SIP Standard "runs on top of several different transport protocols," Ex[1004] at 1, and Peloton fails to identify any such transport protocols which, consistent with the '427 Patent, execute the bandwidth limitation.

Peloton now argues merely that the SIP messages convey information "which may be used to affirm the needed bandwidth is available before continuing or aborting the session connection process." Reply at 1-2 (citing DI at 41). This is in contrast with the argument in Peloton's petition, which specifically (and exclusively) identifies the various SIP messages and their corresponding content as executing the "process for guaranteeing a communication bandwidth." *See, e.g.*, Pet. at 48 ("SIP Standard describes accepting an invitation to initiate a session by sending a 2xx response."). Absent in this argument is identification of any reference which actually performs the claimed process—a deficiency which Peloton cannot now cure by introducing new arguments.

III. UEDA IS NOT PRIOR ART TO THE '427 PATENT

Peloton's argument regarding priority of the ' 427 Patent must fail, and the Board should not consider Ueda to be prior art.

A. The August Presentation Establishes Conception¹

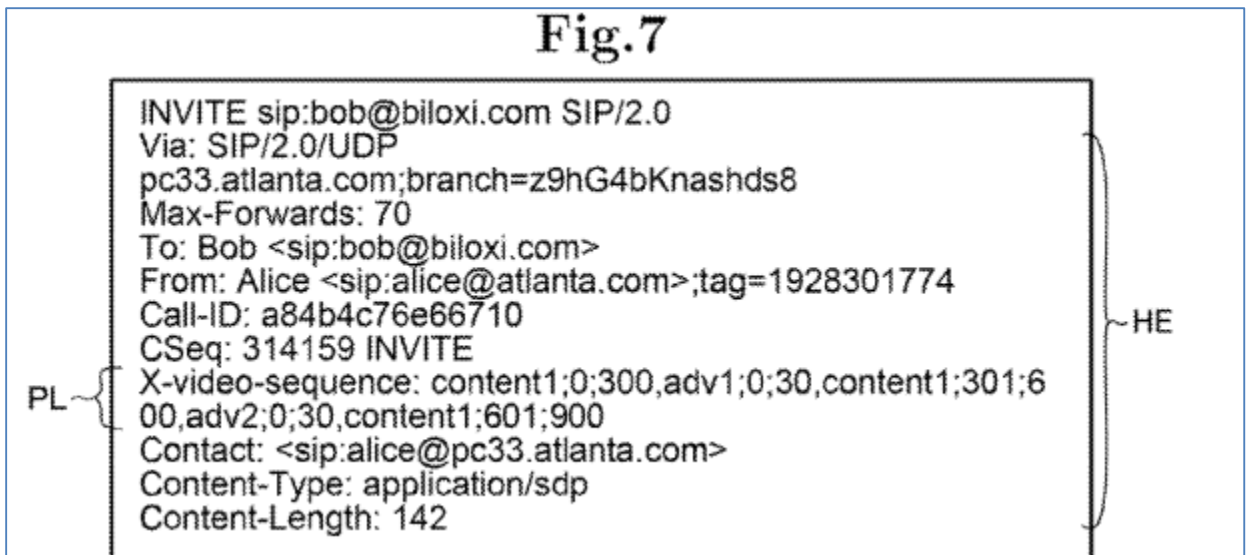
Peloton first argues that the August Presentation cannot establish conception because it does not explicitly disclose “one or more connection control servers . . . based on the received equipment specification information.” Reply at 4. However, the August Presentation indeed “encompass[es] all limitations of the claimed invention,” *Singh v. Brake*, 222 F.3d 1362, 1367 (Fed. Cir. 2000). As explained below, Peloton's narrow reading of the Presentation is improper under the law and fails to consider the actual disclosure of the August Presentation. Peloton also puts forth no argument from its own expert to rebut the opinions presented by Dr. Jeremy Cooperstock in his Supplemental Declaration, which sets forth the precise disclosures in the August Presentation—as such, Dr. Cooperstock's testimony regarding conception of the '427 Patent is un rebutted and undisputed by Peloton's

¹ Patent Owner notes that claims 32, and 34-36 do not recite or require “equipment specification information” and thus Petitioner's argument with respect to this limitation is irrelevant for those claims. Peloton therefore makes no argument that the August Presentation does not disclose each of the elements of these claims.

own expert. See Ex[2010] ¶¶18-21 (setting forth unrebutted expert testimony that the August Presentation discloses each of the elements of the Challenged Claims).

The proper standard does not necessarily require a conception document to explicitly recite each and every claim limitation, but rather, “the test for conception is whether the inventor had an idea that was definite and permanent enough that one skilled in the art could understand the invention.” *Burroughs Wellcome Co. v. Barr Labs., Inc.*, 40 F.3d 1223, 1228 (Fed. Cir. 1994); see also *Coleman v. Dines*, 754 F.2d 353, 359 (Fed. Cir. 1985) (“It is therefore the formation, in the mind of the inventor of a definite and permanent idea of the complete and operative invention, as it is thereafter to be applied in practice, that constitutes an available conception, within the patent law.”) (emphasis in original). Here, Patent Owner has shown this in multiple ways.

Peloton’s own argument admits that the presentation explicitly shows “equipment specification information.” Specifically, in its Petition, Peloton proposed a construction for the term “equipment specification information” as “an identifier for identifying the user equipment,” and as an example points to elements from the ’427 Patent that show such a construction. Pet. at 9. This includes, for example, Figure 7 of the ’427 Patent which shows the asserted identifier such as “alice@atlanta.com” or “alice@pc33.atlanta.com.” Figure 7 is reproduced below.



Almost this exact figure (with minor variations not at issue here) is also reproduced throughout the August Presentation which Peloton claims does not describe this feature, including, for example portions of slide 12, reproduced below, which shows exactly the same type of “equipment specification information” which Peloton in turn relies upon in its Petition. *See* Pet. at 29-30.

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INVITE sip:bob@biloxi.com SIP/2.0
Via: SIP/2.0/UDP pc33.atlanta.com;branch=z9hG4bKnashds8
Max-Forwards: 70
To: Bob <sip:bob@biloxi.com>
From: Alice <sip:alice@atlanta.com>;tag=1928301774
Call-ID: a84b4c76e66710
CSeq: 314159 INVITE
Contact: <sip:alice@pc33.atlanta.com>
Content-Type: application/sdp
Content-Length: 142

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Ex[2013] at 12. Thus, by Peloton’s own admission, the August Presentation clearly contemplates “equipment specification information” as used within the ’427 Patent.

Peloton further disputes that the August Presentation does not disclose “the process of using ‘equipment specification information’ as part of an authentication

process to validate the user equipment.” Reply at 5. This again ignores the clear disclosure within the August Presentation. For example, the Presentation contemplates “authentication of users” and shows such authentication steps in slide 3, as occurring between the user equipment (“UE”) and the rest of the system (including the “Core IMS,” outlined in green). Though this is included in a “description of prior art” slide, it shows that an inventor, Mr. Taniguchi, clearly contemplated and held within his possession, the user of equipment specification information as part of authentication of the overall system. See Ex[2013] at 3, 9, 10, 11, 12, 21; *see also* Ex[2010] ¶18 (identifying the relevant slides as disclosing “equipment specification information” and use of such information to “establish a connection between the application server system and the user equipment based on the received equipment specification information”). This is further affirmed within slide 9, which contemplates that the “SCF [Service Control Functions] receives authenticated user information from IMS,” with such authenticated user information coming to the IMS from the UE, as shown in slides 10 and 11. Ex[2013] at 9-10. Thus the August Presentation explicitly includes this claim limitation, and shows that an inventor of the ’427 Patent had “a specific, settled idea, a particular solution to the problem at hand.” *Teva Pharma. Indus. Ltd. v. AstraZeneca Pharma. LP*, 661 F.3d 1378, 1383 (Fed. Cir. 2011).

Peloton’s argument that “slides 12 and 21 do not even relate to information sent by a user equipment” is unavailing. Reply at 5. Slides 12 and 21 clearly indicate superimposition of certain information on an “INVITE Message” according to working examples shown. Ex[2013] at 12, 21. This INVITE message is shown elsewhere to be transmitted between the User Equipment “UE” and other components, in particular the “Core-IMS” and the “SCF” as exemplified on slides 10 and 11, and the information in this INVITE message comprises equipment specification information.

As Peloton does not challenge any other element of claim 1 as absent from the August Presentation, and given that the challenged equipment specification information is clearly shown, the August Presentation shows an earlier conception date that the priority filing date of the ‘427 Patent. Further, since claims 32, and 34-36 do not contain the challenged limitation, Peloton presents no argument against conception of at least those claims.

Peloton also erroneously asserts that the August Presentation does not establish conception of claims 2-9 and 15-17. In particular, Peloton ignores Dr. Cooperstock’s recitation of *specific slides* which also disclose each of these features. See Ex[2010] ¶ 21. Even assuming for the sake of argument that the Board may not “look to whether one skilled in the art could have thought of the invention,” Dr. Cooperstock has provided, and Peloton does not challenge, specific elements within

the August Presentation which show that an inventor “actually had in their mind[] the required definite and permanent idea” required for each of dependent claims 2-9 and 15-17. *See Burroughs Wellcome Co. v. Barr Lab’ys, Inc.*, 40 F.3d 1223, 1232 (Fed. Cir. 1994). Peloton makes no attempt to dispute this disclosure.

B. NEC Has Established Mr. Taniguchi’s Reasonable Diligence in Reducing to Practice the Invention of the ’427 Patent

“Where a party is first to conceive but second to reduce to practice, that party must demonstrate reasonable diligence toward reduction to practice from a date just prior to the other party’s conception to its reduction to practice.” *Mahjurkar v. C.R. Bard, Inc.*, 79 F.3d 1572, 1579 (Fed. Cir. 1996). In order to show reasonable diligence in reducing the invention to practice, NEC must show that an inventor, Mr. Taniguchi, worked with reasonable diligence to reduce the invention to practice. In the present case, this was shown via Mr. Taniguchi’s reasonably continuous work on this invention, despite his many responsibilities both within NEC and in related projects within the IPTV industry. NEC has met this burden and ***need not show that Mr. Taniguchi exclusively worked only on the ’427 Patent during this time period.*** *See Monsanto Co. v. Mycogen Plant Science, Inc.*, 261 F.3d 1356, 1369 (Fed. Cir. 2001) (“Proof of reasonable diligence, however, does not require a party to work constantly on the invention or to drop all other work”) (cleaned up); *Artic Cat Inc. v. GEP Power Prods., Inc.*, 919 F.3d 1320, 1331 (Fed. Cir. 2019). (reversing Board’s

finding of no antedation based on “too rigid” of standard, noting “diligence need not be perfectly continuous”); *Perfect Surgical Techniques v. Olympus America, Inc.*, 841 F.3d 1004, 1009 (Fed. Cir. 2016) (“an inventor is not required to work on reducing his invention to practice every day during the critical period”).

Mr. Taniguchi provides more than just a “general statement” to support this claim – he describes his time preparing the initial draft specification in August 2008 (based upon his work on the August Presentation, which as established above shows conception), Ex[2011] ¶ 12, and explains that he continued to revise and prepare the specification despite his various other duties within NEC along with related IPTV projects. *Id.* ¶ 13. These duties included Mr. Taniguchi’s award-winning work and participation in related IPTV activities, including ETSI TISPAN, and his participation in the MSF’s GMI 2008 Xc Implementation Agreement, which also relate to the technology underlying the ’427 Patent. *See, e.g.*, Ex[2024] at 12, 22; Ex[2026]. Such evidence does not “depend solely upon” Mr. Taniguchi himself, and instead corroborates his continued diligence with respect to the invention of the ’427 Patent by showing third party recognition of his contributions and work. *In re Jolley*, 308 F.3d 1317, 1328 (Fed. Cir. 2002) (“Corroboration may be established by ‘sufficient circumstantial evidence of an independent nature’”).

Peloton’s assertion that NEC “also provides ***no corroboration whatsoever*** of any activities related to drafting the specification” simply ignores the substantial

evidence of record. Reply at 8. NEC has provided, at least, the corroborating evidence of Mr. Motohiro Baba (Ex[2023]), testifying that his Firm received a request to draft and file the application on November 6, 2008, which testimony is itself corroborated by NEC's request to prepare a patent application corresponding with the invention "so that it can be filed as soon as possible" (Ex[2019] (translation of Ex[2018])). Those dates, in turn, are corroborated by the business records discussed in the declaration of Mr. Chishiro (Ex[2022]), who confirmed using NEC's electronic records, that the draft patent specification and work request were sent to Mr. Baba's Firm on November 6, 2008—during the critical period. *Id.* ¶¶6-7.

That evidence also corroborates Mr. Taniguchi's testimony that he was preparing the draft patent specification during the critical period (Ex[2011] ¶¶13, 15), because Mr. Baba testified that his Firm received the draft specification on November 6, 2008. Ex[2023] ¶4. Such evidence, especially given the amount of time which has passed since the critical period of the '427 Patent invention, is sufficient under the rule of reason to corroborate Mr. Taniguchi's testimony.

Peloton cites *Shu-Hui Chen v Bouchard*, but that case is distinguishable because there is no question here, unlike *Shu-Hui Chen*, about "who worked on what applications." Mr. Taniguichi testified he himself drafted the specification (Ex[2011] ¶¶ 12-13, 15), a complicated technical document that would require

significant time to write in view of Mr. Taniguchi's otherwise busy work schedule, (Ex[2016]), which is corroborated by Mr. Baba (Ex[2023] ¶ 4), and by the fullness of Mr. Taniguchi's draft even before work by patent attorneys (Ex[2017]). Thus, this is also distinguishable from the uncorroborated testimony in *Tesla, Inc. v. Charge Fusion* cited by Peloton, Reply at 8. Indeed, *Shu-Hui Chen* itself held that "whether a putative inventor's testimony has been sufficiently corroborated is determined by a 'rule of reason' analysis, in which 'an evaluation of all pertinent evidence must be made so that a sound determination of the credibility of the inventor's story may be reached.'" 374 F.3d 1299, 1309 (Fed. Cir. 2003).²

As the Federal Circuit has noted:

In determining whether an invention antedates another, the point of the diligence analysis is not to scour the patent owner's corroborating evidence in search of intervals of time where the patent owner has failed to substantiate some sort of activity. It is to assure that, in light of the evidence as a whole, the invention was not abandoned or unreasonably delayed.

Perfect Surgical Techniques, 841 F.3d at 1009 (cleaned up). The unrebutted evidence here shows that Mr. Taniguchi was reasonably continuous in his efforts to

² Peloton made no request to depose Mr. Taniguchi regarding his declaration, or question his activities related to reduction to practice of the '427 Patent.

reduce the invention to practice from *Ueda*'s filing in September 2008 until Mr. Taniguchi's priority patent filing in November 2008. Thus, *Ueda* is not prior art.

IV. CLAIMS 1, 4-9, 14, 16, 18, 20, 22, 32, AND 34-36 ARE NOT OBVIOUS IN VIEW OF UEDA, SIP STANDARD, AND SDP STANDARD

A. There Is No Motivation to Combine Ueda and the SIP Standard

Peloton claims that NEC's arguments regarding the motivation to combine have "already been rejected by the Board." Reply at 9. As a matter of procedure, this is incorrect: The parties are not bound by statements made by the Board in instituting an *inter partes* review, rather, the institution decision merely finds that "there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." 35 U.S.C. § 314. For that reason, Peloton's implication that the Board should ignore or dismiss Patent Owner's arguments in its Patent Owner Response are misplaced.

NEC's argument is not premised on the level of "granularity" which Peloton attacks in its Reply. Rather, Peloton's burden, with respect to Ueda and the SIP Standard is to demonstrate that a person of ordinary skill in the art *would have been motivated* to combine the references in the proposed manner. *See Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015). This is what Peloton has failed to do. As a result of the features of both Ueda and the SIP Standard (as explained in NEC's POR), Peloton has failed to put forth any reason why a POSA would actually combine the references as proposed—which is emphasized by the fact that Ueda

already contemplates the use of various features that Peloton now contends would be provided by the SIP Standard. *See, e.g.*, POR at 24-26. Peloton pushes back against the inherent incompatibility between the SIP Standard and Ueda in its Reply by noting that Dr. Cooperstock states that *SDP* “contemplates that applications may be sent as part of a session.” Reply at 12. Ignoring that Peloton presents no such argument in its Petition, the fact that *another* reference *may* provide for a particular feature does not, as Peloton implies, explain why a POSA would be motivated to combine SIP and Ueda.

B. There Is No Motivation to Combine Ueda, the SIP Standard, and the SDP Standard

As explained in the POR, and acknowledged by the Board, even if a POSA “would have been able to incorporate Ueda’s media details, transport addresses, and other metadata into SIP-encapsulated SDP session descriptions without redundancy,” Peloton is still required, within the Petition, to identify a motivation as to why a POSA would incorporate such metadata. POR at 32. Whether a POSA *could have* modified the various fields of the SDP Standard is not the correct inquiry, and Peloton has failed to make the threshold showing that a POSA would have had any motivation at all to make such a modification. *See Trutek Corp. v. Regents of the Univ. of Michigan*, IPR2022-00674, Paper 10, 25 (P.T.A.B. Sept. 28, 2022) (“‘[T]he burden falls on the challenger’ to show that ‘a skilled artisan would have

been motivated to combine the teachings of the prior art,’ and that a ‘skilled artisan would have had a reasonable expectation of success in doing so’”) (quoting *Pfizer, Inc. v. Apotex, Inc.*, 480 F.3d 1348, 1361 (Fed. Cir. 2007)). Peloton contends that a POSA would “recognize the benefit of leveraging SDP and SIP with Ueda,” Reply at 15, but fails to consider any suggestion within the references themselves that would justify such a combination since Ueda makes no mention of the SIP or SDP Standards. *See In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998) (“Although the suggestion to combine references may flow from the nature of the problem . . . the suggestion more often comes from the teaching of the pertinent references . . . or from the ordinary knowledge of those skilled in the art”) (internal citations omitted).

Peloton also attempts to dismiss NEC’s argument that Peloton’s combination is premised upon an improper application of hindsight bias, claiming that the combination is “merely the combination of familiar elements according to known methods.” Reply at 16 n.6. However, as explained in the Patent Owner Response, Peloton picks and chooses elements from the cited references and relies upon its expert to state that these elements “could” be combined as proposed based upon the skill of a POSA in order to reach the Challenged Claims. *See* POR at 48-49. This falls far short of the standard which Peloton must meet—and instead falls into the trap of hindsight bias, and thus should be disregarded. *See InTouch Techs., Inc. v.*

VGO Comms., Inc., 751 F.3d 1327 (Fed. Cir. 2014) (“[VGo’s expert’s] testimony primarily consisted of conclusory references to her belief that one of ordinary skill in the art *could* combine these references, not that they *would* have been motivated to do so.”) (emphasis in original). Peloton’s expert, Dr. Reader, merely looked to the disparate references presented by Peloton and concluded that they *could* be used to reach the ’427 Patent, but does not explain how, nor why a POSA would make such a combination. See POR at 49-50 (collecting examples of hindsight bias).

C. Ueda, the SIP Standard, and the SDP Standard Do Not Teach the Bandwidth Limitation

Peloton’s Reply to NEC’s argument regarding the bandwidth limitation of the ’427 Patent identifies three purported weaknesses in NEC’s argument:³

- The wrong standard for obviousness.
- Import additional requirements to the bandwidth requirement.
- Proposed combination should fail for not “mandating” a system bandwidth.

Reply at 17-21. Patent Owner addresses each of these points below.

³ Contrary to Peloton’s assertion, NEC strongly disagrees that any of Peloton’s references, including the SIP Standard itself, disclose either bandwidth reservation or bandwidth guarantee.

1. NEC Has Applied the Correct Standard for Obviousness

Peloton confusingly suggests that NEC has applied the wrong standard for obviousness in considering the combination (presumably) of Ueda and the SIP Standard. However, Peloton's argument devolves into a contradiction, as it states only that the "whitepaper describing the protocol for interacting with such servers—does not need to disclose the bandwidth guarantee limitation." Reply at 18. However, as consistently identified by NEC, in no combination do any of the references disclose the bandwidth limitation. Rather, Peloton appears to instead be relying on some inherent feature of the SIP Standard – for example, the SIP does *mention* (though neither the Standard nor Peloton discuss it) transport protocols, which the '427 Patent does describe. But, Peloton fails to identify any transport protocol as actually performing the features for which Peloton relies upon the SIP Standard, thus fails to identify or explain how the SIP Standard teaches the transport protocols that might actually perform a process for guaranteeing a bandwidth as required. Peloton's arguments that the "proposed combination" is used for "exactly this purpose" are for naught since Peloton does not describe or identify any element that performs the necessary function.⁴

⁴ Given the multiple references to the SIP Standard (and the SDP Standard) within the patent itself, the Examiner did not determine that the SIP Standard discloses "a

Claim 1 of the '427 Patent is very clear in requiring “the one or more connection control servers executes a process for guaranteeing a communication bandwidth required for transmitting content data.” Peloton’s *own* construction is that this is a “standard process performed by SIP servers using SIP messages” – i.e. is performed according to the SIP Standard. Yet, both the SIP Standard, and Peloton’s own expert are clear – the SIP Standard (and SIP messages) does not execute any processes and do not perform any kind of network resource reservation capabilities (which would necessarily include any type of “guarantee”) and is not responsible for transmission of the actual content for a particular transmission. *See* POR at 35-38 (explaining that the SIP Standard does not teach a bandwidth guarantee process); *see also* Ex[1004] at 10 (“SIP cannot, and does not, provide any kind of network resource reservation capabilities.”); Ex[2029] (Transcript of Deposition of Dr.

process for guaranteeing a communication bandwidth.” *See Al-Site Corp. v. VSI Int’l, Inc.*, 174 F.3d 1308, 1323 (Fed. Cir. 1999) (“The presumption of validity under 35 U.S.C. § 282 carries with it a presumption that the Examiner did his duty and knew what claims he was allowing.”). Here, Peloton has expressed no reasonable justification for disrupting the Examiner’s expertise judgment that the SIP and SDP Standards do not disclose this feature.

Clifford Reader) at 75:7-8 (“So the SIP messages can’t execute anything. It is not a – it’s just a message”).

To overcome this deficiency, Peloton now agrees with the Board’s “identification” that the SIP messages do not constitute the recited process for guaranteeing a communication bandwidth—but it is too late. Peloton’s Petition is entirely devoid of reference to transport functions or transport protocols (which would be the functions, according to the ’427 Patent which execute the process for guaranteeing a bandwidth guarantee)⁵ which are capable of executing a bandwidth guarantee process as required by the claims. Instead, Peloton relies upon a nebulous “proxy server” (ostensibly provided by the SIP Standard) as performing these complicated functions. However, Peloton fails to identify what functions are used to execute such a process, no reference contains the bandwidth guarantee process (notwithstanding that the “combination” of these references does), Peloton does not rely on inherency of the SIP Standard (or any reference) as containing these

⁵ NEC does not concede that these are the only functions which may execute such a process, but note these functions were explicitly identified in the ’427 Patent specification, and are differentiated from the SIP Standard, by the SIP Standard itself.

functions, nor does Peloton rely on the knowledge of a person of ordinary skill in the art to provide this missing feature.

2. NEC Has Not Imported Any Additional Requirements to the Claims

Contrary to Peloton's assertion, NEC does not argue that *guaranteeing* bandwidth necessarily includes reserving a bandwidth – this is a misunderstanding of NEC's argument and the claims of the patent. Rather, NEC argues that the claim language requires that the relevant server “executes *a process* for guaranteeing a communication bandwidth” and that this process has a preliminary step of performing a bandwidth reservation prior to the bandwidth guarantee. POR at 37-38. This is shown as part of various figures, including Figure 5, which shows at step B501 a bandwidth reservation process is executing prior to the later, C503, bandwidth guarantee process. Since the SIP Standard, explicitly, cannot perform any network reservation processes, it necessarily cannot perform the “process for guaranteeing a communication bandwidth” as contemplated by the '427 Patent.

3. NEC Has Not Argued that a Mandate is Required for the Bandwidth Limitation

Finally, Peloton also disputes NEC's arguments that the bandwidth limitation requires a process that processes beyond an instant time prior to transmission of the relevant content. Reply at 22. However, Peloton's own argument undercuts its

ultimate conclusion, and NEC does not argue that a bandwidth *must* be maintained in order for the bandwidth guarantee to have occurred. *See* POR at 41-42.

First, Peloton argues that “NEC includes no support from the specification or its expert” for its statements—and makes no attempt to address the other evidence which was presented by NEC to illustrate the plain and ordinary meaning of this term. Peloton does not dispute this evidence or ordinary understanding of the term. POR at 42.

Additionally, Peloton undercuts its own argument by noting that, according to Figure 5 of the ’427 Patent, “connection control server (core IMS) is no longer involved *after connection* between the user device and application server system has been established.” Reply at 20. But this is precisely what NEC argues: The process for guaranteeing a bandwidth, contrary to the SIP Standard, is an ongoing process that begins during the connection process with the server and extends until that process is complete. In contrast, and undisputed by Peloton, the SIP Standard (as combined with Ueda) would perform an initial check for bandwidth prior to the connection process. POR at 41-42.

D. Ueda, the SIP Standard, and the SDP Standard Do Not Teach the Play-list Limitation

Peloton’s primary rebuttal against NEC’s arguments, rather than addressing the merits, is that “*Ueda discloses sending a playlist,*” Reply at 22. But this “point”

only goes to weaken Peloton’s already cursory motivation to combine, as Peloton does not address, again, why a POSA would be motivated to combine the play-list of Ueda with the various media fields of the SDP Standard. As with the motivation to combine, the argument is replete with examples where Peloton and its expert have demonstrated only that a POSA *could* import a play-list into the SDP Standard’s fields but provide no justification for *why* such a change would be made, since Ueda clearly already contemplates a specific method by which the play-list was exchanged.

The combination, as proposed by Peloton, is premised on the improper application of hindsight bias, by which Peloton and its expert have looked at the claims of the ’427 Patent, looked at the cited references, and concluded that a POSA *could have* used the fields of the SDP Standard to transmit play-list information. See POR at 48-49 (listing examples of hindsight bias with respect to the combination of Ueda, the SIP Standard, and the SDP Standard).

Peloton further does not address NEC’s additional argument that the Petition fails to disclose *play-list information* as recited in the claims. According to the claims, “play-list information” (which is what is transmitted according to the claims) is

information containing the main content identification information contained in the content delivery request and the selected sub content specification information, and . . .

information indicating a sequence in which the main content identified by the main content identification information and the sub content specified by the selected sub content specification information are output.

See, e.g., Ex[1001] at 37:21-30; 41:4-15; 42:17-27. Peloton makes no attempt to square this requirement with the purported “playlist” of Ueda. Rather, Peloton merely repeats, without explanation, that “***Ueda discloses sending a playlist***” without providing any explanation of how the purported playlist contains all of the “play-list information” required by the claims. *See* Reply at 22-23.

V. CLAIMS 1, 4-9, 14, 16, 18, 20, 22, 32, AND 34-36 WOULD HAVE BEEN OBVIOUS IN VIEW OF UEDA, SIP STANDARD, AND BECHTOLSHEIM

A. There Is No Motivation to Combine Ueda, the SIP Standard, and Bechtolsheim

NEC does not argue that Peloton’s motivation to combine should fail because Bechtolsheim does not teach a particular claim limitation—NEC argues that Bechtolsheim itself teaches against the very motivation which Peloton relies upon to combine the references. As Peloton notes, the proposed “motivation” to combine Bechtolsheim with Ueda is to “maintain video quality and avoid requiring a higher bandwidth than available.” But, as argued in NEC’s POR, Bechtolsheim does not do this. Rather, Bechtolsheim specifically teaches that “[i]f this target bandwidth is too small, the import preprocessor 148 may be configured to *issue warnings and drop data* in order to meeting the schedule.” Ex[1006] ¶0038. This contrasts with the

proposed “motivation” put forth by Peloton; Bechtolsheim does not *maintain* the video quality, or avoid a higher bandwidth requirement during the connection process, but rather adjusts, ad hoc, during the actual stream to modify the transmitted content. This purported motivation does not comport with the actual teaching and functioning of the references, and Peloton’s proposed reasoning must fail. *See In re Fulton*, 391 F.3d 1195, 1200 (Fed. Cir. 2004) (“[T]he prior art as a whole must ‘suggest the desirability’ of the combination”) (quoting *In re Beattie*, 974 F.2d 1309, 1311 (Fed. Cir. 1992) (internal quotations omitted)). This is not a matter of the motivation to combine having “direct[] impact [on] the claimed [limitation],” but rather of the reference itself not supporting the motivation that Peloton has proposed. *Lone Star Silicon Innovs. LLC v. Iancu*, 809 F. App’x 773, 780 (Fed. Cir. 2020).

Petitioner also argues that it need not provide a specific motivation to combine Bechtolsheim with the SIP Standard. Reply at 24-25. But Peloton’s obviousness argument is premised specifically on combining features of the SIP Standard with Bechtolsheim. *Compare* Pet. at 74 (proposing including play-list elements of Bechtolsheim with the combination of Ueda and the SIP Standard) *with id.* at 53-54 (describing how the play-list information must be imported into the SIP Standard messages). Since Peloton contemplates combining elements of Bechtolsheim with the SIP Standard, Peloton must provide at least some explanation of *why* and *how* a

POSA would combine the references as proposed NEC's remaining arguments within its POR address Peloton's other points.

B. Ueda, the SIP Standard, and Bechtolsheim Do Not Teach the Bandwidth and Play-list Limitations

NEC's arguments are premised on the *necessary* combination of references and the implications of the combination proposed by Peloton, not on some " illogical combination" that Peloton claims. Reply at 25. As noted in the Response, Peloton relies upon Bechtolsheim to disclose that "[a]t the same time that the play-list is put together, stream system 130 executes a process for guaranteeing a communication bandwidth for transmitting content data." Petition at 141 (emphasis added). This is distinct from the claimed requirement that the play-list is transmitted *at a same time* that the system executes a process for guaranteeing a communication bandwidth. Peloton's contention that NEC is suggesting that the play-list is not sent, *see* Reply at 26, is not only incorrect, but is irrelevant. NEC's argument is premised entirely on Peloton's failure to even properly allege the correct feature according to the claims. Whether the play-list according to Bechtolsheim is sent at all misses the point when the core question is whether it is sent *according* to the timing required by the claim, which Peloton has failed to show. POR at 59-60.

VI. CLAIMS 2, 3, 15, AND 17 ARE NOT OBVIOUS IN VIEW OF UEDA, SIP STANDARD, SDP STANDARD, AND COHEE

Peloton repeats its arguments with respect to the need for providing a motivation to combine the references, which NEC addresses above. *See supra* Section V.A. Peloton also submits that Dr. Reader's explanation provides "sufficient" motivation, without addressing or rebutting the arguments presented in the POR and make no attempt to explain *why* such a proposed explanation is "sufficient." *See* Reply at 28.

VII. CLAIMS 2, 3, 15, AND 17 WOULD HAVE BEEN OBVIOUS IN VIEW OF UEDA, SIP STANDARD, BECHTOLSHEIM, AND COHEE

Peloton argues that no such requirement exists which mandates Peloton to provide a motivation to combine Cohee with Bechtolsheim, relying on *Intell. Ventures II LLC v. Ericsson Inc.*, 685 Fed. Appx. 913, 918 (Fed. Cir. 2017). Peloton's reliance on this (non-binding) decision, is not dispositive, and as explained above, *see supra* Section V.A, and within NEC's POR itself, *see* POR at 63-67, Peloton, even assuming it is not required to provide a specific motivation to combine each reference, has failed to provide a sufficient justification for combining Cohee with any of the relied upon references.

VIII. CONCLUSION

For the reasons set forth herein, the petition should be denied.

Date: September 4, 2024

Respectfully submitted,

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CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that the foregoing Patent Owner Response, exclusive of the exempted portions as provided in 37 C.F.R. § 42.24(a), contains no more than 5,600 words and therefore complies with the type-volume limitations of 37 C.F.R. § 42.24(b).

Date: September 4, 2024

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §§ 42.6(e) and 42.105(a), this is to certify that I caused to be served a true and correct copy of the foregoing “PATENT OWNER’S SUR-REPLY” via the PTAB’s E2E system and sent via email as detailed below.

Date of service: September 4, 2024

Documents served: PATENT OWNER’S SUR-REPLY

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