

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BOX, INC., and DROPBOX, INC.,

Petitioners

v.

TOPIA TECHNOLOGY, INC.,

Patent Owner

Case IPR2023-00427

Patent 9,143,561

PATENT OWNER'S RESPONSE (POR)

HIGHLY CONFIDENTIAL - ATTORNEYS' EYES ONLY

TABLE OF CONTENTS

I. Introduction	1
II. The Petition Fails to Name All RPIs	1
A. Petitioners' provided <i>de facto</i> funding	3
B. -C. Petitioners' explanation of their own interest and whether and under what circumstances Petitioners take Egnyte's interest into account	3
D. Petitioners' relationship with Egnyte	4
E. Egnyte's "interest in" and "benefit from" the IPRs	5
F. Whether Petitioners can be said to be representing that interest	6
G. Whether Egnyte actually desires review	6
H. The relevance of overlapping Board members	6
I. Communications between Petitioners and Egnyte	7
III. Petitioners Have Not Demonstrated Unpatentability of the Challenged Claims By a Preponderance of the Evidence	7
A. Overview	7
B. Response to Ground 1	12
1. Sigurdsson does not disclose "automatically transferring the modified first electronic file copy to the third electronic device"	12
a. The teaching of Sigurdsson must be considered as a whole	12
b. Sigurdsson fails to teach or suggest that the first application is configured to store the modified first electronic file copy to the memory device associated with the first electronic device when the third electronic device is not in communication with the first electronic device	19

c. Sigurdsson is directed to a pull-based transfer system that does not automatically transfer the modified first electronic file copy to the third electronic device associated with the user	21
d. Patent Owner did not mischaracterize Petitioners' arguments or Dr. Balakrishnan's testimony	28
2. HTTP Client/Server architecture structurally requires a request then response based approach	29
3. It would not have been obvious to modify Sigurdsson to disclose automatically sending the modified first electronic file copy responsive to receiving the file copy from the second electronic device	33
a. It would not have been obvious to modify the server of Sigurdsson to automatically transfer content without first receiving a request for the missing content from the third electronic device	33
b. It would not have been obvious to modify Sigurdsson to replace its pull-based file transfer with push-based file transfer because it would forfeit the purpose it purports to serve	35
4. It would not have been obvious to combine Sigurdsson and Shappell because Shappell teaches away from using a server	36
5. The Sigurdsson and Shappell combination fails to teach or suggest replacing an older version of the first electronic file stored on the third electronic device with the modified first electronic file copy having the content modified by the user, where the second electronic device and the third electronic device are each associated with a same user.	39
C. Response to Ground 2	42
1. Brown in view of Hesselink fails to disclose the first application automatically transferring a modified first electronic file copy to the third electronic device.	42

2. Hesselink fails to disclose the first application associated with a user automatically transferring to the third electronic associated with a same user	52
3. Brown cannot be modified to disclose push-based file transfer because it would forfeit the purpose it purports to serve	56
4. The Petition relies upon Hesselink's peer-to-peer embodiment, which cannot be modified to teach "automatic transfer" from a server	58
IV. CONCLUSION	62

TABLE OF AUTHORITIES

Cases

<i>Atlanta Gas Light Co. v. Bennett Regul. Guards, Inc.</i> , IPR2013-00453, Paper 88 (PTAB Jan. 6, 2015)	1
<i>Cardiac Pacemakers, Inc. v. St. Jude Medical, Inc.</i> , 381 F.3d 1371 (Fed. Cir. 2004).	37
<i>Chemours Co. FC, LLC v. Daikin Indus.</i> , 4 F.4th 1370, 1376 (Fed. Cir. 2021)	41
<i>Credit Acceptance Corp. v. Westlake Servs.</i> , 859 F.3d 1044, 1050 (Fed. Cir. 2017)	1
<i>IBM v. Iancu</i> , 759 Fed. Appx. 1002, *20-21(Fed. Cir. 2019)	passim
<i>In re Dow Chem. Co.</i> , 837 F.2d 469, 473 (Fed. Cir. 1988)	36
<i>In re Enhanced Security Research, LLC</i> , 739 F.3d 1347, 1355 (Fed. Cir. 2014) ...	15
<i>In re Gordon</i> , 733 F.2d 900, 902 (Fed. Cir. 1984)	60
<i>In re Ratti</i> , 270 F.2d 810, 813 (CCPA 1959)	39, 42, 61
<i>In re Wesslau</i> , 353 F.2d 238 (CCPA 1965)	15
<i>Intel Corp. v. PACT XPP Schweiz, AG</i> , 61 F.4th 1373, 1380 (Fed. Cir. 2023)	64
<i>KSR Int'l Co. v. Teleflex Inc.</i> , 550 U.S. 398, 416 (2006)	36
<i>Microsoft Corporation et al. v. Koninklijke Philips N.V.</i> , IPR2018-00185	42
<i>PayPal, Inc. v. PersonalWeb Technologies, LLC</i> , IPR2019-01111, Paper No. 27, 25 (PTAB 2019)	4
<i>Plas-Pak Industries, Inc. v. Sulzer Mixpac AG</i> , 2015 WL 328222 at *2 (Fed. Cir. 2015)	61
<i>Polaris Indus. v. Arctic Cat, Inc.</i> , 882 F.3d 1056, 1068 (Fed. Cir. 2018)	41
<i>Rovi Guides, Inc. v. Vidal</i> , No. 2020-1994, 2022 U.S. App. LEXIS 10465 (Fed. Cir. Apr. 19, 2022)	passim
<i>RPX Corp. v. Applications in Internet Time, LLC</i> , IPR2015-01750, Paper 128 (PTAB 2020)	3, 7, 8, 9
<i>Spectralytics Inc. v. Cordis Corp.</i> , 649 F.3d 1336, 1343 (Fed. Cir. 2011)	39
<i>Trimble Inc. v. Perdiemco LLC</i> , 802 Fed. Appx. 556, 558 (Fed. Cir. 2020)	4
<i>Volkswagen Group of America, Inc. v. Arigna Technology Ltd.</i> , IPR2021-01263, Paper 16, 12 (PTAB 2022)	3
<i>W.L. Gore & Assoc., Inc. v. Garlock, Inc.</i> , 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983)	41, 44

TABLE OF EXHIBITS

Exhibit	Description
2001	Hearing Transcript and Order Denying Defendant Egnyte's Motion to Stay in <i>Topia Technology, Inc. v. Egnyte, Inc.</i> , C.A. No. 21-1821-CJB
2002	Screenshot of Egnyte Inc.'s Webpage, captured May 8, 2023: https://www.egnyte.com/dropbox-replacement
2003	Defendant Egnyte's invalidity contentions in <i>Topia Technology, Inc. v. Egnyte, Inc.</i> , C.A. No. 21-1821-CJB
2004	Defendants' joint invalidity contentions in <i>Topia Technology, Inc. v. Box, Inc., SailPoint Technologies Holdings, Inc., and Vistra, Inc.</i> , 6:20-cv-01175-ADA and <i>Topia Technology, Inc. v. Dropbox, Inc., SailPoint Technologies Holdings, Inc., and Clear Channel Outdoor Holdings, Inc.</i> , 6:21-cv- 001373-ADA
2005	Scheduling Order in <i>Topia Technology, Inc. v. Egnyte, Inc.</i> , C.A. No. 21-1821-CJB
2006	Scheduling Order in <i>Topia Technology, Inc. v. Box, Inc., SailPoint Technologies Holdings, Inc., and Vistra, Inc.</i> , 6:20-cv-01175-ADA and <i>Topia Technology, Inc. v. Dropbox, Inc., SailPoint Technologies Holdings, Inc., and Clear Channel Outdoor Holdings, Inc.</i> , 6:21-cv-001373-ADA
2007	USPTO Memo regarding Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation ("Fintiv Memo")

2008	<i>Pro Hac Vice</i> Motion for Heidi Keefe filed by Defendant Egnyte in <i>Topia Technology, Inc. v. Egnyte, Inc.</i> , C.A. No. 21-1821-CJB, D.I. 61 (and screenshot of Minute Order granting motion)
2009	Motion to stay filed by Defendant in <i>Topia Technology, Inc. v. Box, Inc.</i> , 3:23-cv-00063-JSC
2010	<i>Unified Patents LLC v. Justservice.net LLC</i> , IPR2020-01258, Exhibit 2017 (PTAB 2022)
2011	<i>Unified Patents LLC v. Topia Technology, Inc.</i> , IPR2022-00782, Paper 8 (PTAB 2022)
2012	Proof of service for complaint filed against Egnyte in <i>Topia Technology, Inc. v. Egnyte, Inc.</i> , C.A. No. 21-1821-CJB
2013	Declaration of Dr. Prashant Shenoy
2014	Curriculum Vitae of Dr. Prashant Shenoy
2015	Selected Excerpts from Microsoft Computer Dictionary, Fifth Edition (2002)
2016	Declaration of L. Roman Rachuba
2017	Reserved
2018	Official Transcript of Deposition of Heidi L. Keefe taken on June 20, 2023 in IPR2023-00427, IPR2023-00429, IPR2023-00430, IPR2023-00431, IPR2023-00432, IPR2023-00433
2019	Official Transcript of 35 U.S.C. § 101 Motions Day Hearing held on December 20, 2022 in <i>Topia Technology, Inc. v. Egnyte, Inc.</i> , C.A. No. 21-1821-CJB (D.I. 68)

2020	Joint Initial Case Management Conference Statement filed in <i>Topia Technology, Inc. v. Dropbox, Inc.</i> , C.A. No. 23-62-JSC and <i>Topia Technology, Inc. v. Box, Inc.</i> , C.A. No. 23-63-JSC (D.I. 94)
2021	Egnyte's Memorandum of Law in Support of Motion for Judgement on the Pleadings that Plaintiff's Asserted Patents are Invalid Under 35 U.S.C. § 101 filed in <i>Topia Technology, Inc. v. Egnyte, Inc.</i> , C.A. No. 21-1821-CJB (D.I. 40)
2022	Selected Excerpts from "Computer Networks – A Systems Approach (3rd Ed.) (2003) by Larry L. Peterson and Bruce S. Davie"
2023	Selected Excerpts from "Computer Networks – A Systems Approach (4th Ed.) (2007) by Larry L. Peterson and Bruce S. Davie"
2024	Deposition Transcript of Dr. Ravin Balakrishnan, Ph.D. (dated October 27, 2023)
2025	Declaration of Dr. Prashant Shenoy, Ph.D.
2026	Declaration of L. Roman Rachuba

I. Introduction

Patent Owner Topia Technology, Inc. (“Patent Owner”) submits this Response to the Petition for *Inter Partes* review (Paper No. 3) (*cited* “Pet.”) of claims 1, 3, 4, 8, 10 and 11 (“Challenged Claims”) of U.S. Patent No. 9,143,561 (“the ’561 Patent,” EX1001) filed by Box, Inc., and Dropbox, Inc., (“Petitioners”). The Board should reject Petitioners’ IPR challenge at least because Petitioners (1) fail to name all real parties in interest, and (2) fail to establish a reasonable likelihood that any challenged claim is obvious over the prior art.

II. The Petition Fails to Name All RPIs

In violation of 35 U.S.C. § 312(a)(2), the Petition fails to identify all real parties in interest/privies of Petitioners, in particular, Egnyte Inc., which is time-barred under 35 U.S.C. § 315(b). The instant review should therefore be terminated. *Atlanta Gas Light Co. v. Bennett Regul. Guards, Inc.*, IPR2013-00453, Paper 88 (PTAB Jan. 6, 2015); *see Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1050 (Fed. Cir. 2017) (§ 315 [is] . . . not limited to the institution stage” and can operate to terminate an already instituted proceeding.)

Petitioners and Egnyte, through their joint-defense agreement (JDA) to defend

against Patent Owner's multi-district infringement suits, and shared counsel¹, are pursuing a singular goal of invalidating the '561 Patent. EX2001, 9:17-19, 10:9-10. This gives Petitioners a second bite at the apple, in the event the IPR allegations are unsuccessful, in contrast to the statute and its intent. Through the JDA, Petitioners and Egnyte have collaborated on the grounds raised in the Petition. EX1029 ¶ 10; EX2018 157:12-25 (Egnyte and Petitioners' district court invalidity contentions are identical and not "inconsistent or contradictory" with the grounds in the Petition). Egnyte may have even found the references cited in the Petition. EX1029 ¶ 7; EX2018 150:6-8. While the Petition was being drafted, Petitioners' lead counsel Ms. Keefe represented Egnyte in district court on all matters, as evidenced by her unrestricted *pro hac vice* admission and introduction by Egnyte to the Delaware Court as the face of Egnyte. citing EX2019 100:7-12. It is undisputed that no documents or agreements exist limiting shared counsel's access to confidential Egnyte information while drafting the Petition. EX2008; EX2018 84:8-13, 47:6-20. Indeed, shared counsel never informed the Court or even Egnyte that her representation was restricted, *e.g.*, to § 101 matters. *Id.* 88:18-21; 174:7-9; 48:24-49:7; 106:14-22. Consideration of the factors in *RPX Corp. v. Applications in*

¹ While preparing the Petition, Heidi Keefe ("shared counsel") of Cooley LLP, simultaneously represented Petitioners and Egnyte.

Internet Time, LLC, IPR2015-01750, Paper 128 (PTAB 2020) (precedential) (AIT II) necessitates a finding that Egnyte is an RPI.

A. Petitioners' provided [REDACTED]

While Petitioners are not “defensive patent aggregation entit[ies]”, they [REDACTED] for shared counsel's representation of Egnyte to invalidate the '561 Patent, while drafting the Petition. EX2018 58:6-25 ([REDACTED] [REDACTED]). Despite the obvious, under this factor, “the issues of control and funding, [] carry less weight” as compared to the nature of the Parties' relationship and the degree to which Egnyte stands to benefit. *Volkswagen Group of America, Inc. v. Arigna Technology Ltd.*, IPR2021-01263, Paper 16, 12 (PTAB 2022).

B. -C. Petitioners' explanation of their own interest and whether and under what circumstances Petitioners take Egnyte's interest into account

Both Petitioners and Egnyte have a mutual interest in invalidating the '561 Patent because they have been sued. Petitioners' interest however, does not negate the fact that they took Egnyte's interests into account. *PayPal, Inc. v. PersonalWeb Technologies, LLC*, IPR2019-01111, Paper No. 27, 25 (PTAB 2019) (“representing their own interests in addition to those of Amazon's does not negate a finding [of] a privity [relationship].”).

Indeed, Petitioners, through shared counsel and the JDA, were ethically

obligated to take Egnyte's interest into account. *Trimble Inc. v. Perdiemco LLC*, 802 Fed. Appx. 556, 558 (Fed. Cir. 2020) (quoting Cal. R. of Prof'l Conduct 1.7); *see also* USPTO R. Prof'l Conduct 11.107. This obligation necessitates that Petitioners control and execute their instant IPR strategy at the behest of Petitioners and Egnyte.

Petitioners' and Egnyte's strategy of attacking the '561 Patent with this Petition and in district court better accommodated Petitioners' and Egnyte interests by allowing multiple different invalidity attacks to proceed at once. Under this plan, success at any stage, by any party, would mutually benefit all parties to the JDA.

D. Petitioners' relationship with Egnyte

Not only did Petitioners' and Egnyte share lead-drafting counsel while the Petition was being prepared, Petitioners and Egnyte are parties to the JDA², and Egnyte has been a long-time client of shared counsel's law firm. EX2001, 10:5-7. As Judge Burke in Delaware recognized, the relationship between Petitioners and Egnyte is "about as close as you can get in terms of coordinating and understanding,

² *Asahi Glass Co., Ltd. v. Toledo Eng'g Co.*, 505 F. Supp. 2d 423, 434-435 (N.D. Ohio 2007) (existence of a JDA demonstrates privity); *Crown Equip. Corp. v. Toyota Material Handling*, 2005 U.S. Dist. LEXIS 22211, 2005 WL 2454116, at *4 (N.D. Ohio) (joint defense agreement, shared counsel, and a non-party's control over expert retention support privity).

et cetera, as you might.” EX2001, 11:10-12.

This close relationship is further evidenced by the fact that Egnyte's invalidity contentions are identical to Petitioners' served in their respective district courts. EX2004, 19, 69. These contentions are consistent with the grounds in the Petition, and shared counsel acknowledges that Egnyte may have identified the prior art relied upon. EX1029 ¶ 10; EX2018 150:6-8, 157:12-25.

The Board has consistently held that shared counsel tends to support an RPI/privy relationship. *Agilent Tech., Inc. v. Waters Tech. Corp.*, IPR2019-01131, Paper 12, 13-14, (PTAB 2019); *Paramount Home Entm't, Inc. v. Nissim Corp.*, IPR2014-00961, Paper No. 11, 9 (PTAB 2014); *Zoll Lifecore Corp. v. Philips Elec. N.A. Corp.*, IPR2013-00615, Paper 15, 15 (PTAB 2014); *Johnson Health Tech, Co. Ltd. v. Icon Health & Fitness, Inc.*, IPR2014-01242, Paper 16, 15 (PTAB 2015); *Radware, Inc. v. F5 Networks, Inc.*, IPR2017-01249, Paper 10, 5 (PTAB 2019); *c.f. Adobe Inc. v. Rah Color Technologies LLC*, IPR2019-00629, Paper 35 at 12–13 (PTAB Sept. 4, 2019) (an outlier to the aforementioned cases, where the Board found no RPI relationship where no § 315(b) issue arose).

E. Egnyte's “interest in” and “benefit from” the IPRs

Because Egnyte is being accused of infringement, this factor weighs heavily in favor of an RPI relationship. *AIT II*, 24-25; EX2001, 15:8-11 (Delaware Court acknowledging IPR benefit to Egnyte). The arrangement smacks of a scheme for

Petitioners to get two bites at the apple – first in the IPR, and second in the Egnyte case where a JDA exists and Petitioners would no doubt assist.

F. Whether Petitioners can be said to be representing that interest

Petitioners' and Egnyte's interests are 100% aligned in their unified invalidity defense, indeed, shared counsel could not represent both Petitioners and Egnyte while drafting the Petition otherwise. *AIT II*, 25 (“[I]t stands to reason that RPX inevitably represented Salesforce's interests, and provided benefit to Salesforce, by filing IPR petitions challenging the same patents asserted against Salesforce in infringement litigation, in a manner that Salesforce itself could not do as a §315(b) barred party.”)

G. Whether Egnyte actually desires review

The fact that the '561 Patent is being asserted against Egnyte, which failed to timely file or join an IPR attacking the same patent, is “persuasive evidence that [Egnyte] would have been interested in Board review of the patentability of the claims in the patents asserted against it in litigation, supporting a conclusion that [Egnyte] is an RPI in these proceedings.” *AIT II*, 27.

H. The relevance of overlapping Board members

The overlapping board members factor is not relevant to the instant RPI analysis, and is thus neutral. *See AIT II*, 29 (Finding that the overlapping board members factor did not weigh for or against the unnamed party being an RPI).

I. Communications between Petitioners and Egnyte

Petitioners and Egnyte have refused to produce communications between them, but shared counsel and the JDA show the required nexus that Egnyte is an interested party. *AIT II*, 30 (“Even if RPX did not directly discuss filing an IPR, the discussions of litigation are naturally tied to possible defenses, of which an IPR challenge is one. The discussion of pending litigation by AIT against Salesforce by RPX, who subsequently filed an IPR, weighs in favor of finding that Salesforce was an interested party. Such communications need not expressly involve a request by Salesforce for RPX to file an IPR petition.”).

III. Petitioners Have Not Demonstrated Unpatentability of the Challenged Claims By a Preponderance of the Evidence

A. Overview

The '561 Patent provides a user-centric computer network architecture for file synchronization, where a server automatically receives a modified file from one device associated with a user when the user modifies the file and the server **automatically transfers** it to another device **associated with the same user**. Consistent with this focus, claim feature [1d] (and similarly claim [8c]) recites “the **first application** is further configured to **automatically transfer** the modified first electronic file copy to the **third electronic device** [associated with a user] ...”

The Board's preliminary findings that the Petition has shown a reasonable likelihood of success under Grounds 1 and 2 are in error at least for the following three reasons.

First, the Petition relies on Sigurdsson (Ground 1) and Brown in view of Hesselink (Ground 2) as teaching the “automatic transfer” of the modified electronic file to the third electronic device. However, the disclosures of Sigurdsson, Brown and Hesselink clearly require a client to send a request for synchronization of certain data before downloading the requested data, and therefore fail to disclose the “automatic transfer” limitation.

Specifically, throughout its disclosure, Sigurdsson requires a server to receive a request from a client device before the server transmits missing content to the client device. EX1016, Figs. 2, 3, 6; ¶ 36, 40-47, 69, 61-79. Moreover, Sigurdsson describes that its system is implemented as an HTTP client/server operating based on request/response process. EX1016, ¶ 47. Likewise, in Brown and Hesselink, the client must initiate a request for any update to the connection server. Brown discloses that synchronization process is initiated by a client, not the server. EX1025, 5:14-17. Also Hesselink consistently states that its data transfer process is initiated by the client computer requesting for data. *See, e.g.*, EX1026, FIG. 4, step 440 and FIG. 8, steps 810, 830. An HTTP protocol did not support push-based functionality at the time of the invention. Thus, even if one combined the teachings of Brown and

Hesselink, a modified file would not be automatically transferred to a client without a request from the client. EX2025, ¶¶ 34, 95.

Second, the claims require **the first application**, executed on a first electronic device, to **automatically transfer** the modified first electronic file copy, from the second electronic device associated with a user, to the third electronic device **associated with that same user**. Neither Sigurdsson nor Hesselink discloses this requirement.

The facts and issue before the Board are remarkably analogous to those in *Rovi Guides, Inc. v. Vidal*, No. 2020-1994, 2022 U.S. App. LEXIS 10465 (Fed. Cir. Apr. 19, 2022). In overruling the Board's obviousness determination, the Federal Circuit in *Rovi Guides* held that all terms included in the claim must be considered since each term must add something more. *Id.* ("The available-to-a-user limitation requires the claimed system be configured to check whether an archived program is available to a specific user. A broader construction, which would only require the system be configured to check whether an archived program exists, would render the 'to the user' language meaningless ... So the 'to a user' phrase in claim 1, presumably, must add something more. Indeed, the system must not only check whether an archived copy exists; it must ensure the specific user has access to that copy").

The reasoning in *Rovi Guides* is directly applicable here. Id. The **automatically** transferring limitation requires the first application on the first electronic device (e.g., a server) to **automatically** transfer the modified first electronic file copy to the third electronic **associated with the user**. A broader construction that encompasses the case where the third electronic device performs various intermediate steps to determine when and/or how to request the missing content from the first electronic device as in Sigurdsson and Hesselink, and a broader construction that encompasses the case where *any* device connectable over the network receives the modified file as in Hesselink, would render the “**automatically transferring**” by the first application executed on the first electronic device to the third electronic device **associated with the user and executing the third application** language meaningless.

Third, a POSA would not have combined Sigurdsson with Shappell or combine Brown with Hesselink to arrive at claimed features [1d] and [8c], because both Shappell and Hesselink *teach away* from using a server. Shappell, when considered as a whole, overwhelmingly teaches that peer-to-peer system without using a server. *See*, for example, EX1020 ¶¶ 1, 7, 37, and 46. Shappell describes that its goal is to facilitate group interaction through which a desired group of users can interact with each other in a **secured environment**, and through which users can access and **maintain control with respect to files** shared in their shared

relationships with one another. As such, similar to Hesselink discussed below, Shappell expressly requires a **server-less** shared space in order to create a **secured** shared space for sharing files (§ 7). EX2025 §§ 83-88.

Likewise, Hesselink's file synchronization is based on the peer-to-peer system. While acknowledging this difference, Petitioners argue that a POSA would not have been dissuaded from combining Hesselink with Brown and relying on Hesselink's teachings of a peer-to-peer model. EX2025, § 128. However, Petitioners directly contradict what Hesselink's actually teaches. Hesselink addresses the security concerns in using server/client architecture for file synchronization. "[M]any users may be uncomfortable storing photos of their families on some photo service server in some unknown location where it is also often unknown what level of security (if any) such server is provided with."; EX2026, § 6. To solve this problem, Hesselink provides a peer-to-peer method that allows users to access their files on any network accessible communication device, from any location accessible over that network. EX2026, § 10. Thus, contrary to Petitioners' assertion, Hesselink clearly **disparages and thus teaches away** from implementing its method in a client/server model. EX2025 § 132.

For at least the above reasons and the reasons further detailed below, Petitioners have not met their burden of establishing the unpatentability of the challenged claims of the '561 patent, as the overall claimed user-centric computer

network architecture, including least features [1d] and [8c], and similar features [1e] and [8d], would not have been obvious to a POSA.

B. Response to Ground 1

1. Sigurdsson does not disclose “automatically transferring the modified first electronic file copy to the third electronic device”

Sigurdsson does not disclose that “the first application [executed on the first electronic device] is further configured to **automatically transfer** the modified first electronic file copy to the third electronic device.”

a. The teaching of Sigurdsson must be considered as a whole

The Petition fails to give proper weight to “automatically transfer,” and instead of considering the disclosure of Sigurdsson as a whole, or even the full description of the relied-upon embodiment in Sigurdsson, the Petition improperly relies on select sentences taken out of context while ignoring the principal structure and operations taught by Sigurdsson.

The Board misapprehended Sigurdsson in stating, “Sigurdsson expressly teaches the transfer of a modified file from its server 106 to its Client C (the third electronic device) in its descriptions of step 626 and of the “alternative embodiment of step 606” in the sequence diagram of Figure 6. EX1016, ¶¶ 68, 80, FIG. 6.” Paper No. 17, (*hereinafter* “DI”), 33.

Petitioner and the Board rely on two “alternative embodiments” of steps in the sequence diagram of FIG. 6 to assert that Sigurdsson “at least suggests the automatic transfer of a modified file from the server to Client C.” DI, 35 and Pet., 23. In particular, Petitioner and the Board rely on statements Sigurdsson makes in ¶ 68 and ¶ 80 in isolation and without considering the context of the disclosure to support this assertion.

"It is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art." *In re Wesslau*, 353 F.2d 238 (CCPA 1965). Similarly, it is error to "stitch together an obviousness finding from discrete portions of prior art references without considering the references as a whole." *In re Enhanced Security Research, LLC*, 739 F.3d 1347, 1355 (Fed. Cir. 2014).

There is no dispute that the transfer Sigurdsson describes in step 626 of FIG. 6 is not automatic from the perspective of the server. Dec, 34. This is because the transfer of missing content from Server 106 to Client C is initiated by a request from Client C for a list of missing content in step 612 and a request for the missing content in step 620. *See* DI, 34 and Pet., 26.

But Petitioner and the Board lift two portions of Sigurdsson, to the exclusion of the reference's surrounding description, to assert that "Sigurdsson teaches or suggests a transfer from its server to its client that is automatic, not just from the perspective of the user, but also from the perspective of the first electronic device." DI, 36. These two portions found in ¶ 68 and ¶ 80 concern alternative embodiments to steps 606 and 620, respectively, in the sequence shown in FIG. 6.

A POSA would not have understood the discussion of the alternate embodiment of step 606 described in ¶ 68, and the alternate embodiment of step 620 described in ¶ 80 to be divorced from the accompanying steps in FIG. 6. EX2025, ¶¶39-42. These alternative embodiments are part of the sequence of the "method for sharing and synchronizing content using a peer-to-peer and server architecture of FIG. 4 when a client that is offline comes online." EX1016 ¶ 21. The reference describes this as enabling "peer-to-peer content sharing and synchronization using a combination of peer-to-peer and 'drop-box' techniques." *Id.* ¶ 62. The reference further explains that the "peer-to-peer techniques can be used by clients that currently are online to share the content directly between clients," and "the server can be used as a drop box for the content" to supply that content to an offline client once it comes online again. *Id.*

A POSA would have understood that ¶¶ 61-82 in Sigurdsson describes the sequence shown in FIG. 6 for performing the method of using the peer-to-peer and

client/server architecture of FIG. 4. EX2025, ¶ 44. Both ¶ 68 and ¶ 80 are part of this sequence. To extract only these two paragraphs, let alone a single sentence from ¶ 68, from the sequence fails to consider the actual teachings of the reference when read in their proper context. *Id.*

Sigurdsson explains that in step 606 Client A posts content to another client (Client B) to initiate the peer-to-peer content flow. EX1016, ¶ 65. Client B, in step 608, stores the content and can propagate the content directly to Client C, if that client is online. *Id.* In the example shown in FIG. 6, however, Client C is offline so Client B propagates the content to Server 106 instead. *Id.* Sigurdsson goes on to explain how Server 106 transmits the content to Client C, when that client comes online, through steps 612-626. *Id.* ¶¶ 68-80.

The alternate embodiment of step 606 described in ¶ 68, represented by the dashed line between Client A in step 606 and the Server in step 610, merely concerns how the content can be transferred from Client A directly to the Server without first going through Client B. While ¶ 68 states that the “Sever 106 can then transmit the content to the remaining client peers, such as Clients B and C” it in no way teaches or suggests that Server 106 *automatically* transfers the content to a client. On the contrary, the very next paragraph begins the discussion of *how* Server 106 transfers the content, through steps 612 to 626, when Client C comes back online.

In referring to ¶ 68, the Board asserts that Sigurdsson “does not describe the transfer of a modified file with the alternative embodiment of step 606 as resulting from any request from Client. C.” DI, 34. The Board states it does not “read Sigurdsson’s disclosure so narrowly” that the transfer described in ¶ 68 is limited to the transfer described in “step 620 and its associated steps 612-620 and 626-630. *Id.* The Board posits a situation that is not actually described in Sigurdsson, stating, “[f]or example, if Client C were online when the sever sought to transfer the modified file to Client C, there would be no apparent reason to use steps 612-620 and 626-630 since the process of those steps concern how to transfer files to Client C when Client C is offline at the time of the desired transfer and subsequently comes online.” DI, 35. But this example ignores Sigurdsson’s teachings of how clients transfer content when the clients are online, as opposed to when the receiving client is offline.

Focusing on a single sentence of ¶ 68 (“The Server 106 can then transmit the content to the remaining client peers, such as the Clients B and C.”) to the exclusion of other parts of the reference necessary to its proper understanding would be error. The alternative embodiment of step 606 is part of the overall sequence for handling synchronization *when a client is offline* when a transfer of content is to take place. As Sigurdsson explains, with the peer-to-peer and server architecture of FIG. 4 “[t]he peer-to-peer techniques can be used by clients that are currently online to share the

content directly between clients” and “the server can be used as a drop box for the content until the offline client comes online again.” EX1016 ¶ 61. Considering the reference as a whole, a POSA would have understood Sigurdsson as limiting the transfer for the alternative embodiment of step 606 to using step 620 and its associated steps 612-620 and 626-630. This is because the alternative embodiment of step 606 is for use with the sequence of FIG. 6 which is for the case of Client C being offline at the time of the transfer. If Client C is online, Sigurdsson teaches that the transfer would be performed using the peer-to-peer technique that does not involve transferring content from the server. In this case where both clients are online, the transfer would not be performed by the server using the drop box technique. EX1016, ¶¶ 45-48.

Similarly, step 626, discussed in ¶ 80, also is part of the sequence of FIG. 6 which concerns an offline client coming online. EX1016, ¶21. Step 626 is performed to “Provide Missing Content to Client C if Clients A and B are Offline.” *Id.*, FIG. 6 Step 626. This concerns when *both* the first and second clients are offline “at the time of the third client’s request for missing content.” EX1016, ¶ 79. Petitioners and the Board rely on the statement in ¶ 80 that “the Server 106 sends the Client X Content 410 to Client C 406,” for teaching that Server 106 automatically transfers the content to Client C. But this statement cannot be considered in isolation. A POSA

would not understand the statement in ¶ 80 to teach or suggest Server 106 automatically transferring the modified content to Client C. EX2025, ¶ 49

While it is true that Sigurdsson discloses that the Server 106 can transmit the content to the remaining client peers, such as the Clients B and C, Sigurdsson is clear that this transmission of the content by the server 106 is performed *only* after receiving a request for the missing content from the Clients B and C. EX2025, ¶ 50.

Moreover, it is clear that Sigurdsson at ¶ 65 already contemplates the scenario suggested by the Board, that is, a scenario in which the client is already online and Sigurdsson at ¶ 65 unambiguously states that the peer-to-peer technique applies (“In step 606, the content originating on the first client is posted to a second client, thus initiating a peer-to-peer content flow.”). EX2025, ¶ 50-56.

As such, nothing in the alternative embodiment of step 606 suggests that the server 106 automatically transfers the content 410 to the client C 406 without receiving a request for missing content from the client C 406. *Id.*

Therefore, the description in ¶ 80 of Sigurdsson relied upon in the Petition is a result after several intermediate steps performed by the Server 106 and the Client C 406. EX2025, ¶¶54-57.

The foregoing is further evident throughout the disclosure of Sigurdsson. For example, at ¶ 9 Sigurdsson discloses (emphasis added): “The system also includes a data table to store the content extracted from the file on the first client and the

metadata value, an interface to **receive from a second client a request for content.**”

EX1016, ¶ 9.

Additionally, at FIG. 2 and ¶¶ 37 and 40 Sigurdsson discloses (emphasis added): “[i]n step 212, the **second client polls for updates**, representing content generated at other clients”(¶ 37) and “[i]n step 218, the client **requests** the updated content that it needs”(¶ 40). EX1016, ¶¶ 37, 40. Thus, in every case involving a server 106 transmitting content to the Client C, Sigurdsson requires the server 106 to receive a request from the Client C before the server 106 transmits the content 106 to the Client C. As such, Sigurdsson does not disclose “automatically transferring the modified first electronic file copy to the third electronic device.” EX2025, ¶¶ 54-60.

- b. Sigurdsson fails to teach or suggest that the first application is configured to store the modified first electronic file copy to the memory device associated with the first electronic device when the third electronic device is not in communication with the first electronic device

Patent Owner separately responds to patentability of claims 4 and 11.

The Board states that it does not read Sigurdsson so narrowly that it discloses the server providing content to a client only if the server receives a request from the content from that client. DI, 34, *citing* Patent Owner's Preliminary Response (Paper No. 7), 42. The Board asserted, “But Sigurdsson does not limit the transfer described for the alternative embodiment of step 606 to step 620 and its associated steps 612-

618 and 626-630.” DI, 34. In giving a hypothetical example where a client (e.g., Client C) would not send a request to the sever to initiate the transfer, the Board considers the situation where the client (Client C) is not offline when the transfer is to occur. *Id.* The Board states its hypothetical example as, “if Client C were online with the server sought to transfer the modified file to Client C, there would be no apparent reason to use steps 612-620 and 626-630 since the process of those steps concern how to transfer files to Client C when Client C is offline at the time of the desired transfer and subsequently comes online.” *Id.* As discussed above, Sigurdsson teaches that in this situation the “peer-to-peer techniques can be used by clients that that are currently online to share the content directly between the clients,” rather than using the “drop-box” technique implemented using a server. EX1016 ¶62. But even if Sigurdsson were read to have one client send the modified content to the server to synchronize with another client that was online at the time, this hypothetical example would fall outside the scope of claims 4 and 11.

Claim 4 expressly recites that “the first application is configured to store the modified first electronic file copy to the memory device associated with the first electronic device **when the third electronic device is not in communication with the first electronic device.**” Similarly, claim 11 recites that “the second electronic device is not in communication with the electronic system.

Accordingly, even considering the hypothetical example expressed by the Board, Sigurdsson, alone or in combination with Shappell, would not satisfy the limitations of claims 4 and 11 and would not render those claims obvious.

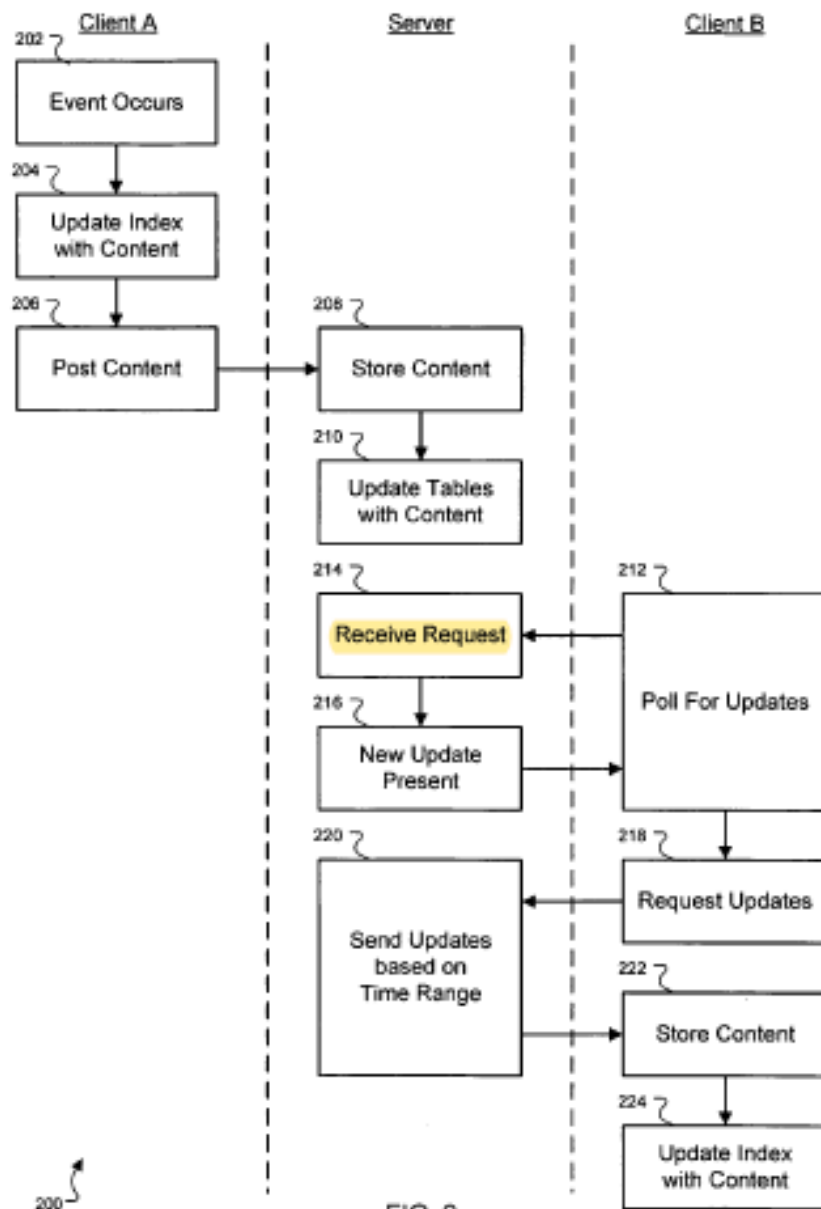
c. Sigurdsson is directed to a pull-based transfer system that does not automatically transfer the modified first electronic file copy to the third electronic device associated with the user

The requirement of **automatically** transferring the modified first electronic file copy to the third electronic device **associated with the user** cannot be ignored. Similar to the analysis in *Rovi Guides*, the **automatically** transferring the modified first electronic file copy to the third electronic device **associated with the user** limitation requires the first application on the first electronic device (e.g., the server of Sigurdsson) to **automatically** transfer the modified first electronic file copy to the third electronic **associated with the user**. *Rovi Guides*, 2022 U.S. App. LEXIS. 10465 A broader construction encompassing the case where the third electronic device, instead of the claimed first electronic device, perform various intermediate steps to first determine when and how to request the missing content from the first electronic device as in Sigurdsson, would render the “**automatically transferring**” by the first electronic device to the third electronic device **associated with the user** language meaningless.

The Board, citing to Sigurdsson at ¶ 31 and Dr. Balakrishnan Decl. (EX1028), ¶¶ 524-529, stated “Sigurdsson describes automatic transfer of files from other

computers to clients, for example, with client to client transfers.” DI, 35. However, this portion of Sigurdsson does not correspond to the “automatic transfer” limitation (*i.e.*, without a client request). Rather, it merely states a result from interactions between Client A and Client C for synchronizing files. The details of the process and structure of the system are omitted in FIG. 1 and ¶ 31 of Sigurdsson for brevity, but this disclosure lays the groundwork for the details in the ensuing passages related to a request from C consistent with a “pull” approach as illustrated in FIG. 2. EX2025, ¶ 65-66.

For instance, Sigurdsson describes FIG. 2 (reproduced below) as a sequence diagram showing an illustrative method 200 for sharing and synchronizing content across multiple client devices **according to the implementation shown in FIG. 1**. EX1016 at ¶ 32.



Specifically, Sigurdsson discloses the following steps performed by the system:

- In step 212, the Client B104 polls the Server 106 for new content. (¶ 37)

- In step 214, the **Server 106 receives polling requests** from the Client B 104. (¶ 38)
- In step 216, **the server indicates to the polling client** that content updates are available. (¶ 39)
- In step 218, **the Client B104 sends a request to the Server 106** for the **missing Client A Content 108**. (¶ 40)
- In step 220, the server sends the updated content **corresponding to the time range requested by the server**. (¶ 41)

EX1016, ¶¶ 37-41.

Accordingly, the Board's reading of ¶ 31 of Sigurdsson is incorrect, because it ignores the several intermediate steps performed by the Server 106 and the Client B104, including the *pull* steps performed by the Client B104: **"the Client B104 sends a request to the Server 106** for the missing Client A Content 108." EX2025, ¶¶ 67-70.

On cross-examination, Dr. Balakrishnan cited to ¶ 47 of Sigurdsson to alleged it teaches a push mechanism.

Q. Does -- well, you said pushing to 14 the client. Show me where it discloses pushing to the client without receiving a request?

A. Well, as I discussed earlier, it says in Paragraph 47, for example, it says it protects transfer protocol secure 19

client/server, and as I discussed earlier, this very clearly HTTP protocol does allow for, once the connection has been opened, for things to be done in response to a client request, but also to settle things directly to the client from a server... Figure 4, for example, shows data going back and forth, and data going from client to client as well.

EX2024, 63:13-24.

¶ 47 of Sigurdsson *merely* discloses:

- The Client A102 can include both data and applications.
- The applications include an Event Listener 322, a File to Text/HTML Converter 324, and a hypertext transfer protocol secure (HTTPS) Client/server 326.
- The HTTPS Client/server 326 can be used as a client that tracks web access and can contain a Time Stamp 328 which associates viewed web pages with a time that they were accessed by the user. The HTTPS Client/server can also be used as a server to provide content to peer clients.

Contrary to Dr. Balakrishnan's understanding, there is no mention of "connection has been opened" or "pushing" data "directly to the client from a server," and no such inferences can be drawn. EX2025, ¶¶ 71-72.

Moreover, Sigurdsson describes FIG. 4 as "a schematic showing a system 400 for sharing and synchronizing content using **a peer-to peer and client/server architecture**. In the system 400, content still can be shared among the Client A 102,

the Client B 104 and a Client C 406 using the Server 106 in a method **similar to that of method 200 of FIG. 2.**" EX1016, 51 (emphasis added). Since Sigurdsson *expressly* states that FIG. 4 implements a method similar to FIG. 2, it is clear that *pull* steps are performed by the Client B104 to receive content. That is, **the Client B104 sends a request to the Server 106** for the missing Client A Content 108." EX2025, ¶¶ 73-74.

Therefore, when properly read as a whole, there is no escaping the fact that Sigurdsson discloses that the server 106 sends content to Client B104 **only after receiving a polling request and subsequently receiving a request for the updated content.** Accordingly, a POSA would understand that Sigurdsson is directed to a pull mechanism, not a push mechanism, and thus fails to disclose "automatically transferring the modified first electronic file copy to the third electronic device". Id., ¶ 75.

Moreover, Dr. Balakrishnan was clear that his conclusions did not rely on any actual disclosure of the server's transmission of content without a request, but on the *absence* of such disclosure :

Q. But do you see the back and forth in the paragraph which goes to request missing content? That's also a response to missing content. How do you read it otherwise?

A. I don't disagree it can be in response to missing content, but it doesn't have to, and that's my point.

Q. Where does it say that it doesn't have to? Where does it say that?

A. Where does it say that it has to?

Q. So again, you go back to the absence of disclosure, you're construing it to mean support for a proposition; that's the only way you can get it?

EX2024, 111:22-112:10.

Thus, Dr. Balakrishnan's analysis attempts to read into the disclosure teachings that are not actually taught on the theory that the modification is feasible. *See IBM v. Iancu*, 759 Fed. Appx. 1002, *20-21 (Fed. Cir. 2019) ("Silence in that sense would not by itself suffice for the Petitioner to meet its burden to prove, by a preponderance of the evidence, that there was no user authentication action in this scenario. *See* 35 U.S.C. § 316(e). Nor would that burden be met merely by adding a finding that IBM did not prove the opposite, i.e., a finding of 'the absence of sufficient evidence showing the provision or validation of a set credentials at the partner site' in this scenario. J.A. 67").

Dr. Balakrishnan attempted to clarify this position by citing to ¶ 68 of Sigurdsson. EX2024, 113:1-8. However, a finding that ¶ 68 of Sigurdsson teaches a process of automatically transferring missing content without a request for the

missing content is not supported. Paragraph 68 of Sigurdsson merely states that the server can transmit the content to the remaining client peers. This disclosure fails to provide any implementation details, such as, when and how the missing content will be transmitted to the client peers. On the other hand, Sigurdsson provides such details in paragraph ¶ 69 that follows, “In step 612, the third client requests a list of missing content from the server.”

Moreover, even if Sigurdsson were silent regarding the details on how the Server 106 transmits the content to the remaining client peers, such as the Clients B and C, silence alone would not support a finding that there was no request before the missing content is sent to the peer client. *IBM*, 759 Fed. Appx. 1020-21.v. *Iancu*, 2019 U.S. App. LEXIS 9450, *20-21.

d. Patent Owner did not mischaracterize Petitioners' arguments or Dr. Balakrishnan's testimony

In its Decision on Institution, the Board stated at page 37 that Patent Owner mischaracterized Petitioner's arguments and Dr. Balakrishnan's testimony regarding Sigurdsson and Shappell. The Board appears to have misapprehended Patent Owner's argument.

First, Dr. Balakrishnan provided an example for the server transmitting the content to the remaining client peers, which includes the server “(3) receiv[ing] a

request from Client C for missing data”. EX1028, ¶ 523, The Petitioner relies on this portion of the Declaration, repeating this exact language. Pet., 24.

Second, as discussed in detail in sections B.1.a and B.1.c, the other portions of Sigurdsson (such as Figs. 2, 4 and 5 and their corresponding descriptions) relied on by the Petitioner and Dr. Balakrishnan's for allegedly discussing “synchronization” fail to disclose or suggest a server sending missing content to the third client device (i.e., Client C) without first receiving a request for the missing content from the third client device. EX1028, ¶¶ 520-525; Pet., 23-28.

2. HTTP Client/Server architecture structurally requires a request then response based approach

The Board preliminarily found that “[a]lso unsupported by the record is Patent Owner's argument that it would not be obvious to ‘replace’ Sigurdsson's ‘HTTP client/server architecture’ which ‘requires a request then response approach.’ ... As discussed, the Petition relies on Sigurdsson's alternative embodiment that does not require client requests to ‘transmit content.’” DI, 36-37.

Initially, Patent Owner maintains that Sigurdsson's alternative embodiment in fact requires client requests to ‘transmit content’ as discussed above in detail in III.B.1.

Moreover, in FIG. 3, Sigurdsson discloses that the client devices 102 and 104 are implemented as a hypertext transfer protocol secure (HTTPS) client/server

structure (i.e., HTTPS Client/Server 256 and HTTPS Client/Server 356). EX2025, ¶
76.

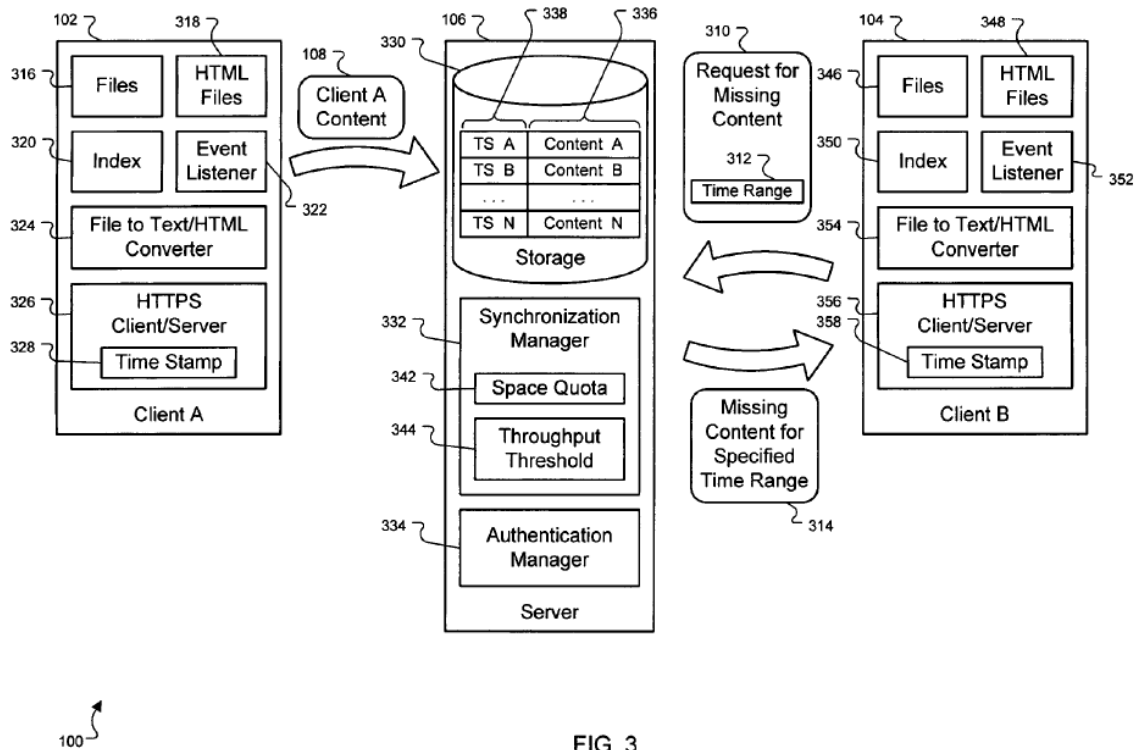


FIG. 3

HTTP (HyperText Transfer Protocol) is a recognized standard application-level protocol used for exchanging files on the World Wide Web. HTTP runs on top of the TCP/IP protocol and (later) on the QUIC protocol. Web browsers are HTTP clients that **send file requests to Web servers, which in turn handle the requests via an HTTP service.** EX2025, ¶¶ 27.

Regarding this protocol, Dr. Balakrishnan testified:

I think it's all over the place. 12 So, for example, in Paragraph 47, the last sentence says, "The HTTPS

Client/server can be used as a server to provide content to peer clients, which is described in more detail below." It doesn't limit it to being only in response to a request, and that would be a person of skill understanding of how HTTP works, would understand that to be included, pulling and pushing, for example.

EX2024, 64:11-20.

In ¶ 47, Sigurdsson states that the functionality of the HTTPS Client/server is “described in more detail below.” These details are instructive. For example, Sigurdsson in fact describes the client/server architecture in FIGS. 4 and 7 and ¶¶ 51-60 and 83-90. Tellingly, nowhere in this description is there a teaching support for Dr. Balakrishnan's suggestion of the server being capable of pushing content to clients. EX2025, ¶¶ 70-75. *See also IBM*, 759 Fed. Appx. 1020-21.

Moreover, Dr. Balakrishnan is simply wrong about how HTTP worked at the time of the invention (the 2007/2008 timeframe). For instance, the HTTP protocol is a request-response protocol, in which HTTP servers use the client-pull architecture, where clients send HTTP requests to the server and the server sends HTTP responses after processing each request. The standard HTTP protocol practiced during the 2007/2008 timeframe did not support push-based functionality where the server can automatically send data to a client without the client making requests for data. EX2025, ¶¶ 27-28.

An HTTP/HTTPS server plays the role of a server in a client–server model by implementing the server part of the HTTP/HTTPS network protocol. An important feature of an HTTP/HTTPS server is that the HTTP/HTTPS server waits for incoming client requests and for each request it responds by providing the requested information or performing a requested task. *Id.*, 29.

Even when there is already an established connection or an open connection between an HTTP/HTTPS server and a client, the HTTP/HTTPS server cannot push data to the client prior to receiving a client request for the data. **Under the HTTP protocol in effect at the time of the invention (the 2007/2008 timeframe), an HTTP/HTTPS server does not perform actions on its own without a request from a client.** Therefore, in server-client communication in the timeframe of 2007/2008, including server-client communication using the HTTP protocol, the server could not perform actions on its own without a request from a client. EX2025, ¶¶ 27-36. As such, Sigurdsson requires a system architecture based on an HTTP request/response process for data transfer between the client and the server as described in FIG. 3. Therefore, Sigurdsson fails to disclose the feature of “**automatically transferring** the modified first electronic file copy to the third electronic.” *Id.*, 76-82.

Furthermore, it would not have been obvious to replace the principal structure (*i.e.*, the request-response based HTTP client/server) of Sigurdsson with a push-

based server that automatically **transfers** modified to a client device. A POSA would not have found it obvious to replace the pull-based HTTP client/server taught by Sigurdsson with a push-based server that automatically transfers data to a client without any client request. In fact, a fundamental feature of an HTTP architecture, namely, providing a service in response to a request from a client teaches away from an “automatic” provision of a service without any request. EX2023, ¶¶ 76-82.

3. *It would not have been obvious to modify Sigurdsson to disclose automatically sending the modified first electronic file copy responsive to receiving the file copy from the second electronic device*
 - a. *It would not have been obvious to modify the server of Sigurdsson to automatically transfer content without first receiving a request for the missing content from the third electronic device*

The Board states that “[i]t would have been obvious to use Server 106 to automatically send the modified first electronic file copy responsive to receiving the file copy from the second electronic device” primarily relying on ¶¶ 521–523 of Dr. Balakrishnan’s testimony. DI, 35, 36.

However, ¶¶ 521–523 of Dr. Balakrishnan’s testimony fails to provide a proper basis for the modification.

“The rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than

predictable results to one of ordinary skill in the art.” *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2006). “There must be a reason or suggestion in the art for selecting the procedure used, other than the knowledge learned from the applicant’s disclosure” *In re Dow Chem. Co.*, 837 F.2d 469, 473 (Fed. Cir. 1988); “The suggestion to combine references must not be derived by hindsight from knowledge of the invention itself”. *Cardiac Pacemakers, Inc. v. St. Jude Medical, Inc.*, 381 F.3d 1371 (Fed. Cir. 2004)

Dr. Balakrishnan cites to the synchronization manager 332 in ¶ 48 of Sigurdsson and concludes that since Sigurdsson discloses a synchronization manager 332 for “synchroniz[ing] content stored on and shared between the clients”, it would have been obvious to “automatically send, via the first application, the modified first electronic file copy to a third electronic device responsive to receiving the modified first electronic copy from the second electronic devices.” EX1028, ¶ 435.

While ¶ 48 of Sigurdsson discloses “synchroniz[ing] content”, nowhere does Sigurdsson disclose or suggest “automatically transferring” the missing content without first receiving a request for the missing content from the third client device. EX2025, ¶ 40. In particular, as explained above in detail in Sections B.1.a and B.1.c, overwhelmingly discloses first receiving a request for missing content from the client before sending the missing content to the client. As such, any suggestion to

modify the teachings of Sigurdsson to include the claimed limitation of “automatically transferring” would be derived by hindsight from knowledge of the invention itself, which is impermissible.

b. It would not have been obvious to modify Sigurdsson to replace its pull-based file transfer with push-based file transfer because it would forfeit the purpose it purports to serve

Sigurdsson intentionally and purposefully chose the “pull” based approach to implement its “drop box” mechanism and, as such, Sigurdsson cannot be modified to apply to the “push” based file transfer because it would forfeit the purpose of Sigurdsson. EX2025, ¶¶ 78-82.

For instance, Sigurdsson discloses that “[t]he Server 106 can provide a **temporary storage location, or “drop box”**, for a user's files, documents, web pages, or the contents of these documents. **The drop-box can facilitate sharing this information between the user's computers by storing the shared content if the target computer is offline.**” EX1016, ¶ 27. Moreover, Sigurdsson discloses that “[t]he system 400 can enable peer-to-peer content sharing and synchronization using a combination of peer to-peer and **“drop box” techniques**” and “the server can be used as a **drop box** for the content until the offline client comes online again.” EX1016, ¶ 62.

Sigurdsson therefore uses the server as “drop box” for storing content for a client that is offline, and to that end, when the client is back online, the client can

request to server to provide the missing content (i.e., access the “drop box” to retrieve data) as shown at least in FIG. 2 (step 218), FIG. 3 (step 310), FIG. 6 (step 610) and FIG. 7 (step 710). EX2025, ¶ 80-82.

It is well settled that if the proposed modification of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references cannot be relied upon to render the claims prima facie obvious. *See In re Ratti*, 270 F.2d 810, 813 (CCPA 1959). Here, the Petitioner's proposed modification would require a substantial reconstruction and redesign of the “drop box” mechanism using the HTTP client/server architecture of Sigurdsson as well as a change in the basic principle under which the Sigurdsson's system was designed to operate, which is improper.

4. *It would not have been obvious to combine Sigurdsson and Shappell because Shappell teaches away from using a server*

The Board states that it “do[es] not agree with Patent Owner that because Shappell discloses a peer-to-peer network, it “expressly teaches away from using a server” DI, 37 Shappell does not merely provide a general preference for an alternative invention. Instead, Shappell expressly and repeatedly discounts the use of a server by specifically requiring a **server-less** shared space. As explained in *Spectralytics Inc. v. Cordis Corp.*, 649 F.3d 1336, 1343 (Fed. Cir. 2011), “teaching away’ does not require that the prior art foresaw the specific invention that was later

made, and warned against taking that path.” The Court stated: “A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference or would be led in a direction divergent from the path that was taken by the applicant.” *Id.* In this regard, Shappell discloses that “a computer implemented method and system enable users to share files in a **server-less** shared space. By providing access to such **[server-less]** spaces via a visual presentation, the system renders content available for access by other group members. Access is sometimes provided through propagation of metadata or other uniquely identifying indicia associated with the shared space to all group members. Abstract. EX2025, ¶ 84. Referring to the Abstract, Dr. Balakrishnan confirmed on cross-examination that Shappell’s disclosure is directed to a shared space without a server.

A. I think what Shappell means by that is, the system enables you to share files in a system that doesn't necessarily have a server. So it's a shared space.

Q. It's a shared space without a server, that's what Shappell's disclosure is, right?

A. I think that sentence says that, yes.

EX2024, 64:11-20.

A prior art reference must be considered as a whole. *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). Here, Shappell, when considered as a whole, overwhelming teaches that peer-to-peer system *without using a server*. EX2025, ¶ 85. Shappell repeatedly teaches using a shared space without a server. And for good reason. Shappell was concerned about facilitating group interaction through which a desired group of users can interact with each other in a secured environment, and through which users can access, and maintain control with respect to files shared in their shared relationships with one another. EX2025, ¶ 86. See *Chemours Co. FC, LLC v. Daikin Indus.*, 4 F.4th 1370, 1376 (Fed. Cir. 2021) (reversing because, inter alia, “Here, the Board appears to have ignored the express disclosure in Kaulbach that teaches away from the claimed invention”); cf. *Polaris Indus. v. Arctic Cat, Inc.*, 882 F.3d 1056, 1068 (Fed. Cir. 2018) (“The Board failed to analyze whether Denney ‘teaches away’ from claims 17-19 by determining whether ‘a person of ordinary skill, upon reading [Denney], would be discouraged from following the path set out in [Denney], or would be led in a direction divergent from the path that was taken by the applicant.’ In re Fulton, 391 F.3d 1195, 1201 (Fed. Cir. 2004). This was error.”). Specifically, Shappell was trying to address problems with existing network interaction mechanisms that do not provide a mechanism for readily manipulating

shared data and information among a desired group of users or an user interface to simplify management of such shared data. EX2025, 87.

On the other hand, Sigurdsson proposes a system including a client/server mechanism. Therefore, It would not have been obvious to a person of ordinary skill in the art to have modified the teachings of Sigurdsson to provide a server-less shared space (i.e., replace the client/server mechanism) as disclosed in Shappell, because doing so would change the principle of operation of Sigurdsson. EX2025, ¶ 88. *In re Ratti*, 270 F.2d at 810, 813. See also, *Microsoft Corporation et al. v. Koninklijke Philips N.V.*, IPR2018-00185, Institution Decision, Paper No. 7, 12 (May 22, 2018) A central feature of Sigurdsson network architecture is using the client/server mechanism for providing access to client that are offline, and then come online. Modifying Sigurdsson's architecture to a server-less shared space would change the principle of operation of Sigurdsson and as such a person of ordinary skill in the art would not have modified the teachings of Sigurdsson with the teachings of Shappell.

5. *The Sigurdsson and Shappell combination fails to teach or suggest replacing an older version of the first electronic file stored on the third electronic device with the modified first electronic file copy having the content modified by the user, where the second electronic device and the third electronic device are each associated with a same user.*

Claim 1 recites automatically transferring the modified first electronic file copy from the second electronic device to the third electronic device to **replace an older version of the first electronic file stored on the third electronic device,**

where “[the] second electronic device and [the] third electronic device [are] each **associated with a same user.**” The language expressly requires the second electronic device and the third electronic device to be **associated with the same user.**

As in *Rovi Guides*, the requirement that the second electronic device and the third electronic device be associate **with a single user** cannot be ignored. *Rovi Guides*, 2022 U.S. App. LEXIS 10465, at *5-6. The Federal Circuit reasoned that “no reasonable fact finder could find that Sie’s club notification system 3 teaches the available-to-a-user limitation. Sie’s system checks for availability to a specific user only after the club notification is displayed. But the claim language requires the indication (i.e., the notification) to be based on a determination of availability to a specific user. *Id.*, at 7. Thus, no reasonable finder of fact could find Sie teaches the available-to-a-user limitation.”

As with *Rovi Guides*, here claim 1’s **associated with the same user** limitation requires the claimed method to send the file not only a specific user but a device that is associated with the very same user that sent the file. A broader construction, which would only require the system be configured to query all the devices or devices of a group of users would render the “to the user” language meaningless.

Petitioner relies on Shappell for allegedly disclosing these features missing Sigurdsson.

However, Shappell, when considered as a whole, overwhelming teaches a peer-to-peer system for sharing files **among group members**. *W.L. Gore*, 721 F.2d 1540.

Shappell is directed to a system and method for defining a server-less shared memory space and sharing files **among group members** in the shared space. EX1020, ¶ 1. Specifically, Shappell's main focus is to "facilitate group interaction through which a desired group of users can interact with each other in a secured environment, and through which users can access, and maintain control with respect to files shared in their shared relationships with one another". *Id.*, ¶ 6. Dr. Balakrishnan confirmed that **people who are members of his group use the shared space**.

Q. A group of members using a share space. That's what Shappell is about. You think that that's just this paragraph. Is there anything else anywhere else that makes you think otherwise?

A. That a non-group of people may have accessed the shared space; is that what he's asking? No. The whole point is that there's some mechanism to validate **people [who] are members of his group in order to use the shared space**.

EX2024, 143:17-25.

No reasonable fact finder could find that Shappell's sharing files **among group members** in the shared space teaches the **associated with the same user** limitation. While Shappell discloses sharing a file with users of a group, Shappell simply does not teach or suggest a server sending the file to a specific device "associated with the user." EX2025, ¶ 93. Therefore, Shappell cannot and does not teach or suggest "**replac[ing] an older version of the first electronic file stored on the third electronic device with the modified first electronic file copy** [from the second **electronic device**]", where "[the] second electronic device and [the] third electronic device [are] each **associated with a same user**."

Furthermore, since Shappell discloses a system designed to share a file with members of a group, if the teachings of Sigurdsson were to be modified based on Shappell, the combination cannot and does not teach or suggest **automatically transferring** the modified first electronic file copy **to the third electronic device** associated with a **same** user as **the second electronic device**.

C. Response to Ground 2

1. *Brown in view of Hesselink fails to disclose the first application automatically transferring a modified first electronic file copy to the third electronic device.*

The plain language of the challenged claims specifies that **a first application** executable on a first electronic device **automatically** transfers a modified first

electronic file copy received from a second electronic device to a third electronic device, as recited in claim [1d] and similarly in claims [1e], [8c], [8d].

The Petition asserts that claim limitation [1d] would have been obvious in view of Brown in combination with Hesselink. It is undisputed that in Brown a transfer of changes to a file, from a server to a client, is initiated by the client. Pet., 55 (“After execution of the functionality discussed for claim [1b], above, **client 135 would initiate communication with the server** and receive a copy of the modified electronic file sent to server 105 by client 130, as described above for claim [1b]. (Brown 2:63-67, 3:1-8; Balakrishnan, ¶¶ 896-898).”) It also is undisputed that in the asserted combination of Brown and Hesselink, a transfer of changes to a file from a server to a client is initiated by the client. Id. In discussing Brown in combination with Hesselink the Petition states, “[t]hus, it would have been obvious that Brown’s synchronization process on laptop client 135 would **begin by checking whether the server has any updates**, including updates from other client devices, such as desktop client 130. (Brown, 10:18-27; Balakrishnan, ¶ 898.)” Pet., 55. In neither Brown, nor in the asserted combination of Brown and Hesselink, does an application executable on Brown’s server “automatically transfer the modified first electronic file copy” to a client. Rather, the **client** in Brown or the Brown/Hesselink combination must initiate the transfer. It does so, as Petitioners admit, by “laptop client 135 ... **checking whether the server has any updates.**” Pet., 55.

In greater detail, Petitioners rely upon FIG. 1 of Brown depicting client 130 as an exemplary “second electronic device” and client 135 as an exemplary “third electronic device.” Pet., 40. However, in Brown, the synchronization process is only between the initiating client synchronization application (SA) and the server, and this process does not synchronize another client 135 with the server 105. In order for the other client 135 to synchronize with the server 105, **the other client 135 must initiate synchronization with the server 105.** EX1025. 3:42-46. Unless the other client 135 initiates the synchronization process, the server 105 would not send the modified file received from the client 130. Id. 5:14-24 (“The synchronization process is **initiated by a client SA when it makes a sync poll call to the server,** passing it the client sync index (CSI) identifying its current known state of the account.”)

Brown further illustrates that the update process is **performed by the client** in which the client determines what updates need to be retrieved from the server and then requests the server to send the changes related to the file or directory. EX1025, FIG. 4B, 10:45-48. That is, in Brown, the client retrieves the changes from the server **only upon the server receiving the request from the client.** EX2025, ¶¶ 96-97. Thus, in Brown, to synchronize with the server, **the client must actively pull down changes from the server,** as opposed to the modified file being “automatically” transferred from the server to the client. Clearly, Brown uses a protocol that uses a

“pull” mechanism and not the server automatically “pushing” the modified file to the client. In the “pull” mechanism, the client does not know when new data is available and the client must poll the server to see if there is new data available to the client and request that data from the server (i.e., pull the data). EX2025, ¶¶ 96-98.

The automatic transfer in the claims of the '561 Patent is automatic from the *server's* perspective (that is, the first electronic device executing the first application). *See* claim 1 of the '561 Patent, “**the first application** is further configured to **automatically transfer** the modified first electronic file copy to the **third electronic device** ... (associated with a user)” and similarly claim 8 of the '561 Patent. That is, the claims of the '561 Patent adopt a push-based file transfer from the server to the client, thus allowing the server to send the modified file to the client without a need for the client to explicitly request it. Brown discloses the completely opposite method, that is, client pull. The Board states, without support, “[w]hile we recognize that Brown uses the phrase “from the user's perspective” in connection with file synchronization, we do not believe this limits Brown's disclosure in the manner suggested by Patent Owner's argument.” DI, 42. The Board, however, did not provide any explanation as to how Brown's disclosure can be construed as teaching or suggesting an automatic transfer from the server's side, and thus did nothing more than attempt to improperly expand the teachings of Brown.

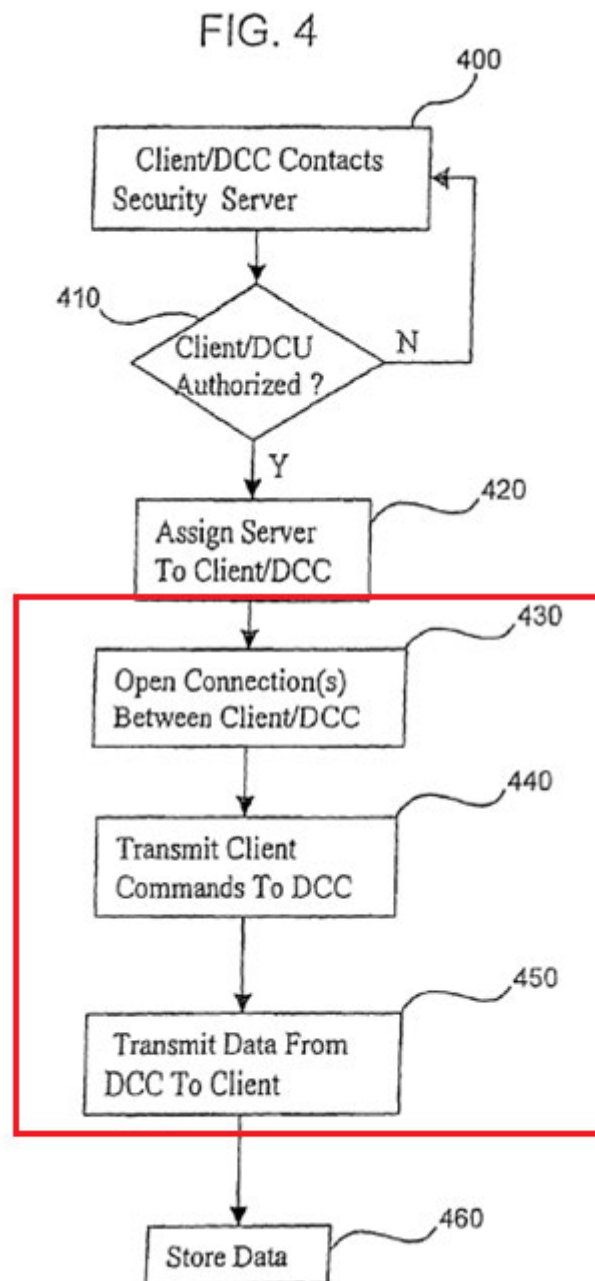
In an attempt to cure the deficiencies of Brown, the Petition relies heavily on a statement in Hesselink ¶ 183 as a reason to modify Brown to “automatically forward updated files from server 105 to synchronizing clients as soon as file updates are received at server 105.” Pet., 56. The Board cites this reason for disagreeing with Patent Owner’s argument that “[j]ust like in Brown, Hesselink uses a pull mechanism in its file synchronization process.” DI, 43, *citing* Prelim. Resp. 56-59. But Petitioners gloss over the claim language in relying on this statement in Hesselink. Claim limitation [1d] requires “the first application” to be “configured to automatically transfer the modified first electronic copy to the third electronic device,” where the “first application” is executed by the “first electronic device,” *e.g.*, a server. In other words, the server is configured to automatically transfer the modified copy to another device associated with the user. Hesselink’s statement in ¶ 183 neither teaches nor suggests that a server automatically transfers the modified copy. It merely states, “when data is updated, such as when a file is edited, for example, **the system** may be configured to automatically update all or some designated subset of computers on the network as soon as the update has been performed at one location.” EX1026 ¶ 183 (emphasis added).” But Hesselink neither teaches or suggests that **a server** is configured to automatically update other computers on the network, only that “**the system**” is configured to do so. The system in ¶ 183 of Hesselink refers to the access and control system 10 as illustrated in FIG.

1, which includes user computers 12a, 12b, a connection server 14, and network-enabled devices 18a, 18b. EX2025, ¶¶ 107-109. Hesselink at the cited portion or anywhere else does not contain any disclosure of the **server** automatically pushing the modified file. *Id.*, ¶¶ 103-107. The Board did not rely on actual disclosure of Hesselink to teach automatic transfer of the modified file from a server, but on the absence of such disclosure. When there is an absence of disclosure, Hesselink cannot be relied upon as containing such lacking disclosure. *IBM*, 759 Fed. Appx. 1020-21.

It should be noted that Hesselink, ¶ 183 refers to the previous discussion of file synchronization that requires a client request, because the paragraph begins with “As noted above.” There is no discussion whatsoever of a push-based file transfer from the server in the preceding paragraphs in Hesselink. To the contrary, Hesselink only discusses the pull-based synchronization throughout its disclosure, for example, as illustrated in detail with reference to FIGS. 4 and 8 as discussed below. Considering Hesselink's disclosure as a whole, what “the system” is configured to do in ¶ 183 is updating **in response to a client request**. EX2025, ¶ 108.

In detail, referring to FIG. 4, Hesselink describes the operation of the access and control system 54. If the user of client computer 12a-12n is authorized in event 410, security server 58 assigns one of the connection servers 14a-14n to the user of client computer 12a-12n, in event 420. In event 430, a connection is made between the connection server 14a-14n assigned in event 420, and the network-enabled

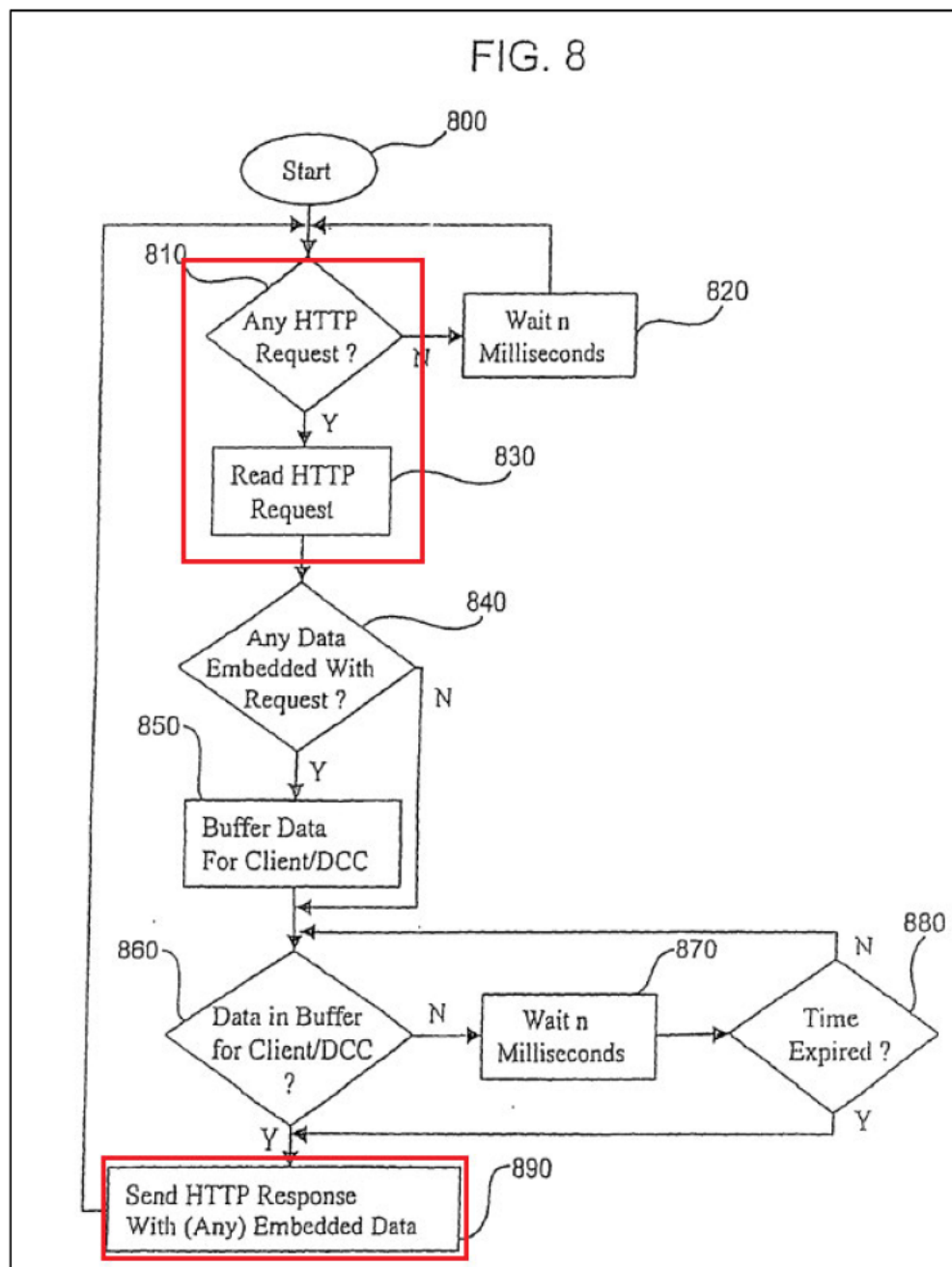
device 18a-18n selected by the user authorized in event 410. In event 440, client computer 12a-12n transmits instructions or commands to a network-enabled device 18a-18n, and in event 450, network-enabled device 18a-18n transmits data to client computer 12a-12n. EX2026, ¶¶ 86-87. Hesselink at ¶ 87 further discloses, referring to events 440 and 450: “Client process 32 on client computers 12a-12n **periodically sends HTTP requests** to connection server 14a-14n that include embedded command data. Device control process 38 on device control computer 36a-36n also **sends periodic HTTP requests** to connection server 14a-14n with embedded data from network-enabled device 18a-18n.”



EX 1026, FIG. 4 (emphasis added.).

Thus, just like in Brown, Hesselink uses a pull mechanism in its file synchronization process. EX2025, ¶ 110. That is, in Hesselink, the client **must initiate a request** for any update to the connection server. The HTTP

request/response process for data transfer between the client and the connection server is also illustrated in FIG. 8 of Hesselink. The process includes event 810 in which it is determined “whether or not **any HTTP request has been received** from client computer 12a-12n (or device control computer 36a-36n)”; if an HTTP request has been received and there is no data is embedded within the HTTP request, event 860 in which it is determined “if there is any data present for client computer 12a-12n from network-enabled device 18a-18n”; and event 890 in which “**an HTTP response** is sent to client computer 12a-12n by connection server 14a-14n,” and “[i]f any data was present in the connection server sending buffer for client computer 12a-12n, this data is **embedded within the HTTP response.**”



EX1026, FIG. 8 (emphasis added.).

Thus, Hesselink is precisely focused on a data transfer process based on client pull, which is implemented by clients sending HTTP requests to the server to request the data. This is the opposite of the server initiating a data push to a client.

As discussed in III.A.2, the HTTP protocol is a request-response protocol and the HTTP servers use the client-pull architecture. The standard HTTP protocol practiced at during the 2007/2008 timeframe did not support push-based functionality where the server can automatically send data to a client without the client making requests for data.

For at least the reasons discussed above, the description in Hesselink, ¶ 183 relied upon in the Petition does not meet the “automatic transfer” limitation.

2. Hesselink fails to disclose the first application associated with a user automatically transferring to the third electronic associated with a same user

As explicitly recited in the preamble of claim 1, each of the first electronic device, the second electronic device, and the third electronic device are all associated with a user, *i.e.*, the same user.

The requirement of the first application **automatically transferring** the modified first electronic file copy to the third electronic device associated with the same user cannot be ignored. As discussed above, the Federal Circuit held that all terms, including in the claim must be considered since each term must add something more. *Rovi Guides*, 2022 U.S. App. LEXIS 10465, at *5-6. Similarly, the term “**automatically**” must add something more in the claimed feature “the first application is further configured to **automatically transfer the modified first electronic file copy to the third electronic device.**”

The **automatically transferring** limitation requires the claimed method to not merely have the first electronic file copy modified by a user at the second electronic device end up at any third electronic device, but the limitation requires the first application executed on the first electronic device (e.g., server), associated with that user, to automatically transfer the modified first electronic file copy to the third electronic device via the third application executed on the third electronic device. It would be error to consider the “automatic transfer” feature of the asserted claims in isolation. This feature must be considered in connection with the specific arrangement of first, second and third applications running on three different electronic devices, including the server between the multiple devices to be synchronized, as claimed. It is the use of these application programs and their arrangement that made possible the “automatic transfer” to another device (i.e., without the other device requesting it) associated with the same user.

Petitioners cited ¶ 183 of Hesselink to argue that it would have been obvious to automatically forward updated files from server 105 to synchronizing clients as soon as file updates are received at server 105. Pet., 56. However, ¶ 183 of Hesselink states: “As noted above, when data is updated, such as when a file is edited, for example, the system may be configured to automatically update **all or some designated subset of computers on the network** as soon as the update has been performed at one location.”

The “all or some designated subset of computers on the network” and “online computers” discussed in this paragraph refer to client or user computers 12a, 12b, that may be operatively coupled to a connection server 14 via a public or global network 16 and one or more network-enabled devices 18a, 18b that are also operatively coupled to connection server 14 via global network 16. *See* FIG. 1 and ¶ 76 of Hesselink. *See also* ¶¶ 120-121 of Hesselink (“The present invention enables a user to access devices 18 a-18 n of **all the computers that a user would normally have access to**, from any single location throughout the world where the user has network access, assuming all of the computers also have network access. It is further noted that any of the computers shown in FIG. 9 may function as a DataClient, **the device or devices of which other computers access to share a file or files from.**”) EX2025, ¶¶ 117-120.

That is, Hesselink only discloses updating all or some of the computers that are online to which the user has access. The file-access permission is stored in the database 52 and permission management information can be downloaded and stored in the user module's local cache to determine what data access functionalities that the particular user module can perform and to which files or directories may be accessed on which remote device modules. *Id.*, FIG. 10 and ¶ 132. Therefore, Hesselink does not make a determination as to whether the third electronic device is associated with the same user by use of the first, second, and

third applications recited in the asserted claims, and hence Hesselink cannot make an automatic transfer of a modified file based on such determination. While Hesselink at FIG. 10 mentions application 72a (e.g., Windows Explorer®), this application is only for accessing remote storage device 18b at computer 74 over a wide area network. *Id.*, ¶ 127. Nowhere does Hesselink discuss a dedicated file transfer and/or synchronization application as recited in the asserted claims.

EX2025, ¶ 120.

In *Rovi Guides*, the patent owner drew a distinction between a determination of “general availability”—that an archived copy is available to **some users**—and a determination of present “availability . . . to a **specific user**” and argued that the prior art does not teach the available-to-a-user limitation. The Federal Circuit agreed with the patent owner because if the determination of “general availability” were to be construed to meet the available-to-a-user limitation, such broad construction would render the ‘to the user’ language in the claim meaningless. *Rovi Guides*, 2022 U.S. App. LEXIS 10465, at *5-6.

Likewise, updating all or some of online computers the user has access to, as taught by Hesselink, cannot be construed as teaching “automatically transfer the modified first electronic file copy to the third electronic device” that is associated with the same user, because such construction would render the “associated with a user” language meaningless. In the ’561 Patent, based on the “association” with a

user established via the first, second, and third applications executable on different devices, the server can find the third electronic device to which the “automatic transfer” should be performed. EX2025, ¶ 121. In contrast, Hesselink only looks at whether the user is making a data access request to a remote directory in the remote device, in order to determine whether to update the user's local device. Hesselink's automatic update is not based on the determination of the third electronic device being associated with a user via the third application. EX2025, ¶ 121.

3. *Brown cannot be modified to disclose push-based file transfer because it would forfeit the purpose it purports to serve*

Brown intentionally and purposefully chose the “pull” based approach, and as such, Brown cannot be modified to apply to the “push” based file transfer because it would forfeit the purpose of Brown. EX2025, ¶ 123.

Brown specifically states at 3:17-28 (emphasis added):

The client/server architecture is designed to **minimize the load on the server processor** in order to maximize server scalability. To that end, as many processor-intensive operations as possible, such as message digest computation and comparison, data encryption and decryption, and **synchronization itself, are performed by the client SA**. Also, the **polling mechanism used by the client SA** to determine if the client is synchronized with the server is designed to **require**

minimal processing on the server when the client and server are in sync. This is significant because as a rule only a small percentage of clients require synchronization activity at any point in time.

As noted above, Brown aims to minimize the load on the server processor. To that end, as many synchronization operations as possible are performed by the client, including the operation to make a sync poll call to the server. Thus, the intended principle of operation and purpose of Brown was the opposite of a server-push mechanism for file synchronization and taught away from using such a mechanism. EX2025, ¶ 125.

Because “the proposed modification cannot render the prior art unsatisfactory for its intended purpose,” and because “the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious.” MPEP § 2143.01(V and VI), citing *In re Gordon*, 733 F.2d 900, 902 (Fed. Cir. 1984) and *In re Ratti*, 270 F.2d 810 (CCPA 1959); *see also Plas-Pak Industries, Inc. v. Sulzer Mixpac AG*, 2015 WL 328222 at *2 (Fed. Cir. 2015) (“[C]ombinations that [1] change the ‘basic principles under which the [prior art] was designed to operate,’ . . . or that [2] render the prior art

‘inoperable for its intended purpose,’ . . . may fail to support a conclusion of obviousness.”)

In summary, a POSA would not have found it obvious to modify Brown as asserted in the Petition because such a modification would fundamentally and impermissibly change the principle of operation of Brown from a pull type synchronization system to a push type synchronization system. EX2025, ¶ 126. Furthermore, such a modification would render Brown unsatisfactory for its intended purpose. Thus, a POSA would not have had a legitimate reason to modify Brown to arrive at the claimed “automatically transfer” limitation. Id.

4. The Petition relies upon Hesselink’s peer-to-peer embodiment, which cannot be modified to teach “automatic transfer” from a server

Petitioners rely on automatic updates in all or some designated subset of computers described in Hesselink, ¶ 183. Pet., 56. As discussed in detail above, this paragraph does not disclose an automatic transfer from the server. Moreover, the updates in Hesselink, ¶ 183 are based on a peer-to-peer connection between two computers, as opposed to a client-network architecture.

Petitioners argue that a POSA would not have been dissuaded from combining Hesselink with Brown in view of Hesselink’s use of a peer-to-peer model as opposed to Brown’s client/server model. Pet., 51. This allegation is contrary to Hesselink’s explicit disclosure. Hesselink would actually dissuade a

POSA from applying Hesselink in a client/server model because Hesselink raises security concerns in using server/client architecture for file synchronization.

EX2025, ¶ 132. EX1026, ¶ 6 states: “[M]any users may be uncomfortable storing photos of their families on some photo service server in some unknown location where it is also often unknown what level of security (if any) such server is provided with.” EX1026, ¶ 13 also states: “Providing secure access to remote devices has typically required setup of a dedicated private network ... A dedicated server within the private network provides for communication with the Internet, and a dedicated telephone line, digital subscriber line (DSL) or like communication interface is used to connect the device to the dedicated server. Such a system involves costly and difficult installation and maintenance.” To solve this problem, Hesselink proposes a peer-to-peer method, which is easy to use, relatively inexpensive, and secure. EX1026, ¶ 10. EX2025, ¶ 132. Contrary to Petitioners’ assertion, Hesselink clearly disparages or teaches away from implementing its method in a client/server mode, and Dr. Balakrishnan also acknowledged this:

A. In this particular example, it's talking about one possible negative or disadvantage of storing personal photos on a server where it might be not known what securities provided. ... So this is just simply one example where Hesselink describes a possible scenario where one

does not know what the security protocols might be in
this particular example.

Q. So Hesselink's disclosure is for a peer-to-peer system
that does not have this disadvantage; is that reasonable to
say?

...

A. I think that's fair as a general matter, yes.

EX2024, 77:22-78:19.

Petitioners argue that “Hesselink does not teach that the devices in its
synchronization network must not include any servers” and cites Hesselink, ¶ 122
as allegedly teaching any of computers 72, 74 and 76 as being a computer device
including “file server.” Pet., 52. However, while Hesselink mentions including a
server within its peer-to-peer system, such a server only serves as a pipeline or
conduit between two peers. Also, the “file server” mentioned in Hesselink, ¶ 122 is
only an example of a type of computing device for computers 72, 74 and 76, each
of which are peers in the peer-to-peer architecture (i.e., nodes between which a
direct link is provided). The mere mention of a “file server” that may implement
any of computers 72, 74 and 76 in FIG. 11 of Hesselink, ¶ 122 by no means
implicates, let alone render obvious, Hesselink’s applicability to a client/server
model. EX2025, ¶ 133.

The Board in its Decision on Institution stated: “We are not persuaded at this at this stage by Patent Owner's argument limiting Hesse link's teachings of automatically updating to a "peer-to-peer connection between computers," citing *Intel Corp. v. PACT XPP Schweiz, AG*, 61 F.4th 1373, 1380 (Fed. Cir. 2023) (“[I]f a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.”). DI, 44. However, the Board’s analysis is in error because the factual findings in that case are not applicable here. In *Intel Corp.*, in applying the so called known-technique rationale, the Federal Circuit found that (1) the two references relied upon in the IPR proceeding address the same problem, and (2) the combination is a suitable option to address that problem, and thus there is a motivation to combine. *Intel Corp.*, 61 F.4th 1380. To the contrary, Brown and Hesselink do not address the same problem. While both Brown and Hesselink generally relate to synchronizing data among multiple computers, Hesselink specifically addresses the problems with using a client-server system for synchronization, which has security concerns, expensive costs and difficulty in installation and maintenance. *See* EX2026, ¶¶ 6, 13. That is, Hesselink address the specific problems arising in the client-server system that is adopted in Brown. Because Hesselink denounces the use of a server for synchronization and proposes

a peer-to-peer system as an alternative, no person of ordinary skill in the art would have accepted the combination of Brown and Hesselink as a suitable option to address the problem addressed in Hesselink. Therefore, contrary to the Petitioners' assertion, there was no motivation to combine Brown and Hesselink to arrive at the claim limitations. EX2025, ¶¶ 134-135.

IV. CONCLUSION

For at least the foregoing reasons, the IPR challenge to the asserted claims should be rejected.

Date: November 21, 2023

Respectfully submitted,

/Raja Saliba/

Raja N. Saliba (Reg. No. 43,078)

Chidambaram S. Iyer (Reg. No. 43,355)

Michael R. Dzwonczyk (Reg. No. 36,787)

L. Roman Rachuba (Reg. No. 75,180)

Sughrue Mion, PLLC

Telephone: (202) 293-7060

Facsimile: (202) 293-7860

CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), Patent Owner hereby certifies that the present paper contains 13,403 words (as counted by the “Word Count” feature of Microsoft WordTM). This word count excludes the table of contents, table of authorities, table of exhibits, certificate of word count, and certificate of service.

Respectfully submitted,

/Raja Saliba/

Raja N. Saliba (Reg. No. 43,078)

Chidambara S. Iyer (Reg. No. 43,355)

Michael R. Dzwonczyk (Reg. No. 36,787)

L. Roman Rachuba (Reg. No. 75,180)

Sughrue Mion, PLLC

Telephone: (202) 293-7060

Facsimile: (202) 293-7860

CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the attached Patent Owner Preliminary Response is being served by electronic mail on the following counsel of record:

Heidi L. Keefe
Reuben H. Chen
Lowell D. Mead
Samuel K. Whitt
Cooley LLP
1299 Pennsylvania Ave NW Suite 700
Washington, DC 200004
hkeefe@cooley.com
rchen@cooley.com
lmead@cooley.com
swhitt@cooley.com

/Soo Jin Hur/
Soo Jin Hur

Date: November 21, 2023