

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DROPBOX, INC.,
Petitioner,

v.

ENTANGLED MEDIA, LLC.,
Patent Owner.

Case IPR2024-00284
Patent 8,296,338

**PATENT OWNER'S PRELIMINARY RESPONSE
UNDER 35 U.S.C. § 313 AND 37 C.F.R. § 42.107**

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	LEVEL OF ORDINARY SKILL IN THE ART	4
III.	OVERVIEW OF THE '338 PATENT	4
IV.	THE ASSERTED PRIOR ART REFERENCES AND CHALLENGED CLAIMS	6
	A. ABOULHOSN	6
	B. PHILLIPS	7
V.	LEGAL STANDARDS	8
	A. STANDARD FOR GRANTING AN IPR	8
	B. OBVIOUSNESS STANDARD.....	8
VI.	THE BOARD SHOULD DENY INSTITUTION.....	9
	A. PETITIONER FAILS TO DEMONSTRATE A REASONABLE LIKELIHOOD OF PREVAILING ON GROUND 1 (CLAIMS 1-2, 5-6, 7-9, 10-14) OR GROUND 2 (CLAIMS 3-4).....	9
	i. Claims 1, 2, 5-6 (Ground 1) and Claims 3-4 (Ground 2)	9
	a. Petitioner Fails To Demonstrate that Aboulhosn and/or Phillips Disclose “Receiving User Information To Open An Account For Establishing A Singular File System Across Multiple Devices (1A).”	9
	b. Petitioner Fails To Demonstrate That Aboulhosn Or Phillips Discloses “Scanning Each Of The Multiple Devices By Each Of The Individual Software Clients To Inventory Data On Each Of The Multiple Devices And Create A Meta-Index Of The Files For The Inventoried Data” (1[D])	12

c.	Petitioner Fails To Demonstrate That Aboulhosen Or Phillips Discloses “integrating metadata from the meta-indices of each of the other multiple devices into a local file system of each of the multiple devices, to generate virtual files stored in the same locations as local files of the local file system, the virtual files indistinguishable from the local files by the local file system at each of the multiple devices” (1[H]).....	15
ii.	Claims 7-9 and 10-14.....	20
B.	PETITIONER FAILS TO DEMONSTRATE A REASONABLE LIKELIHOOD OF PREVAILING ON GROUND 3 (CLAIMS 1-2, 5-6, 7-9, 10-14) OR GROUND 4 (CLAIMS 3-4).....	21
VII.	ABOULHOSN AND PHILLIPS ARE MERELY CUMULATIVE TO INFORMATION CONSIDERED DURING PROSECUTION	22
VIII.	CONCLUSION.....	23

TABLE OF AUTHORITIES

Cases

<i>Bae Sys. Info. and Elec. Sys. Integration, Inc. v. Cheetah Omni, LLC</i> , IPR2013-00175, 2014 WL 2858243 (PTAB June 19, 2014)	24
<i>Garmin Int’l, Inc. v. Patent of Cuozzo Speed Techs. LLC</i> , IPR2012-00001, Paper 15 (P.T.A.B. Jan. 9, 2013)	9
<i>Graham v. John Deere Co.</i> , 383 U.S. 1 (1966)	9
<i>In re Kahn</i> , 441 F.3d 977 (Fed. Cir. 2006)	9
<i>In re Magnum Oil Tools Int’l, Ltd.</i> , 829 F.3d 1364 (Fed. Cir. 2016)	24
<i>In re Rijckaert</i> , 9 F.3d 1531 (Fed. Cir. 1993)	8
<i>KSR Int’l Co. v. Teleflex Inc.</i> , 550 U.S. 398 (2007)	9

Statutes

35 U.S.C. § 103(a)	9
35 U.S.C. § 313	1
35 U.S.C. § 314(a)	8

Other Authorities

Office Patent Trial Practice Guide, 77 FED. REG. 48,756 (Aug. 14, 2012)	8
--	---

Regulations

37 C.F.R. § 42.107	1
37 C.F.R. § 42.108(c).....	8
37 C.F.R. § 42.22(a)(2)	8

EXHIBIT LIST

Exhibit No.	Brief Description
2001	Declaration of Patrick McDaniel, Ph.D. Regarding Claim Construction, <i>Entangled Media, LLC v. Dropbox, Inc.</i> , 5:23-cv-03264-PCP (N.D. Cal.), Dkt. 101-7.
2002	'338 patent Information Disclosure Statement considered January 31, 2012.
2003	U.S. Patent Publication No. 2005/0144200A1 to Hesselink <i>et al.</i> , pages 1 & 3.

Listing of Challenged Claims

Claim 1	Claim 7	Claim 10
-	-	10[P] A non-transitory computer-readable storage medium storing a set of instructions that, when executed by a processor, cause the processor to perform operations, comprising:
1[P] 1. A process for establishing a singular file system across multiple devices comprising:	7[P] A system for establishing a singular file system across multiple devices comprising:	-
-	7[A] a web-accessible server;	-
-	7[B] at least one software client plug-in;	-

Claim 1	Claim 7	Claim 10
-	7[C] multiple devices for storing and operating on files;	-
1[A] receiving user information to open an account for establishing a singular file system across multiple devices via a web-based system that includes at least one server;	7[D][1] the web-accessible server receives user information to open an account for establishing a singular file system across multiple devices,	10[A] registering multiple devices with an account for establishing a singular file system across the multiple devices;
1[B] installing an individual software client on each of the multiple devices via the web-based system;	7[D][2] installs the at least one software plug-in on each of the multiple devices,	-

Claim 1	Claim 7	Claim 10
1[C] accepting registration of multiple devices via the web-based system;	7[D][3] accepts registration of the multiple devices,	
-	7[D][4] wherein the at least one software plug-in varies in accordance with an operating system of each of the multiple devices;	-
1[D] scanning each of the multiple devices by each of the individual software clients to inventory data on each of the multiple devices and create a meta-index of the files for the inventoried data;	7[E][1] further wherein the at least one software client plug-in scans its respective one of the multiple devices to inventory files thereon, creates a meta-index to files for the inventoried data,	10[B] scanning each of the multiple devices to inventory data on each of the multiple devices and create a meta-index of the files for the inventory data;

Claim 1	Claim 7	Claim 10
1[E] providing by the individual software clients via the multiple devices individual meta-indices of the inventoried data for each of the multiple devices to the at least one server;	7[E][2] provides the meta-index of the inventoried data for its respective one of the multiple devices to the web-accessible server;	-
	7[F][1] further wherein the web-accessible server receives meta-indices from each of the multiple devices and integrates the meta-indices to create a single meta-index,	-
1[F] integrating by the at least one server the individual meta-indices to create a single master meta-index;	7[F][2] integrates the meta-indices to create a single meta-index,	10[C] generating a single master meta-index from meta-indices of files corresponding to inventory data on each of the multiple devices;

Claim 1	Claim 7	Claim 10
<p>1[G] providing by the at least one server the single master meta-index and meta-indices for each of the other multiple devices to each of the multiple devices via the individual software clients;</p>	<p>7[F][3] provides the single meta-index and meta-indices for each of the other multiple devices to each of the multiple devices via the individual software clients,</p>	<p>10[D] providing the single master meta-index and meta-indices for each of the other multiple devices to each of the multiple devices, metadata from the meta-indices of each of the</p>

Claim 1	Claim 7	Claim 10
<p>1[H] integrating metadata from the meta-indices of each of the other multiple devices into a local file system of each of the multiple devices to generate virtual files stored in the same locations as local files of the local file system, the virtual files indistinguishable from the local files by the local file system at each of the multiple devices; and</p>	<p>7[F][4] integrates at each of the multiple devices metadata from the meta-indices of each of the other multiple devices into a local file system of each of the multiple devices to generate virtual files stored in the same locations as local files of the local file system, the virtual files indistinguishable from the local files by the local file system at each of the multiple devices, and</p>	<p>other multiple devices to be integrated into a local file system of each of the multiple devices to generate virtual files stored in the same locations as local files of the local file system, the virtual files indistinguishable from the local files by the local file system at each of the multiple devices; and</p>

Claim 1	Claim 7	Claim 10
1[I] continually updating the single master meta-index on the at least one server and each of the multiple devices in response to changes to the data indexed thereon,	7[F][5] continually updates the single meta-index on each of the multiple devices in response to operations on the files indexed thereon,	-

Claim 1	Claim 7	Claim 10
1[J] wherein the individual software clients facilitate storage of the data within each of the multiple devices in accordance with the single meta-data index by modifying file systems of each of the multiple devices to include virtual files for data from the single meta- data index that is not local to a multiple device.	7[G] wherein the individual software clients facilitate storage of the data within each of the multiple devices in accordance with the single meta-data index by modifying file systems of each of the multiple devices to include virtual files for data from the single meta-data index that is not local to a multiple device.	10[E] facilitating storage of data within each of the multiple devices in accordance with the single master meta-index by modifying file systems of each of the multiple devices to include virtual files for data from the single master meta-data index that is not local to a multiple device

Claim	
2	The process according to claim 1 wherein the individual software clients vary according to the individual operating systems of each of the multiple devices.

Claim	
3	The process according to claim 1 wherein registration of the multiple devices includes selection of categories of data for each of the multiple devices to be inventoried.
4	The process according to claim 3 wherein categories of data include documents, videos, pictures and music.
5	The process according to claim 1, wherein the individual software clients facilitate creation of a visual representation of the virtual files on a remote one of each of the multiple devices that is indistinguishable from a visual representation of an actual file that is located on a local one of the multiple devices.
6	The process according to claim 1, wherein the meta-data includes at least information regarding file name, file type, file size, local path the file is stored in, date created, and date modified.
8	The system according to claim 7, wherein the at least one software client plug-in facilitates storage of the files within its respective one of the multiple devices in accordance with the meta-data by modifying a file system of its respective one of the multiple devices to include virtual files for files from the single meta-index that are not local to the multiple device.

Claim	
9	The process according to claim 8, wherein the at least one software client plug-in facilitates creation of a visual representation of the virtual files on its respective one of the multiple devices that is indistinguishable from a visual representation of an actual file that is physically located on a another of the multiple devices.
11	The non-transitory computer-readable storage medium of claim 10, further comprising: continually updating the single master meta-index on each of the multiple devices in response to changes to the data indexed thereon.
12	The non-transitory computer-readable storage medium of claim 10, further comprising: updating the single master meta-index on each of the multiple devices in response to changes to meta-indices of a local file of one of the multiple devices.
13	The non-transitory computer-readable storage medium of claim 10, further comprising: updating the single master meta-index on each of the multiple devices in response to changes to a local file of a first device, the local file corresponding to a virtual file of a second device, the local file system of the second device retrieving the local file from the first device

Claim	
14	The non-transitory computer-readable storage medium of claim 13, wherein the virtual files and the local files in the first device are indistinguishable by the local file system of the first device.

Pursuant to 35 U.S.C. § 313 and 37 C.F.R. § 42.107, the Patent Owner Entangled Media LLC (“Entangled Media”) hereby provides a preliminary response to the petition for inter partes review (IPR) (Paper 2, herein “Petition” or “Pet.”).

I. INTRODUCTION

The Petition requests cancellation of independent claims 1, 7 and 10 and dependent claims 2, 3-6, 8, 9 and 11-14 of U.S. Patent No. 8,296,338. The Petition raises four grounds, each requiring a combination of Aboulhosn (EX-1005) and Phillips (EX-1006). The Petition should be denied because it fails to show a sufficient likelihood that Petitioner will prevail as to any claim.

First, each challenged claim requires either that a) user information be received “to open an account for establishing a singular file system across multiple devices,” Limitations 1[A], 7[D][1], thus to “accept registration of the multiple devices,” Limitations 1[B], 7[D][3], or that b) “multiple devices [are registered] with an account for establishing a singular file system across the multiple devices,” Limitation 10 [A].

Petitioner argues that this limitation is disclosed either by Aboulhosn or Phillips. Both Aboulhosn and Phillips, however, disclose *file-sharing* systems that are intended to provide individual shared file access to several different users, not to establish a singular file system across multiple devices associated with one user.

To the extent that Aboulhosn or Phillips disclose registration, this is to provide separate user/user device access to files shared amongst a group of users.

Thus, Petitioner failed to make a *prima facie* showing that Aboulhosn or Phillips disclose Limitations 1[A], 7[D][1], 1[B], 7[D][3], 10[A].

Second, the challenged claims require, after receipt of user information and registration of a user's multiple devices, the scanning of each of the multiple devices to inventory data on each of the multiple devices, to create a meta-index of the files for the inventoried data. Limitations 1[D], 7[E][1], 10[B]. Aboulhosn discloses that after a member device has been admitted, a specific folder is *created* for subsequent use as a shared folder. No scanning of Aboulhosn's local data is required, since at that point the folder is a) new, and b) does not contain any of that member's files. Phillips on the other hand discloses providing access to a network-connected storage device that is represented as a separate drive in the file navigation user interface of a user's device, a logical process known as "mounting" of a resource. Again, no scanning of local data for inventory purposes to generate an index is disclosed or required by Aboulhosn or Phillips.

Neither Aboulhosn nor Phillips disclose the scanning of a user's devices to create an initial inventory of files on a user's devices, that will allow the creation of an index of files across the user's devices. Thus, Petitioner failed to make a *prima facie* showing that Aboulhosn or Phillips disclose Limitations 1[D], 7[E][1], 10[B].

Third, each challenged claim requires integrating metadata from the meta-indices of each of the other multiple devices into a local file system of each of the multiple devices, to generate virtual files stored in the same locations as local files of the local file system, the virtual files indistinguishable from the local files by the local file system at each of the multiple devices, Limitations 1[H], 7[F][4], 10[D].

As stated above, Aboulhosn discloses a specific folder that is shared across a group of unrelated devices and that, as admitted by Petitioner, does not contain files that are indistinguishable from local files by the local file system. Petitioner argues that these limitations are found in Phillips. Phillips, however, specifically identifies that shared files are stored in a network-connected storage device, which is not the same location used by local files. And the Phillips shared files are immediately distinguishable from local files by virtue of their presence in the separately-identified drive used to identify and present the network-connected storage device.

Thus, Petitioner failed to make a *prima facie* showing that Aboulhosn or Phillips disclose Limitations 1[H], 7[F][4], 10[D].

For at least these reasons, as explained in greater detail below, institution of review should be denied.

II. LEVEL OF ORDINARY SKILL IN THE ART

For deciding institution, Patent Owner contests Petitioner’s proffered definition of the level of a person of ordinary skill in the art (“POSITA”).

In the Petition, Petitioner asserts that a POSITA “would have been a person holding at least a *master’s degree* in computer science or electrical engineering, or a related degree, and with at least two years training or experience with networking and file systems.” Pet. 10 (emphasis added).

However, in the related litigation, Petitioner took the position that a POSITA “would have had at least *a Bachelor’s* or Master’s degree in computer science or electrical engineering or a related degree and with at least two years training or experience with networking and file systems.” EX-2001, 14-15 (emphasis added).

Accordingly, Patent Owner objects to Petitioner’s definition of a POSITA in the Petition. At a minimum, Petitioner’s definition of a POSITA in the district court case should apply to this proceeding as well.

Patent Owner reserves the right to contest other aspects of the proposed definition of a POSITA in subsequent filings, if necessary.

III. OVERVIEW OF THE ’338 PATENT

The goal of the ’338 patent is to establish a unified file system across multiple devices of a particular user. At the time of the patent filing, there existed an unmet need to facilitate access to electronic content that physically resides on

any one of multiple user devices (*e.g.*, a laptop, desktop, smartphone or the like) without the need to physically store all of the content on every device. EX-1001, 2:3-11. The patented solution creates a unified representation of the files that are present on each of a user's registered devices, ensuring convenient presentation of and access to a user's files irrespective of their location on a particular device.

The '338 patent enables this by accepting user information to open an account for a user, into which that user's devices are registered. After registration, each of the user's devices are scanned to inventory data (*i.e.*, files) located on each device, thereby to create a meta-index of the files for the inventoried data on each device. Metadata from the meta-indices of the other devices can then be provided to each device, for integration into a local file system of that device. This permits each device to generate virtual files, corresponding to files located on other devices, stored in the same locations as local files of the local file system, the virtual files being indistinguishable from the local files by the local file system at each of the devices.

The '338 patent includes three independent claims: 1, 7, and 10. Claim 7 is similar to claim 1 but is in a system form. *Id.*, 12:12-50. Likewise, claim 10 is similar to claim 1 but in a "computer-readable storage medium" form. *Id.*, 12:63-13:20. Relevant claim 1 elements and their mappings to the corresponding elements of claims 7 and 10, as discussed in this Preliminary Response, are set

forth in Appendix A. For purposes of convenience and consistency in considering both the Petition and this Preliminary Response, these elements have been extracted from the '338 patent claim listing in the Petition. Pet. 88-90.

IV. THE ASSERTED PRIOR ART REFERENCES AND CHALLENGED CLAIMS

A. Aboulhosn

Aboulhosn discloses a peer-to-peer *file-sharing system*, where a group of otherwise-unrelated computer systems can be defined, with one system designated as the “group owner.” The “group owner” has the authority to invite others to join the group. A computer system must be registered with an authentication server to be eligible to become a member of a group. The registration process ensures that the computer system is authorized and provides authentication information for subsequent online authentication. EX-1005, 3:14-21.

After authentication and upon acceptance by the new member of the invitation to join the group, the group owner adds the new member to the group’s member list. A shared folder is then created and appears on the new member’s computer system. *Id.*, 6:39-59, Fig. 6A. Files placed in the shared folder on the new member’s system are then available to the other members of the group. The system thus allows for peer-to-peer sharing of files in the shared folder, with a file owner’s computer system providing a copy to an accessing member. *Id.*, 2:10-18.

B. Phillips

Phillips discloses a multi-user file storage service and system. This system allows users in different geographic locations to interact with a remote file server via a wide area network like the Internet. It supports simultaneous access by multiple users while maintaining the integrity of the files. The system controls access to the files, ensuring that any access to a file at the remote server is performed on the most recently updated portion of the file.

Access to the remote server (the “network-connected storage device”) after authentication by a user, is enabled by presenting the remote server as a separate drive in the file navigation user interface of a user’s device, a logical process known as “mounting” of a resource. While the “mounted” remote server appears in the same user interface as local storage devices, thus “appearing” to be a local resource, it is always distinctly and uniquely identified as the remote server.

After a connection request from a client node (the user’s computer) is authenticated, the client node can access file data at the remote file server node in a fashion that maintains the integrity of the file data. EX-1006, 20:64-67. This includes the downloading and uploading of files, reading, modifying/writing, creating and deleting. *Id.*, Figs. 8 & 9, 26:27-32.

The Petition relies on a combination of Aboulhosn and Phillips for all four grounds. Pet. 7.

V. LEGAL STANDARDS

A. Standard for Granting An IPR

The Board may only authorize an IPR be instituted where “the information presented in the petition ... shows that there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a); 37 C.F.R. § 42.108(c). The petitioner bears the burden of showing that the statutory threshold is met. Office Patent Trial Practice Guide, 77 FED. REG. 48,756. A petition must provide “[a] full statement of the reasons for the relief requested, including a detailed explanation of the significance of the evidence including material facts, and the governing law, rules, and precedent.” 37 C.F.R. § 42.22(a)(2).

B. Obviousness Standard

“A patent may not be obtained ... if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C. § 103(a). The obviousness analysis requires several threshold inquiries.

If a single element of the claim is absent from the prior art, the claim cannot be considered obvious. *In re Rijckaert*, 9 F.3d 1531, 1534 (Fed. Cir. 1993) (reversing obviousness rejection where prior art did not teach or suggest all claim limitations); *Garmin Int’l, Inc. v. Patent of Cuozzo Speed Techs. LLC*, IPR2012-

00001, Paper 15, at 15 (PTAB Jan. 9, 2013) (denying institution under § 103 where the prior art did not disclose all claim limitations).

Obviousness is resolved based on factual determinations including (1) the scope and content of the prior art, (2) any differences between the claimed subject matter and the prior art, and (3) the level of ordinary skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).

The conclusion of obviousness based on a combination of references must be supported with an explicit analysis of a reason to combine those references. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). Such reasons must be more than “mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006).

VI. THE BOARD SHOULD DENY INSTITUTION

A. PETITIONER FAILS TO DEMONSTRATE A REASONABLE LIKELIHOOD OF PREVAILING ON GROUND 1 (CLAIMS 1-2, 5-6, 7-9, 10-14) OR GROUND 2 (CLAIMS 3-4)

i. Claims 1, 2, 5-6 (Ground 1) and Claims 3-4 (Ground 2)

a. Petitioner Fails To Demonstrate that Aboulhosn and/or Phillips Disclose “Receiving User Information To Open An Account For Establishing A Singular File System Across Multiple Devices (1A).”

Limitation 1[A] recites, in relevant part, “receiving user information to open an account for establishing a singular file system across multiple devices”

Petitioner contends that Aboulhosn discloses this limitation (Pet. 29-31), but its argument fails for the following reasons.

According to Petitioner, “Aboulhosn discloses ‘a group owner [“GO”] component that **creates a group** ... [and] invites computer systems to join the group as members’ In creating the group of authorized members to establish Aboulhosn’s singular file system, user information is received by Aboulhosn’s system” Pet. 14 (emphasis in original).

The Petitioner then argues that, “In other words, to create an account (*e.g.*, an established group of authorized users), Aboulhosn’s GO receives user information, such as an identification of the to-be-invited device and a response message accepting an invitation.” Pet. 15.

As stated previously, Aboulhosn is directed to a system that permits file sharing between unrelated computer systems. Aboulhosn is not concerned with providing a unified file system across multiple devices of a particular user. Aboulhosn’s member devices are registered separately, as members of a group within which files are to be shared: “The group member table is maintained by the group owners and contains the identification of each member of the group.” EX-1005, 5:19-21. To the extent that Aboulhosn’s group member table can be considered account information, it is a collection of individual accounts.

Aboulhosn does not disclose creation of a user account against which the user's multiple devices are registered, as claimed in the '338 patent.

Petitioner attempts to skirt this issue by claiming that "an account" is "an established group of authorized users," as above. Pet. 16. But an established group of users is neither an account nor an account for "establishing a singular file system across multiple devices" for a particular user.

Petitioner then argues that "[t]o the extent PO argues that Aboulhosn does not disclose 'receiving user information,' Phillips discloses it. In particular, Phillips discloses '[a]ccepting requests from client manager nodes to create client user accounts'" Pet. 16. This argument fails for the same reason.

Phillips is concerned with providing remote file server access to several different users based on the identities of the users. New users are invited separately to join the group of users permitted to access the remote file server: "the client manager node communicates to the new client user an invitation to join the group of user permitted to access the virtual storage device, which invitation includes the user name ("user id"), the identifier of the virtual storage device ('drive id'), and optionally the OTP." EX-1006, 16:53-57. Phillips thus also does not disclose creation of a user account against which the user's multiple devices are registered.

It should also be noted that claim 1 requires two parts for establishing the user account, namely registering an account for establishing a singular file system,

Limitation 1[A], and accepting registration of multiple devices [to the account that has been registered], Limitation 1[C]. Petitioner asserts that Aboulhosn’s “established group of [unrelated] authorized users” is both a single “user account” and the registration of multiple devices to a user account. Pet. 14, 25. Aboulhosn is neither and definitely not both.

No other relevant theories or explanations pertaining to the user account as claimed, are provided in the Petition to support Petitioner’s arguments in this context. *Id.*, 29-31. Thus, Petitioner fails to make a *prima facie* showing that Aboulhosn or Phillips, alone or on combination somehow satisfy Limitation 1[A].

b. Petitioner Fails To Demonstrate That Aboulhosn Or Phillips Discloses “Scanning Each Of The Multiple Devices By Each Of The Individual Software Clients To Inventory Data On Each Of The Multiple Devices And Create A Meta-Index Of The Files For The Inventoried Data” (1[D])

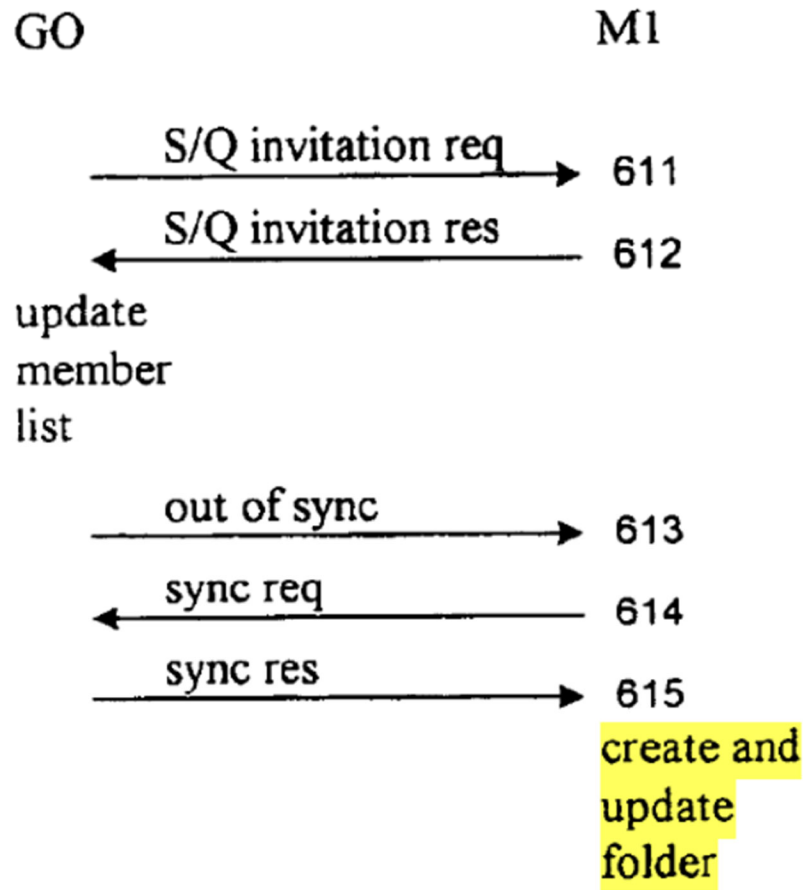
Limitation 1[D] recites, in relevant part, “scanning each of the multiple devices by each of the individual software clients to inventory data on each of the multiple devices and create a meta-index of the files for the inventoried data.” It will be readily apparent that once an account has been established for a user and multiple devices are registered to the user’s account, it is necessary to inventory what is on the different devices in order to establish the singular file system across the multiple devices.

Petitioner argues that this limitation is disclosed by Aboulhosn's synchronization messages, which are used to keep a shared folder updated "when **each member device adds or modifies files in the group folder**" (Pet. 26 (emphasis in original)) or "when, *e.g.*, the **GO computer/server comes online after being offline**" (Pet. 27, 28 (emphasis in original)). More specifically, Petitioner argues that "when each of the multiple devices adds or modifies one or more files, each of them ... *creates* a respective meta-index describing the *updates*." Pet. 27 (emphasis added).

Petitioner's argument fails for a number of reasons. First, a synchronization message that provides notification of changes or updates to a shared folder is not a meta-index reflecting an inventory of data on one of the multiple devices. Second, providing synchronization messages informing other devices of *changes* or *updates* to the contents of a shared folder is not *creation* of a meta-index.

Third, there is no need for Aboulhosn to scan a member device to inventory data on (*i.e.*, local to) each of the multiple devices. Aboulhosn discloses that after a member device has been admitted to the group, a specific folder is created for subsequent use as a shared folder. No scanning of Aboulhosn's local data is required, since at that point the folder is a) new, and b) does not contain any of that member's (local) files. *See in particular* Aboulhosn Fig. 6A, reproduced below,

that mentions creation of the folder, and the associated description of setting up a new member device. EX-1005, 6:39-59.



Invite New Member

Fig. 6A

EX-1005, Fig. 6A (annotated).

It is clear, in Aboulhosn, that no local files are scanned on the new member device to create a meta-index. After the new member is admitted to the group, the

new member transmits a synchronization request message to the group owner.

When the new member receives the synchronization message, it creates the appropriate virtual files in its shared folder. *Id.*, 6:39-59.

In making this argument, Petitioner conflates the initial step of scanning the for local files to create an inventory of what is on a device with the later step (Limitation 1[I]) of updating the master inventory. Determining an initial state (“I counted 1,024 lemons in inventory”) is not the same as reporting any updates (“I sold 8 lemons”) to that state.

Aboulhosn does not disclose this limitation, and Petitioner is not relying on Phillips for this limitation. Thus, Petitioner is unable to make a *prima facie* showing that Aboulhosn satisfies Limitation 1[E].

c. Petitioner Fails To Demonstrate That Aboulhosn Or Phillips Discloses “integrating metadata from the meta-indices of each of the other multiple devices into a local file system of each of the multiple devices, to generate virtual files stored in the same locations as local files of the local file system, the virtual files indistinguishable from the local files by the local file system at each of the multiple devices” (1[H])

Limitation 1[H] recites, in relevant part, “integrating metadata from the meta-indices of each of the other multiple devices into a local file system of each of the multiple devices, to generate virtual files stored in the same locations as local files of the local file system, the virtual files indistinguishable from the local files by the local file system at each of the multiple devices.”

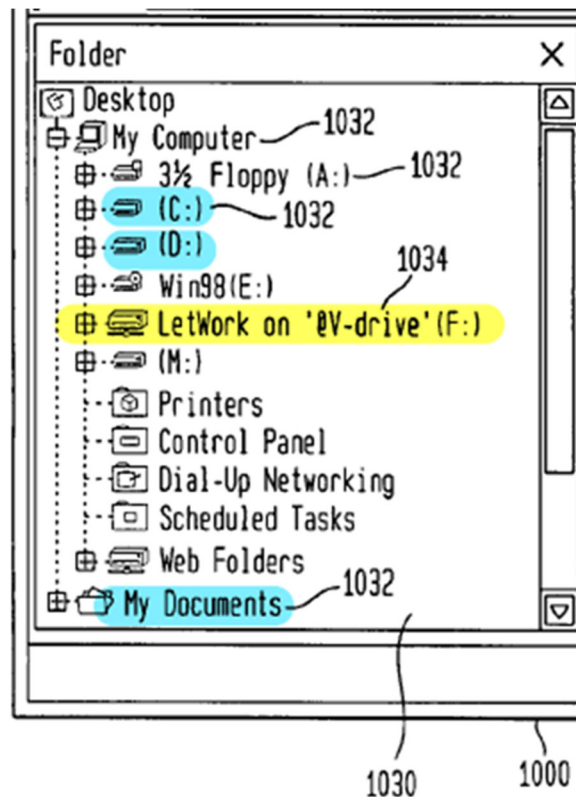
As stated above, Aboulhosn discloses a specific folder that is shared across a group of unrelated devices and that, as admitted by Petitioner, does not contain files that are indistinguishable from local files by the local file system. Pet. 44-45.

Petitioner then argues that Phillips instead disclose this limitation. Petitioner condenses the relevant claim language “the virtual files indistinguishable from the local files by the local file system at each of the multiple devices” into a heading of “indistinguishability.” *Id.* Though Phillips uses the word “indistinguishable,” Phillips specifically identifies that shared files are stored in a network-connected storage device, which is not the same location used by local files as required by Limitation 1[H]. And the Phillips shared files in the network-connected storage device are immediately distinguishable from local files by virtue of their presence in the separately-identified “virtual drive” used to identify and present the network-connected storage device, contrary to the “indistinguishable” requirement of Limitation 1[H].

Phillips discloses, referring to Fig. 4, an excerpt of which is shown below, that “Illustratively, the identifiers “F” and “Lets Work on `@v-drive`” **refer to a virtual storage device** provided by the system and service according to the invention. To that end, the client software provides the appropriate information according to the operating system API for providing **the appearance of an actual physical storage device**. In response, the operating system lists identifiers in the

graphical display portion of the user interface (*i.e.*, the images displayed on the display monitor of the client node) to the client user as any other storage device, with the appropriate properties.” EX-1006, 13:64-14:6 (emphasis added). And, “[s]pecifically, **the virtual storage device**, and its contents (*i.e.*, all of the files, directories/folders, etc. stored in the virtual storage device), **appears**, to the client node user and the application executing at the client node, **to be locally present.**” *Id.*, 14:62-66 (emphasis added).

As can be seen from the excerpt of Phillips Fig. 4 below, the virtual storage device, identified in the figure as “Let(s)Work on `@v-drive` (F:),” is segregated from the drives and locations containing local files, such as the C: and D: drives and the My Documents folder. The remote or virtual nature of the F: drive is also readily apparent from the icon used to identify the F: drive, which includes a representation showing it to be a networked device and not a local device.



EX-1006, Fig. 4 (annotated).

Phillips’ reference to the virtual device “appearing” to be local refers to the fact that the Phillips system permits *interaction* with files on the remote network drive *in the same manner* as local files. *Id.*, 14-11 (“The user can thus “click”, “double click,” “drag” and “drop” on such identifiers.”). However, the files on the remote network device (virtual F: drive) are clearly not “stored in the same locations as local files of the local file system” and the virtual files are not “indistinguishable from the local files” by virtue of their segregation in the virtual F: drive, as required by Limitation 1H.

The Phillips system and its presentation of the remote network device as a separate virtual drive is specifically considered and distinguished in the '338 patent:

“It is also important to note that with other solutions the data on separate devices is kept separated when synchronized – local data is stored in a set of locations within the operating system’s native file system (*e.g.* “My Documents”, “My Pictures”, etc.), while remote data on other devices or other online services is kept in a new location such as a new directory/folder or secondary location (*e.g.*, removable hard drive) mounted on the device. Finally, present solutions generally require a high-degree of user involvement for their operation—users must designate certain files and/or directories for synchronization or backup, and must consciously store content to be synced or backed-up in those locations.” EX-1001, 1:58-2:2.

“The native file system of any given operating system has a set of standard file storage options, such as “My Documents” for documents, “My Music” for music, “My Pictures” for pictures, and so on. Local file systems allow for secondary file systems to be “mounted” and even accommodate the tracking of such file, but in all cases are managed separately. An example of this would be a USB thumb drive, which, when plugged into a computer, is mounted as a secondary storage location.” *Id.*, 4:27-35.

The patented system is then distinguished as follows:

“... a common view and storage location is maintained across all devices. At this point, the local operating system’s file system has been modified to include remote files in the same locations of the local device (such as the “My

Documents” folder) as opposed to a separate and segregated location for such remote data.” *Id.*, 6:23-28.

“... if a unique folder or directory exists on one device (*e.g.* within the My Documents folder) and has several files within it, that folder/directory is created on all other devices so that its files may be put within said folder/directory, ultimately representing the same path to all corresponding files.” *Id.*, 6:37-41.

“Other than mapping between the ‘canonical’ elements of the file system, the software does not interfere with the user’s choice of file locations. For example, if a registered user chooses to store music files in their Windows ‘Desktop’ folder, rather than under their ‘My Music’ folder, as is the convention, the software will respect their choice and make those files appear under the ‘Desktop’ folder of their other registered devices.” *Id.*, 9:20-27.

Thus, Petitioner is unable to make a *prima facie* showing that Aboulhosn and Phillips satisfy Limitation 1[E].

ii. Claims 7-9 and 10-14

Petitioner treats Limitations 7[D][1] and 10[A] as containing limitations substantially identically to Limitation 1[A]. Pet. 66-67, 69. Petitioner treats Limitations 7[E][1] and 10[B] as containing limitations substantially identically to Limitation 1[D]. Pet. 67, 69. Petitioner treats Limitations 7[F][4] and 10[D] as containing limitations substantially identically to Limitation 1[H]. Pet. 67, 69.

Thus, Petitioner has failed to make a *prima facie* case of obviousness for claims 7-9 and 10-14 for the same reasons discussed above, and incorporated herein by reference. Further, Petitioner's analysis for dependent claims 2-6 fail to cure the deficiencies for independent claim 1. Likewise, Petitioner's analysis for dependent claims 8-9 and 11-14 fails to cure the deficiencies for independent claims 7 and 10 respectively. Thus, for at least the same reasons stated above for independent claims 1, 7 and 10, Petitioner fails to make a *prima facie* case of obviousness for the dependent claims 2-6, 8-9 and 11-14.

**B. PETITIONER FAILS TO DEMONSTRATE A REASONABLE
LIKELIHOOD OF PREVAILING ON GROUND 3 (CLAIMS 1-
2, 5-6, 7-9, 10-14) OR GROUND 4 (CLAIMS 3-4)**

Petitioner's analyses in Grounds 3 and 4 for independent claims 1, 7 and 10 fail to cure the deficiencies for the analysis of these claims as set forth for Grounds 1 and 2. Notably, Petitioner adds Shappell (EX-1007) to the analysis of independent claims 1, 7 and 10 in Grounds 3 and 4, to supplement the Aboulhosn and Phillips references. Shappell is alleged to disclose elements found in limitations 1[J] and 7[G], and not the limitations discussed above with reference to Grounds 1 and 2. Thus, for the same reasons stated above for Grounds 1 and 2, Petitioner fails to make a *prima facie* case of obviousness for claims 1-4, 5-6, 7-9, and 10-14 in Grounds 3 and 4.

It should be noted, however, that since neither Phillips nor Aboulhosen disclose multiple devices that are associated with a single user or user account, Shappel cannot show that “software clients facilitate storage of the data within *each of the multiple devices*” associated with the single user or user account, as required in limitations 1[J] and 7[G]. Pet. 90.

VII. ABOULHOSN AND PHILLIPS ARE MERELY CUMULATIVE TO INFORMATION CONSIDERED DURING PROSECUTION

Aboulhosen was cited during prosecution in an Information Disclosure Statement considered by the Examiner on January 31, 2012. EX-2002. Furthermore, as discussed above, the Phillips system and its presentation of a remote network device as a separate virtual drive are specifically considered and distinguished in the '338 patent. Mounting of a remote network device is also disclosed in references that were considered by the Examiner, such as US 2005/0144200 to Hesselink et al. (EX-2003), also listed in the Information Disclosure Statement considered by the Examiner on January 31, 2012, (EX-2002).

Hesselink states in relevant part:

Alternatively, the user may mount a remote storage device (which may be local to a second computer on the network) on the first computer, such that the user can run the application to retrieve and store data on the remote storage device. As a result, the user is not required to reside and use the second computer to access, read, write, and/or print data such as such as

documents, pictures or music files stored in a storage device local to the second computer. EX-2003, [0002], and

Some Microsoft operating systems provide the ability to mount drives (e.g., remote devices) other than the ones that are locally present at the site where a user is operating from. These “virtual drives” are located physically on some other computer system and may be accessed through a central server, wherein each user computer can connect locally to the central server. In such an arrangement, a local user can store data at local drive or store it centrally on the server. Id., [0022].

Accordingly, Petitioner is requesting that the Patent Office reconsider art and disclosures that were before and considered by the Examiner in the original prosecution of the '338 patent. Based on Aboulhosn and Phillips, which are cumulative to the art and disclosures considered during prosecution of the '338 patent, Petitioner is unable to establish that there is a reasonable likelihood that it would prevail with respect to at least one of the claims challenged in the Petition, and the Petition should be denied.

VIII. CONCLUSION

The Aboulhosn and Phillips references have particular goals and uses, namely, either to share a folder between unrelated devices or to provide access to a remote network device from unrelated devices, respectively, which are fundamentally different from the goals and intended uses of the patented system.

The goal and intended use of the patented system, namely, to provide a convenient singular file system across multiple devices used by a single user, are not contemplated or suggested in the Aboulhoshn and Phillips references. It is thus not surprising that Aboulhoshn and Phillips fail to teach or suggest claim elements required to provide the patented system as set forth herein.

Petitioner has also not shown that the claims are a combination of prior art elements according to known methods to yield predictable results, a simple substitution of one known element for another to obtain predictable results, or a choice from a finite number of identified, predictable solutions, with a reasonable expectation of success. Given the different goals and uses of Aboulhoshn and Phillips, they also do not provide a teaching, suggestion, or motivation that would have led one of ordinary skill to modify or combine them to arrive at the claimed invention.

Finally, the argument for institution must be included in the petition itself and not left of the Board to hunt to find. *Bae Sys. Info. and Elec. Sys. Integration, Inc. v. Cheetah Omni, LLC*, IPR2013-00175, 2014 WL 2858243, at *13 (PTAB June 19, 2014); *see also In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016) (“To satisfy its burden of proving obviousness, a petitioner cannot employ mere conclusory statements. The petitioner must instead articulate specific

reasoning, based on evidence of record, to support the legal conclusion of obviousness.”).

For the foregoing reasons, Patent Owner respectfully requests the Board deny Petitioner’s request for inter partes review of the ’338 patent.

Dated: March 27, 2024

Respectfully Submitted,

/Rex Hwang/

Rex Hwang (Reg. No. 56,206)
SKIERMONT DERBY LLP
633 W. Fifth Street, Suite 5800
Los Angeles, CA 90071
Tel: (213) 788-4500
Fax: (213) 788-4545
EntangledMedia_SDTeam
@skiermontderby.com
Lead Counsel for Patent Owner

John E. Lord (Reg. No. 56,562)
SKIERMONT DERBY LLP
633 W. Fifth Street, Suite 5800
Los Angeles, CA 90071
Tel: (213) 788-4500
Fax: (213) 788-4545
EntangledMedia_SDTeam
@skiermontderby.com
Back-Up Counsel for Patent Owner

Alexander E. Gasser (Reg. No. 48,760)
Jaime K. Olin (*pro hac vice* application to
be submitted)
SKIERMONT DERBY LLP
1601 Elm Street, Suite 4400
Dallas, TX 75201
Tel: (214) 978-6600
Fax: (214) 978-6601
EntangledMedia_SDTeam
@skiermontderby.com
Back-Up Counsel for Patent Owner

CERTIFICATE OF WORD COUNT

Under the provisions of 37 C.F.R. § 42.24(d), the undersigned hereby certifies that the Microsoft Office word count for the foregoing Patent Owner's Preliminary Response Under 35 U.S.C. § 313 and 37 C.F.R. § 42.107, excluding the table of contents, table of authorities, claim listing, certificate of word count, and certificate of service, totals 5,268 words, which is less than the 14,000 words allowed under 37 C.F.R. § 42.24(b)(1).

Dated: March 27, 2024

Respectfully Submitted,

/Rex Hwang/

Rex Hwang (Reg. No. 56,206)
Counsel for Patent Owner

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), I certify that I caused to be served on counsel for Petitioner a true and correct copy of the foregoing Patent Owner's Preliminary Response Under 35 U.S.C. § 313 and 37 C.F.R. § 42.107, by electronic means on March 27, 2024, by delivering a copy via electronic mail to the attorneys of record for Petitioner as follows:

- Dion M. Bregman (MLB-Dropbox-IPR-Team@morganlewis.com)
- Michael J. Lyons (MLB-Dropbox-IPR-Team@morganlewis.com)
- Austin L. Zuck (MLB-Dropbox-IPR-Team@morganlewis.com)

Dated: March 27, 2024

Respectfully Submitted,

/Rex Hwang/

Rex Hwang (Reg. No. 56,206)
Counsel for Patent Owner