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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DROPBOX, INC.
Petitioner

v.

MOTION OFFENSE, LLC
Patent Owner

IPR2024-00286
U.S. Patent No. 11,611,520

PETITION FOR *INTER PARTES* REVIEW OF U.S. PATENT NO. 11,611,520 CHALLENGING CLAIMS 1–8 and 17–21 UNDER 35 U.S.C. § 312 AND 37 C.F.R. § 42.104

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Dropbox, Inc. ("Petitioner" or "Dropbox") respectfully requests *inter partes* review ("IPR") of claims 1–8 and 17–21 of U.S. Patent ("USP") No. 11,611,520 (the "'520 patent") (EX1001) pursuant to 35 U.S.C. §§311–19 and 37 C.F.R. §42.1 *et seq*.

I. INTRODUCTION

The '520 patent focuses on techniques allowing a user to share a folder with another user ("folder sharing") or request that another user upload a file ("file request"). This petition addresses the "folder sharing" claims, 1–8 and 17–21 (the "challenged claims"), while the petition in IPR2024-00287 addresses the "file request" claims, 9–16 and 22–24.

The '520 patent is the latest-issued in a long-pending family of patents. Motion Offense already alleged infringement by Dropbox of six patents in the same family in *Motion Offense, LLC v. Dropbox, Inc.*, WDTX-6:20-cv-00251 ("MO-DB-1"), including both "folder sharing" and "file request" claims. After a jury trial in May 2023, all asserted claims at trial were found not infringed and ***invalid***. *See* EX1013 (Jury Verdict Form, May 19, 2023, Dkt. 382).

The challenged claims describe user interfaces for sharing and accessing shared folders that were already well-known in the field before the '520 patent's earliest possible priority date. Indeed, this petition shows that Dropbox itself, along

with others, taught the same interfaces before the '520 patent. Accordingly, the challenged claims should be cancelled.

II. MANDATORY NOTICES

A. Real Party-in-Interest

Under 37 C.F.R. §42.8(b)(1), Petitioner certifies that Dropbox, Inc. is the real party-in-interest.

B. Related Matters

According to USPTO records, the '520 patent is owned by Motion Offense, LLC ("Patent Owner" or "PO"). PO asserted the '520 patent against Dropbox in a complaint filed on April 24, 2023 in *Motion Offense, LLC v. Dropbox, Inc.*, WDTX-6:23-cv-00303 ("MO-DB-2"), now pending. In its September 20, 2023 Preliminary Infringement Contentions, PO alleged infringement of twenty-three claims of the '520 patent's twenty-four total claims. PO had already alleged infringement by Dropbox of six patents in the same family as the '520 patent in MO-DB-1. After a jury trial in May 2023, all asserted claims were found not infringed and ***invalid***. *See* EX1013. PO has stated that the claims of the '520 patent at issue in this petition and MO-DB-2 are "substantially similar" as those related claims already found invalid by a jury. EX1018, ¶31 (PO asserting that "the '520 patent included claims that were substantially similar to those being asserted at trial.").

C. Counsel

Under 37 C.F.R. §§42.8(b)(3)–(4), Petitioner identifies the following lead and backup counsel, to whom all correspondence should be directed.

Lead Counsel: Scott Bertulli (Reg. No. 75,886)

Backup Counsel: Gregory Lantier (*pro hac vice* to be filed)

Trishan Esram (Reg. No. 74,075)

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Petitioner consents to service by e-mail on lead and backup counsel.

III. LEVEL OF ORDINARY SKILL

A person of ordinary skill in the art ("POSITA") at the time of the earliest claimed priority date of the '520 patent (September 22, 2012) would have had at least the equivalent of a Bachelor's degree in electrical engineering, computer

science, or a related field and two or more years of experience in a related field such as networked computer systems using Internet protocols. Less work experience may be compensated by a higher level of education, such as a Master's Degree, and vice versa. EX1002, ¶29.

IV. CERTIFICATION OF GROUNDS FOR STANDING

Petitioner certifies under 37 C.F.R. §42.104(a) that the patent for which review is sought is available for IPR and under 37 C.F.R. §§42.101(a)–(c) that Petitioner is not barred or estopped from requesting an IPR challenging the patent claims on the grounds identified in this petition.

V. STIPULATION

Consistent with the Director's guidance in USPTO Memorandum, Interim Procedure for Discretionary Denials in AIA Post Grant Proceedings with Parallel District Court Litigation (June 21, 2022) and commensurate in scope with a *Sotera* stipulation, if the Board institutes this IPR, Dropbox stipulates not to pursue, in the parallel proceeding identified under "Related Matters" above, the same grounds presented here or any grounds that could have reasonably been raised before the Board with respect to the claims challenged in this IPR. *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12 (P.T.A.B. Dec. 1, 2020) (precedential as to §II.A).

VI. OVERVIEW OF CHALLENGE AND RELIEF REQUESTED

Petitioner requests review of claims 1–8 and 17–21 of the '520 patent and cancellation of these claims as unpatentable over the prior art.

A. Prior Art

The earliest claimed priority date of the '520 patent is September 22, 2012. EX1001 at 2.[1] Petitioner relies on the documents in the Table of Exhibits, including:

- USP No. 8,825,597 to Drew Houston and Arash Ferdowsi (co-founders of Dropbox) ("Houston") (EX1003), filed on August 13, 2010 and issued on September 2, 2014, as §102(e) prior art;
- USP No. 9,633,125 to Garcia et al. ("Garcia") (EX1004), assigned to Dropbox, filed on August 10, 2012 and issued on April 25, 2017, as §102(e) prior art;

[1] Dropbox reserves the right to argue in MO-DB-2 that the '520 patent is not entitled to application No. 13/624,906's September 22, 2012 filing date or application No. 13/626,635's September 25, 2012 filing date. Indeed, a jury already concluded that the asserted patents in MO-DB-1 are not. The Board does not need to resolve any priority date dispute in this proceeding because Dropbox relies only on prior art that predates September 22, 2012.

- USP Application Publication No. 2010/0005138 ("Manzano") (EX1005), published on January 7, 2010, as §102(b) prior art; and
- USP Application Publication No. 2007/0011246 ("Wu") (EX1006), published on January 11, 2007, as §102(b) prior art.

B. Grounds on which the Challenge is Based

Under 37 C.F.R. §§42.22(a)(1) and 42.104(b)(1)–(2), Petitioner requests cancellation of claims 1–8 and 17–21 of the '520 patent on the following grounds:

Ground	Basis	Claims	References
1	§103	1–8, 17–21	Houston and Garcia
2	§103	1-8, 17–21	Houston, Garcia, and Manzano
3	§103	17–21	Houston, Garcia, and Wu
4	§103	17–21	Houston, Garcia, Manzano, and Wu

This petition, supported by the declaration of Dr. Mowry (EX1002), demonstrates that there is a reasonable likelihood Dropbox will prevail with respect to cancellation of at least one of the challenged claims. *See* 35 U.S.C. §314(a).

VII. TECHNOLOGY BACKGROUND

A. Internet-Based Data Storage Systems

As early as the year 2000, more than a decade before the earliest claimed priority date of the '520 patent, there was a burst in Internet-based (or "cloud") data

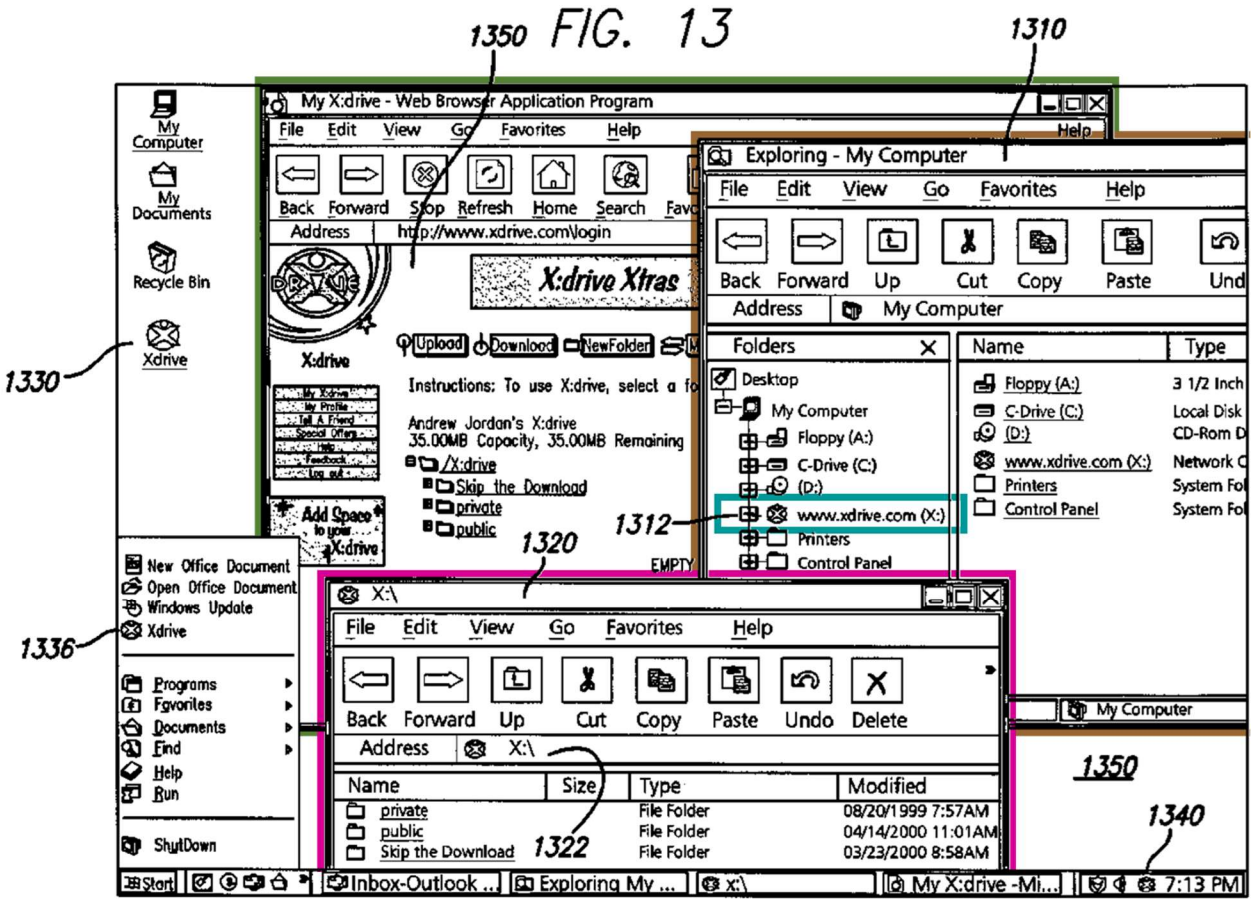
storage systems. *See, e.g.*, EX1015 ("O'Brien"), 1:10–3:4; EX1016 ("Do"), ¶¶1–4; EX1009 ("Kantor"), ¶1. As O'Brien explained, because personal computers were not easily transportable and laptops had fewer resources than desktops, there was a need for "means by which files and other data may be available worldwide through the Internet and not tied to a local computer." EX1015, 2:42–3:1. EX1002, ¶30.

With widespread access to the Internet, computer users started to store "their electronic documents or files on remote computer servers that are geographically remote from the user." EX1016, ¶1; *see also* EX1009, ¶1. Do noted that "[s]toring files on a remote server provides users with several benefits" such as backup copies of files, data recovery, and access to files "from any computer with an Internet connection." EX1016, ¶2. Notably, users could share their files with others by providing them with access to the server. *Id.*, ¶4; *see also* EX1015, 4:1–5 ("give permission to share files"); EX1009, ¶1 ("share content items from their online storage with others"). EX1002, ¶31.

B. Accessing Internet-Based Data Storage Systems

Accessing files stored in a remote server using not only a web-based application but also a client-based application was well known. For example, O'Brien describes an online storage system ("X:Drive") that is accessible from a

"**web-based application 1350**," a "**'My Computer' window 1310**," and a "**client-based application window 1320**."[2] EX1015, 20:21–52. EX1002, ¶32.



EX1015, FIG. 13

The **"My Computer" window 1310** is part of the user computer's operating system (*e.g.*, Windows Explorer or File Explorer, Finder, etc.) and includes a "**drive at logical letter X: 1312**," provided by a client application/program 102 from the online storage system provider. *Id.*, 20:25–31, 7:5–8; *see also* EX1003, Figure 10

[2] Emphasis and annotations added throughout unless stated otherwise.

("My Dropbox" folder 1002); EX1004, Figure 10 (virtual drive 1010), 7:22–24 ("a user interface 2170 (e.g., MAC FINDER or WINDOWS EXPLORER) which displays… the virtual drive user interface 2190."). The **drive 1312** appears among other local drives and "functions as any other drive." EX1015, 20:29–31. EX1002, ¶33.

It was also well known that, because local storage on computers was limited, a file stored on a remote server and displayed in a client-based file explorer interface did not have to be downloaded from the server until the user clicks to open the file. *See, e.g.*, EX1004, 5:35–39 ("when a user double clicks on a file…, the server downloads its copy"); EX1005, ¶50 ("icon 600 may be ghosted (i.e., semi-transparent)… to indicate the non-local status of the file"), ¶51 ("a user may right-click… to request receipt or download of the associated file, at which time the icon 600 will become unghosted"). EX1002, ¶34.

VIII. OVERVIEW OF THE '520 PATENT

A. Alleged Invention

The '520 patent generally relates to "processing a data object identification request in a communication" between a "first node" and a "second node." EX1001, Title, Abstract. EX1002, ¶35.

According to independent claims 1, 7, and 17, "at least one folder"[3] is shared between "a first node" and "a second node" via "at least one network." *See* EX1001, claims 1, 7, and 17. At the first node, interfaces and user interface elements are displayed for the at least one folder to be selected and an email address of a user of the second node to be specified. *See id.* An email message is generated and sent to the second node. The message includes a reference to the at least one folder but does not include "at least one file" in the at least one folder as an attachment. *See id.* A "representation of the at least one folder" is created among other folders in a "file explorer interface" at the second node. *See id.* In one embodiment, another representation of the at least one folder is created and displayed in a "web page." *See id.*, claim 17. In other embodiments, the second node does not store the at least one file when the representation of the at least one folder is created. *See id.*, claims 1 and 7. Upon detecting an indication to open the at least one file, the at least one file is retrieved via the at least one network and displayed at the second node. *See id.* EX1002, ¶36.

[3] Claim 7 recites "at least one data object." As explained *infra*, a data object includes a folder. EX1002, n. 1.

As the grounds below demonstrate, sharing a folder and accessing a file therein in such a fashion were well-known in the art before the '520 patent's earliest possible priority date. EX1002, ¶37.

B. Prosecution History

The '520 patent issued from application No. 17/187,621, filed on February 26, 2021. The '520 patent is a continuation of USP No. 11,044,215, which is a continuation of USP No. 10,587,548, which is a continuation of USP No. 10,021,052, which is a continuation-in-part (CIP) of application No. 14/274,623, which is a CIP of application Nos. 13/626,635 and 13/624,906.[4] At no time during prosecution did the Examiner provide evaluation of the claims in view of any prior art. *See* EX1014, 194–220, 407–415, 539–553, 706–713, 868–872.

C. Overlooking the Prior Art was Material Error

Houston, Garcia, and Wu were of record in the '520 patent's prosecution, but the Examiner did not mention, describe, address, or apply Houston, Garcia, and Wu—alone or in combination—substantively.

[4] The '215, '548, and '052 patents were asserted in MO-DB-1. The challenged claims share the same or similar scope as claims asserted in MO-DB-1. A jury found the asserted claims of all three patents invalid. The '215 patent was subject to IPR in IPR2022-01313, instituted on March 6, 2023.

The Board has made clear that "[i]f the record of the Office's previous consideration of the art is not well-developed or ***silent***, then a petitioner may show the Office erred by overlooking something persuasive…." *Advanced Bionics, LLC v. MED-EL Elektromedizinische Gerate GmbH*, IPR2019-01469, Paper 6 at 10 (P.T.A.B. Feb. 13, 2020) (emphasis added); *see also Amazon.com, Inc., v. M2M Solutions LLC*, IPR2019-01205, Paper 14 at 16 (P.T.A.B. Jan. 27, 2020) ("The Board frequently holds that a reference that 'was neither applied against the claims nor discussed by the Examiner' does not weigh in favor of exercising the Board's discretion under § 325(d) to deny a petition.").

As presented herein, the combination of Houston, Garcia, and/or Wu discloses the precise limitations that the Examiner identified as not being taught by the closest prior art references (*see* EX1014 at 539–553), demonstrating that the challenged claims are unpatentable. *See* Section X *infra*. By overlooking the specific teachings of Houston, Garcia, and Wu in allowing the challenged claims, the Examiner committed a material error even if PO may argue that Houston, Garcia, and Wu were considered. *See* 35 U.S.C. §325(d); *Advanced Bionics* at 10.

The Board has previously instituted review under these exact circumstances, and Dropbox respectfully requests that it do so again here. *See, e.g.*, *Mylan Pharm. Inc., v. Merck Sharp & Dohme Corp.*, No. IPR2020-00040, Paper 21 at 18 (P.T.A.B. May 12, 2020) (instituting review even though "WO '498 was presented to the

Examiner" because the "Examiner never discussed WO '498 or made a rejection based on it" and "gave no reasons for allowance" even though the "disclosure meets the claimed invention" and "[t]he likeliest explanation … is that the Examiner simply overlooked [its] teachings"); *Roku, Inc. v. Universal Elecs., Inc.*, No. IPR2019-01615, Paper 12 at 12–13 (P.T.A.B. Apr. 17, 2020) ("Examiner erred by overlooking the specific teaching of Chardon" because it taught the precise limitations that the Examiner had concluded were "not disclosed, taught, or suggested in the references applied" in allowing the claims); *see also Advanced Bionics*, Paper 6 at n. 9 ("An example of a material error may include misapprehending or overlooking specific teachings of the relevant prior art where those teachings impact patentability of the challenged claims.").

IX. CLAIM CONSTRUCTION

During IPR, claims are construed according to the "*Phillips* standard." *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc); 83 Fed. Reg. 51341 (Oct. 11, 2018). The Board need only construe the claims when necessary to resolve the underlying controversy. *Toyota Motor Corp. v. Cellport Sys., Inc.*, IPR2015-00633, Paper No. 11 at 16 (Aug. 14, 2015); *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017). Here, given the close correlation between the asserted prior art and the claims of the '520 patent, the Board need not construe any terms of the claims to resolve the underlying

controversy, as any reasonable interpretation of those terms consistent with their plain meaning (as would have been understood by a POSITA at the time of the invention, having taken into consideration the language of the claims, the specification, and the prosecution history of record) reads on the prior art.[5]

X. SPECIFIC GROUNDS FOR UNPATENTABILITY

Under 37 C.F.R. §42.104(b)(4)–(5), the following sections (as confirmed in Dr. Mowry's declaration, EX1002, ¶¶44–186) detail the grounds of unpatentability, the limitations of challenged claims 1–8 and 17–21 of the '520 patent, and how these claims are therefore obvious in view of the prior art.

Ground 1 demonstrates that the challenged claims are obvious over the combination of Houston and Garcia. Houston's system synchronizes folders and their contents shared among multiple clients with a host system over a network. Garcia's system is similar and provides express teachings of functionality, including: (1) generating and sending an email with a link to and identifying the shared folder, instead of an attachment and (2) creating a representation of a folder in a location

[5] Dropbox reserves all rights to raise claim construction and other arguments in this and other proceedings as relevant and appropriate. If PO, seeking to avoid the prior art, offers a specific construction or interpretation, Dropbox reserves the right to respond.

among folders in an operating system's file explorer interface. To the extent PO contends that the Houston-Garcia combination does not disclose, teach, suggest, or render obvious a representation of a folder or a file, Manzano discloses these features, as shown in Ground 2. Further, to the extent PO contends that the combination of Houston and Garcia and the combination of Houston, Garcia, and Manzano do not disclose, teach, suggest, or render obvious an email that is partially pre-written, Wu discloses this feature, as discussed in Grounds 3 and 4.

A. Ground 1: Claims 1–8 and 17–21 are Obvious over Houston and Garcia

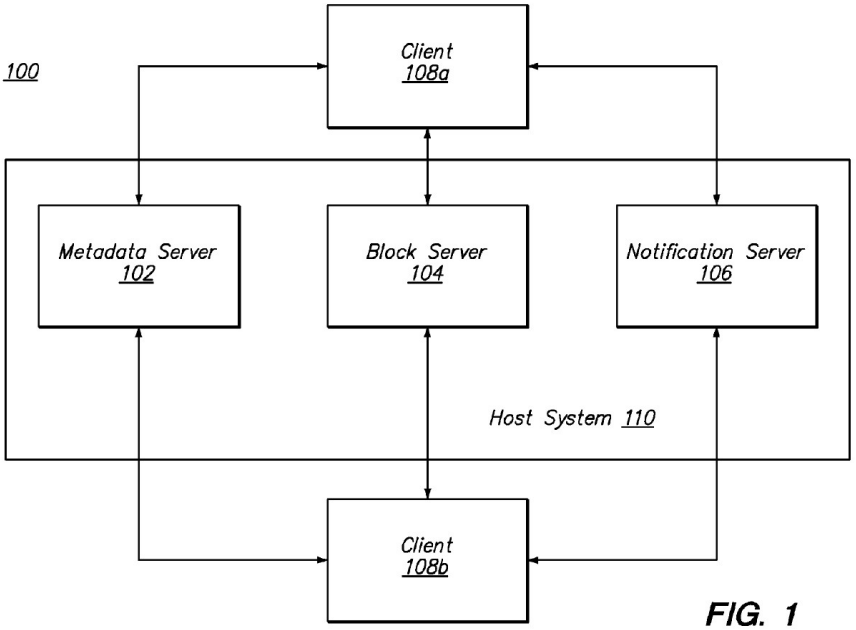
1. Claim 1

a) 1[preamble][6]

Regardless of whether the preamble is limiting, Houston discloses it. For example, Houston discloses a host system 110, comprising servers 102, 104, and 106, that allows clients (*e.g.*, clients 108a and 108b) to share folders with one another. *See* EX1003, 1:53–2:2, 2:59–62, Figure 1. The host system 110 manages folder synchronization requests from the clients, blocks of data exchanged with the clients, and notifications to the clients, via a network. *Id.*, Figure 1, 1:53–54, 6:5–6, 2:63–3:3. Houston makes clear that its disclosed operations are performed by an

[6] *See* Appendix of Claim Listing.

"*apparatus*,"[7] which may comprise a computer storing a computer program. *Id.*, 9:5–9 ("an apparatus for performing the operations herein"). The computer program "may be stored on a non-transitory computer readable storage medium… suitable for storing electronic instructions." *Id.*, 9:10–18. Houston further discloses that the computer may include "a single processor" or "multiple processor designs." *Id.*, 9:18–21; *see also id.*, claim 5. EX1002, ¶62.



EX1003, FIG. 1

Therefore, Houston discloses the preamble of claim 1. EX1002, ¶63.

[7] Terms that appear in the challenged claims are italicized throughout.

b) 1[a]

Houston discloses element 1[a]. Houston illustrates, in Figure 2, a **user interface window 200** (*i.e.*, "*a first interface*") "accessed via a web interface" at a client 108 to share a folder. EX1003, 3:31–35. The **user interface window 200** includes a **text box** (*i.e.*, "*a first user interface element*") for the user to create a new folder to share. EX1002, ¶64.

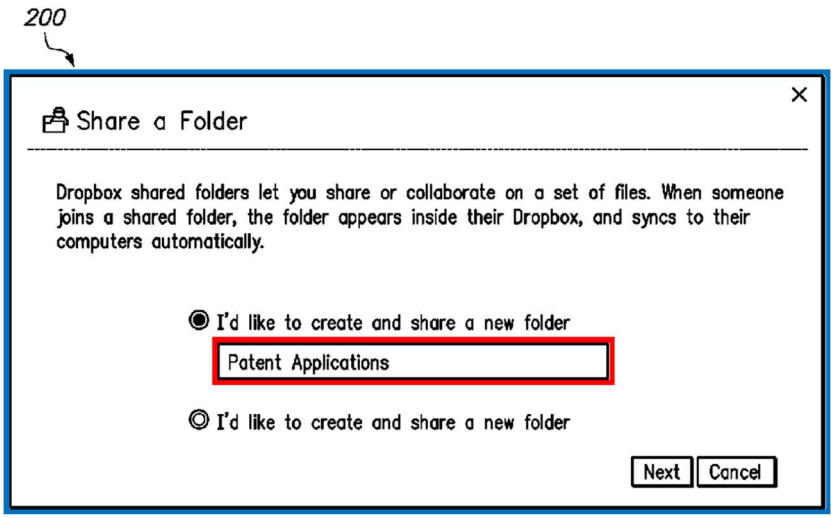


FIG. 2

EX1003, FIG. 2

Alternatively, Houston discloses a **user interface window 300** (*i.e.*, "*a first interface*") that allows the user to select a folder to share from "from among existing folders" displayed in a **file structure** (*i.e.*, "*a first user interface element*"). *Id.* at 3:38-40, Figure 3. EX1002, ¶65.

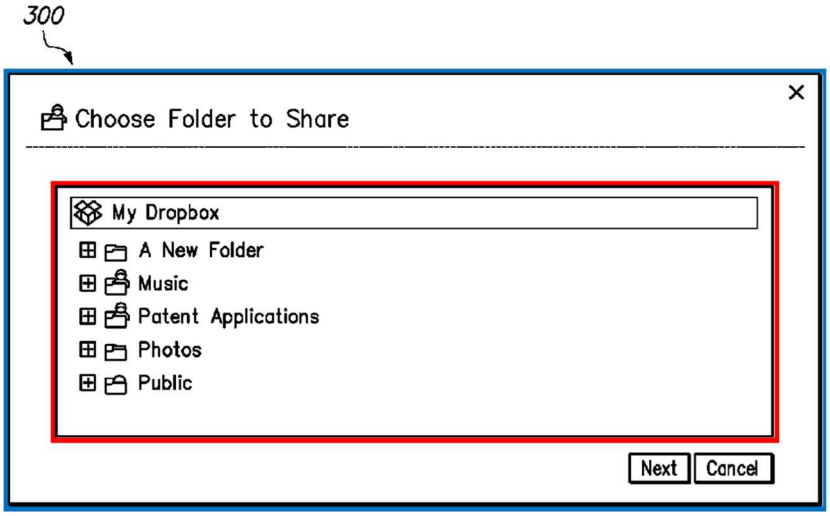
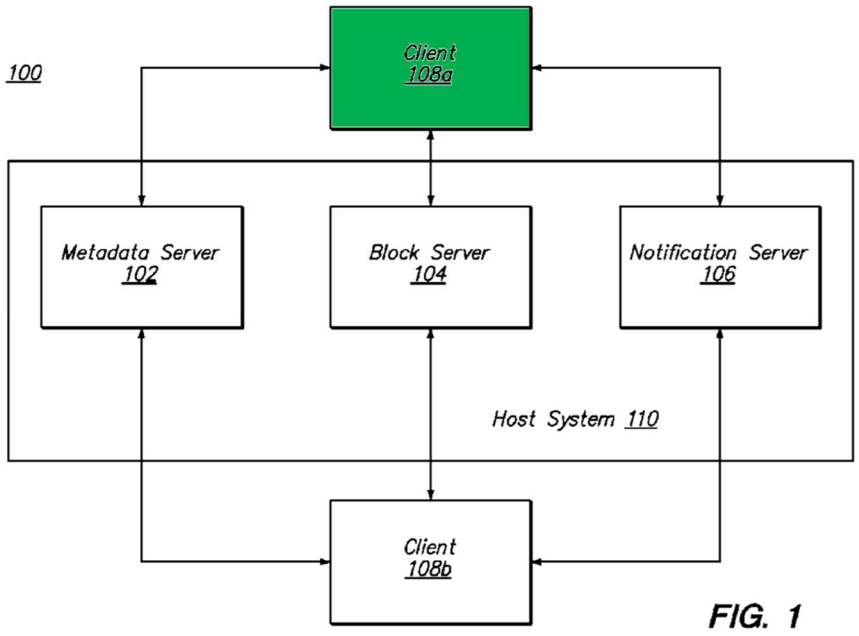


FIG. 3

EX1003, FIG. 3

Each of the **user interface window 200** and the **user interface window 300** is displayed "via a web interface" at a client—*e.g.*, **client 108a** (*i.e.*, "*a first node*")—in communication with the host system 110. *See id.*, 3:31–35, Figure 1. A POSITA would have understood that the host system 110 "*causes display*" of the **user interface window 200** and the **user interface window 300** at the client. EX1002, ¶66.



EX1003, FIG. 1

Therefore, Houston discloses element 1[a]. EX1002, ¶67.

c) 1[b]

Houston discloses element 1[b]. Houston explains that "the user has chosen to create a new folder called 'Patent Applications.'" EX1003, 3:37–38, Figure 2. The user (*e.g.*, at client 108a, "*the first node*") enters the folder name "Patent Applications" (*i.e.*, "*an indication of at least one folder*") utilizing the **text box** (*i.e.*, "*the first user interface element*") of the **user interface window 200** (*i.e.*, "*the first interface*"). EX1003, Figure 2. EX1002, ¶68.

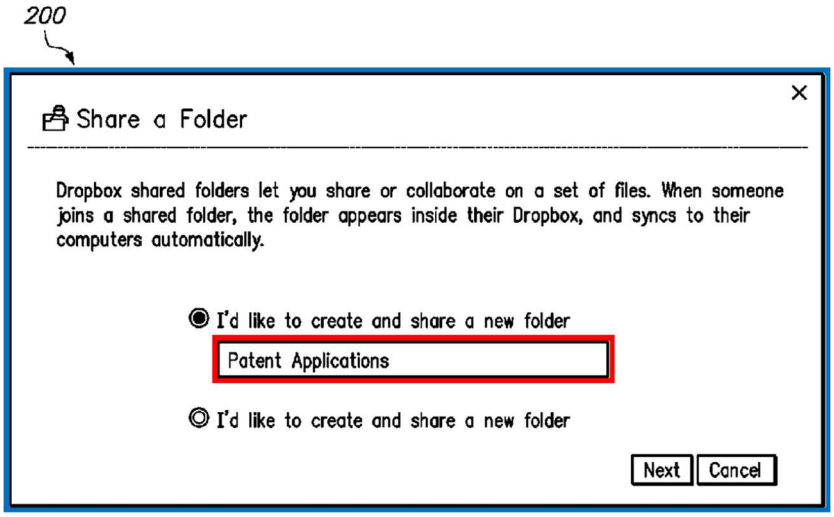


FIG. 2

EX1003, FIG. 2

Alternatively, the user can choose an existing folder to share (*i.e.*, "*an indication of at least one folder*") utilizing the **file structure** (*i.e.*, "*the first user interface element*") of the **user interface window 300** (*i.e.*, "*the first interface*"). EX1003, Figure 3. EX1002, ¶69.

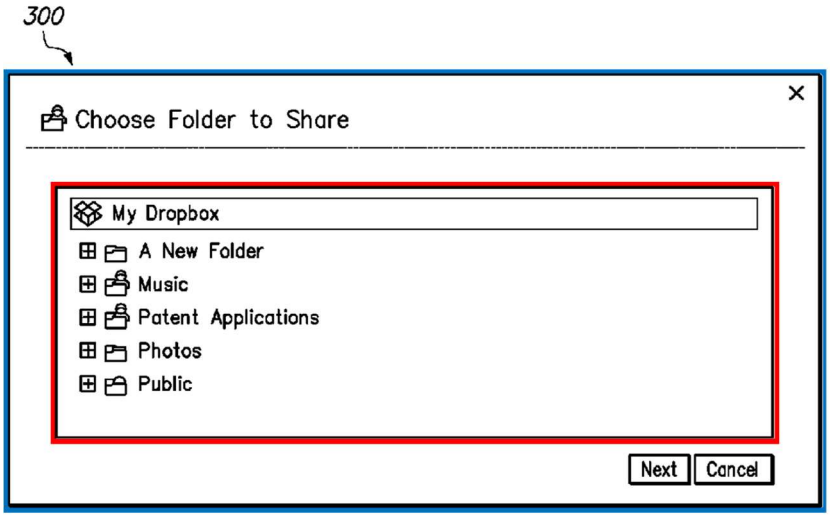


FIG. 3

EX1003, FIG. 3

As Dr. Mowry explains, the "*indication of at least one folder*" is sent to and, accordingly, received by Houston's host system 110 from the client via the network (*e.g.*, shown in Houston's Figure 1) either (1) when the user clicks the "Next" button (*see* Houston's Figure 2 or 3), or (2) when the user clicks a "Share folder" button (*see* Houston's Figure 4). EX1002, ¶70.

Therefore, Houston discloses element 1[b]. *Id.*, ¶71.

d) 1[c]

Houston discloses element 1[c]. Houston discloses that, "[o]nce the user has chosen or created the folder to be shared," the user is presented with a **user interface window 400** (*i.e.*, "*a second interface*") that allows the user to share the folder with other people by entering their email address(es) in a **text box** (*i.e.*, "*a second user interface element*"). EX1003, 3:40–43, Figure 4. EX1002, ¶72.

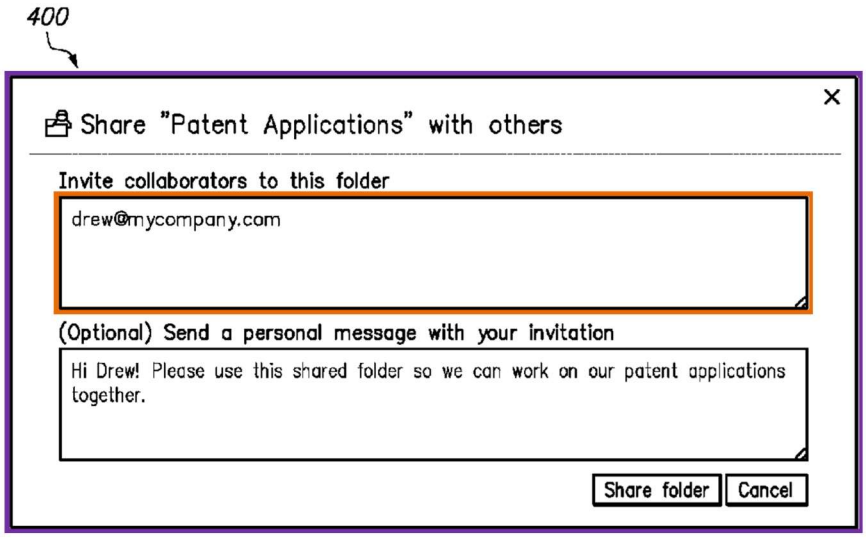


FIG. 4

EX1003, FIG. 4

A POSITA would have understood that the host system 110 "*causes display*" of the **user interface window 400** at the client (*e.g.*, **client 108a**; *i.e.*, "*a first node*"). EX1002, ¶73.

Therefore, Houston discloses element 1[c]. *Id.*, ¶74.

e) 1[d]

Houston discloses element 1[d]. As Houston illustrates in Figure 4, the user invites collaborators to the shared folder by entering an **email address** (*i.e.*, "*indication associated with at least one email address*") via the **text box** (*i.e.*, "*the second user interface element*") of the **user interface window 400** (*i.e.*, "*the second interface*"). EX1003, Figure 4; *see also* element 17[b] ("*the at least one object associated with at least one email address being the at least one email address*"). Houston's host system 110 "*receive[s]*" the email address to notify the collaborator, from the user's client via the network, when the user clicks on the "Share folder" button. EX1002, ¶75.

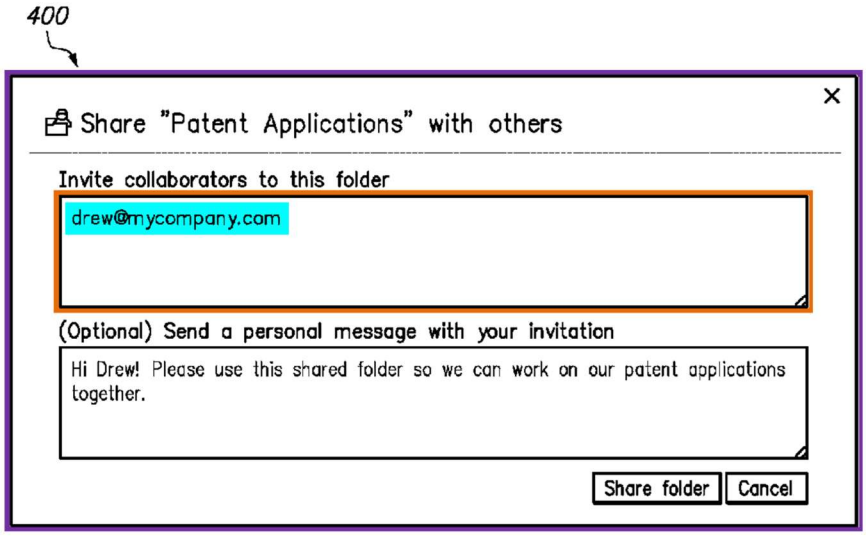


FIG. 4

EX1003, FIG. 4

Therefore, Houston discloses element 1[d]. EX1002, ¶76.

f) 1[e]

Houston discloses element 1[e]. Houston discloses a **"Share folder" button**. EX1003, Figure 4. A POSITA would have understood that the user clicking on the **"Share folder" button** would cause the host system 110 to receive instructions and information from the client, via the network, to share the chosen or created folder with the collaborator at the email address received via the user interface window 400. In other words, the host system 110 would "*receive, from the first node via the at least one network, an indication to share the at least one folder*." EX1002, ¶77.

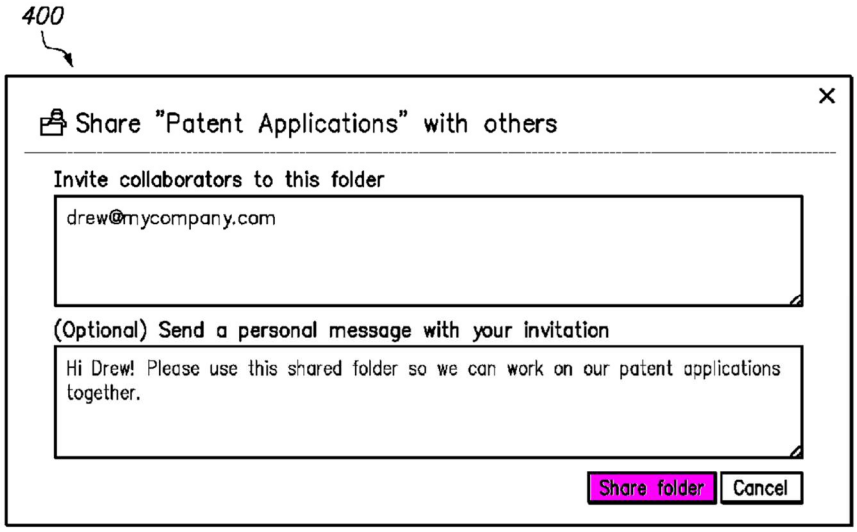


FIG. 4

EX1003, FIG. 4

Therefore, Houston discloses element 1[e]. EX1002, ¶78.

g) 1[f] and 1[g]

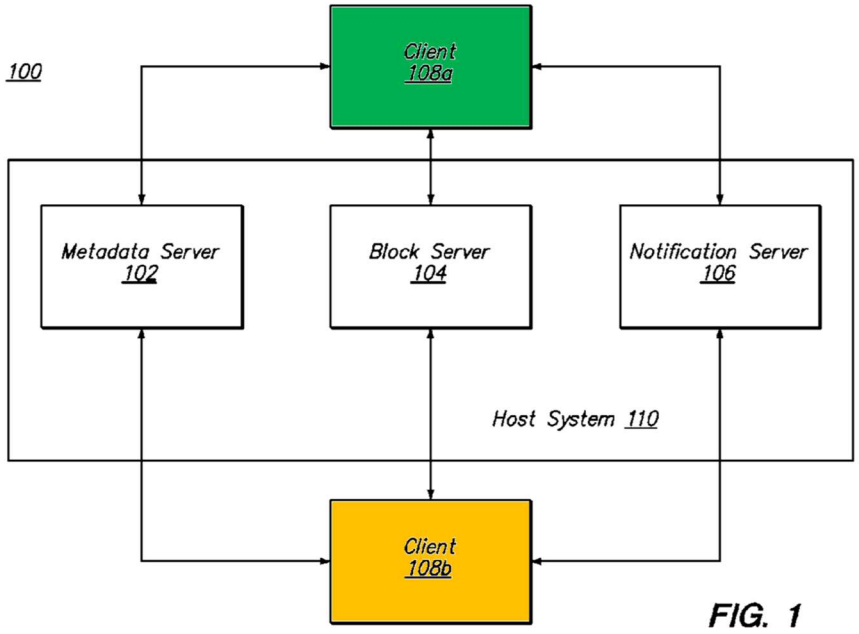
Houston alone discloses or renders obvious, or in combination with Garcia, renders obvious elements 1[f] and 1[g]. EX1002, ¶79.

i. Houston alone

First, as discussed above with respect to elements 1[b], 1[d], and 1[e], Houston discloses "*the receipt of the indication of the at least one folder, the indicia associated with the at least one email address, and the indication to share the at least one folder via the at least one network*." EX1002, ¶80.

Second, Houston discloses that clients may share folders with one another via the host system 110 over a network. EX1003, 3:23–24, 1:53–54. In particular, in

addition to **client 108a** (*i.e.*, "*the first node*"), Houston refers to a **client 108b** (*i.e.*, "*a second node*"). *Id.*, Figure 1, 3:22–23. EX1002, ¶81.



EX1003, FIG. 1

Third, because Houston's host system 110 receives, from a first client, information about a folder to share (*e.g.*, Figures 2 and 3) and a collaborator's email address (*e.g.*, "drew@mycompany.com" in Figure 4) and because Houston explicitly discloses that "the user can **invite** those people with whom he would like to share the folder," a POSITA would have understood that Houston discloses its host system 110—particularly its notification server 106—would send an invitation to notify the collaborator about the folder being shared and how to access the folder by generating and sending an email message to the received email address (*i.e.*, "*generate at least one email message identifying the at least one folder and including*

a reference to the at least one folder"; "*send, to a second node via the at least one network, the at least one email message*"). EX1003, 3:40–43; *see also id*, 2:67–3:3 ("provides those notifications to the clients"), 7:50–51 ("user accepts the invitation to share the folder"). To the extent PO argues that Houston does not expressly disclose the claimed "email message," a POSITA would have appreciated from the same disclosure that an email would be the most practical implementation, rendering this limitation obvious. EX1002, ¶82.

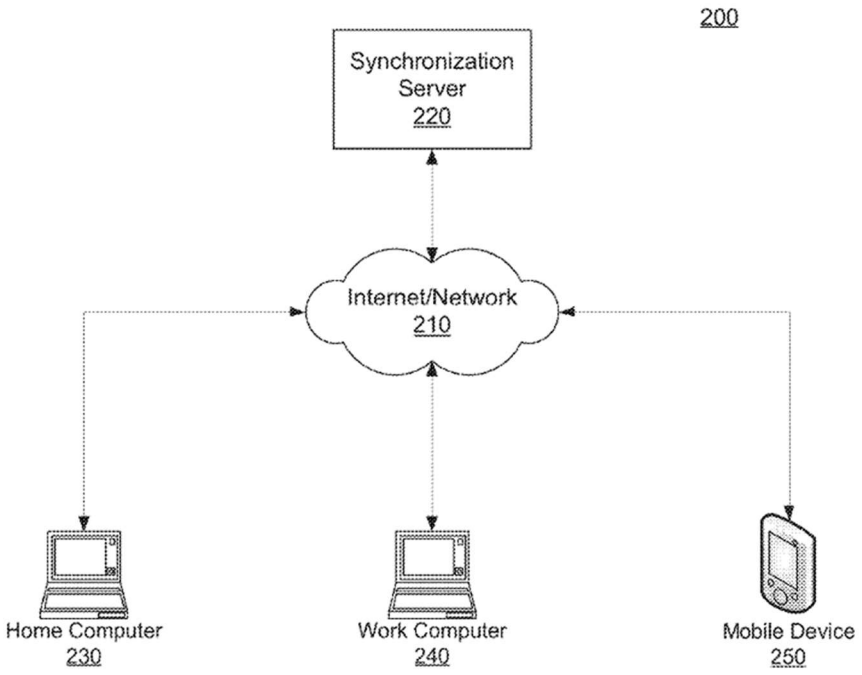
Fourth, Houston discloses that "sharing occurs at the folder level—that is, a folder and any files in that folder are shared among clients" and that "attaching files [is] cumbersome for many computer users," and therefore the email message would not include any file in the shared folder as an attachment (*i.e.*, "*without including at least one file in the at least one folder as an attachment of the at least one email message*"). EX1003, 3:5–10, 1:41–42; *see also id.*, 7:18–48. EX1002, ¶83.

ii. Combination of Houston and Garcia

To the extent PO contends that Houston alone does not render obvious elements 1[f] and 1[g], the combination of Houston and Garcia renders them obvious. EX1002, ¶84.

First, Garcia discloses "a plurality of client devices" (*e.g.*, home computer 230, work computer 240, mobile device 250) in communication with a synchronization server 220 via a network 210. EX1004, 8:8–26, Figure 2. One of

Garcia's client devices corresponds to a "*first node*" and another to a "*second node*." *Id.*, 8:21–24 ("client devices 230, 240, 250… may belong to different users who have shared access to objects with one another"). EX1002, ¶85.



EX1004, FIG. 2

Second, Garcia teaches that a client can share a folder with another client by generating and sending an email with a link to and identifying the shared folder, instead of an attachment. *See* EX1004, 10:32–34, 10:38–40 ("icon 915… places the link onto the clipboard to be copied into an email"), 11:39–43, claim 3, Figures 9, 11–12. EX1002, ¶86.

iii. Motivation to Combine Houston and Garcia

A POSITA would have been motivated to modify Houston's host system according to and informed by Garcia's teachings such that Houston's host system

would generate and send an email message with a link to and identifying a shared folder, without including an attachment, to the user with whom the folder is being shared. EX1002, ¶87.

First, Houston and Garcia are from the same field of endeavor. *See, e.g.*, *Medtronic, Inc. v. Cardiac Pacemakers, Inc.*, 721 F.2d 1563, 1574–75 (Fed. Cir. 1983); M.P.E.P. §2141. Both references are directed to sharing folders. For example, Houston discloses a system that enables "[s]ynchronization of folders shared among multiple clients over a network." EX1003, Abstract, 1:53–54, Figure 1. Similarly, Garcia discloses a system "for enabling a user to synchronize, manage, and share files and folders across a plurality of client devices and a synchronization server." EX1004, Abstract, Figure 2. Thus, both references are directed to systems for sharing folders. EX1003, Abstract, 1:53–54; EX1004, Abstract. Accordingly, a POSITA would have understood that Garcia's teachings were directly applicable to Houston's system. EX1002, ¶88.

Second, implementing Houston's host system to generate and send to the recipient an email message with a link to and identifying a shared folder, without including an attachment, as taught by Garcia, would have yielded expected, predictable results. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 416 (2007); M.P.E.P. §2143(I)(A). Houston's host system receives, from a user at a first node, information about a folder to share and an email address of the person with whom

the folder is to be shared. EX1003, 3:31–43, Figures 2–4. Garcia discloses sharing a folder by generating and sending an email message with a link to and identifying the shared folder, without including an attachment. EX1004, 10:32–34, 11:39–43, claim 3, Figures 11–12. A POSITA would have combined the elements taught by Houston and Garcia—namely, the information received about the folder to be shared and the email address of the recipient as taught by Houston, and the email message to the recipient with a link to the shared folder and without including an attachment as taught by Garcia—using known and routine computer programming principles to modify Houston's host system to generate and send an email message addressed to the recipient with a link to and identifying the shared folder, without including an attachment. This result would have been readily predictable and recognized by a POSITA. EX1002, ¶89.

Third, a POSITA would have been motivated to combine the teachings of Houston and Garcia because generating and sending to the recipient an email message with a link to a shared folder and without including an attachment would have been obvious to try. *KSR*, 550 U.S. at 421; M.P.E.P. §2143(I)(E). There were only a few common and predictable sharing methods—*e.g.*, a physical drive or disc, an email with an attachment, the Web, and an email with a link. *See, e.g.*, Exhibit 1017 at 15 ("four methods occupied the top three spots for all personal groups: email, portable drives, the Web, and writeable disks"), Table 3; Exhibit 1008, Figure 4

(illustrating an email with a link instead of an attachment). A POSITA would have pursued these potential solutions with a reasonable expectation of success because the analysis would have simply involved trying each one of these solutions. *See, e.g.*, *CRFD Research, Inc. v. Matal*, 876 F.3d 1330, 1347 (Fed. Cir. 2017) ("[A] person of ordinary skill would have two predictable choices… providing [the] person of ordinary skill with a simple design choice" of choosing one solution or the other). EX1002, ¶90.

Fourth, the modification of Houston's system to include Garcia's teachings of generating and sending to the recipient an email message with a link to a shared folder and without including an attachment would have been readily implemented by simply modifying Houston's host system to generate and send such an email message using information already received from a user at a first node (*e.g.*, information about the folder to be shared and the recipient's email address). A POSITA would have implemented this modification using basic computer programming principles to modify Houston's host system to include Garcia's teachings of generating and sending to the recipient an email message, which included a link to and identifying the shared folder, without including an attachment. This modification would have been well within the knowledge and skillset of a POSITA. EX1002, ¶91.

Fifth, a POSITA would have been motivated to combine the teachings of Houston and Garcia because Garcia expressly disclosed a benefit of sending an email message with a link to a shared folder—"One benefit of sending links to folders or files to other users is it allows other users to access the folders or files without requiring the other user to create an account in the synchronization system." EX1004, 10:40–43. A POSITA would have recognized other benefits—*e.g.*, sending links to shared folders via an email message, a well-known, widely-used, and convenient form of communication, without needing to attach and/or locally store such folders, which may be large. EX1002, ¶92. In fact, Houston itself identified the motivation for implementing a more elegant alternative to including attachments in email messages and storing multiple versions of the same document locally. *See* EX1003, 1:41–45 ("Not only is attaching files cumbersome for many computer users, but where multiple iterations are involved, it is not difficult to end up with multiple versions of the same document, perhaps having the same or a similar file name, located in various places on a user's hard drive."). EX1002, ¶92.

iv. Reasonable Expectation of Success in Combining Houston and Garcia

A POSITA would also have had a reasonable expectation of success. The combination of Houston and Garcia represents a straight-forward implementation of generating and sending an email using information already received by Houston's

host system, which a POSITA would have been familiar with and been able to implement. The reasons a POSITA would have expected success parallel those that provide motivation for this combination—including because both Houston and Garcia are directed to sharing folders. EX1003, Abstract, 1:53–54; EX1004, Abstract; *see also* Section X.A.1.g.iii. Moreover, a POSITA would have had a reasonable expectation of success in implementing Houston's system to generate and send an email message with a link to a shared folder, without including an attachment, because Houston's underlying specification was designed to be extensible and flexible in its application. *See* EX1003, 9:40–42 ("the disclosure of the present invention is intended to be illustrative, but not limiting, of the scope of the invention"). EX1002, ¶93.

Accordingly, Houston alone or in view of Garcia renders obvious elements 1[f] and 1[g] and a POSITA would have been motivated to combine the teachings of these references and would have had a reasonable expectation of success. *Id.*, ¶94. For these same reasons, a POSITA would have been motivated to combine the teachings of these references for all subsequently discussed claims and limitations in this Ground. *Id.*

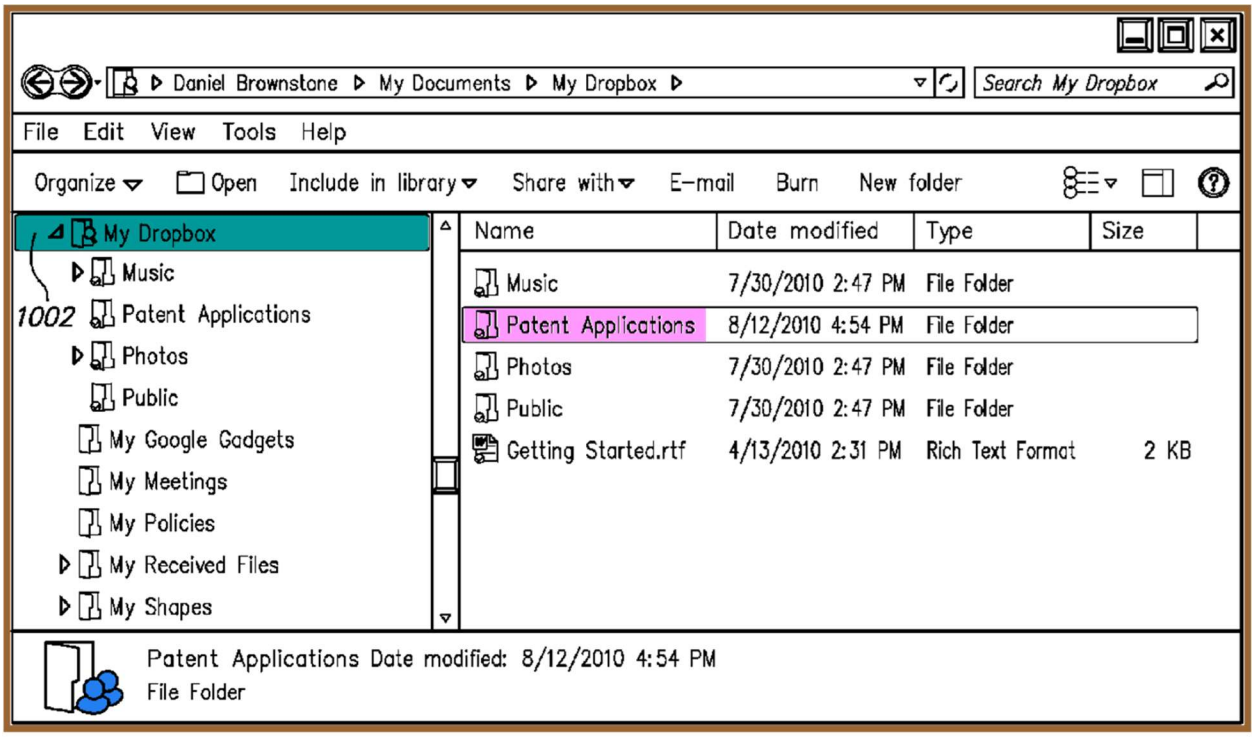
h) 1[h]

Houston alone or in combination with Garcia renders obvious element 1[h]. EX1002, ¶95.

i. Houston alone

First, as discussed above with respect to elements 1[b], 1[d], and 1[e], Houston discloses "*the receipt of the indication of the at least one folder, the indicia associated with the at least one email address, and the indication to share the at least one folder via the at least one network*." EX1002, ¶96.

Second, Houston discloses "an **interface** for interacting with shared folders" (*i.e.*, "*a file explorer interface*"). EX1003, 2:48–50, Figure 10; *see also id.*, 7:18–21 ("users of system 100… interact seamlessly with shared folders through their operating system's standard user interface"). The **"My Dropbox" folder 1002** is "a folder that is synchronized with host system 110" and "is displayed next to other conventional folders such as 'My Meetings', 'My Received Files,' and others." *Id.*, 7:21–31. A POSITA would have understood that code (*e.g.*, software) that allows access to host system 110 is stored on the invited collaborator's client device (*i.e.*, "*the second node*") and cooperates with the **Figure 10 interface** to display the **"My Dropbox" folder 1002** among the other conventional folders, which are local to the client (*e.g.*, "My Meetings"). *See id.*, 3:43–45 ("FIG. 10 and FIG. 11 provide a view of how a folder can be shared **using software on client 108**."), 8:64–9:4 ("the present invention could be embodied in software [that] **could be downloaded to reside on and be operated from different platforms** used by real time network operating systems"). EX1002, ¶97.

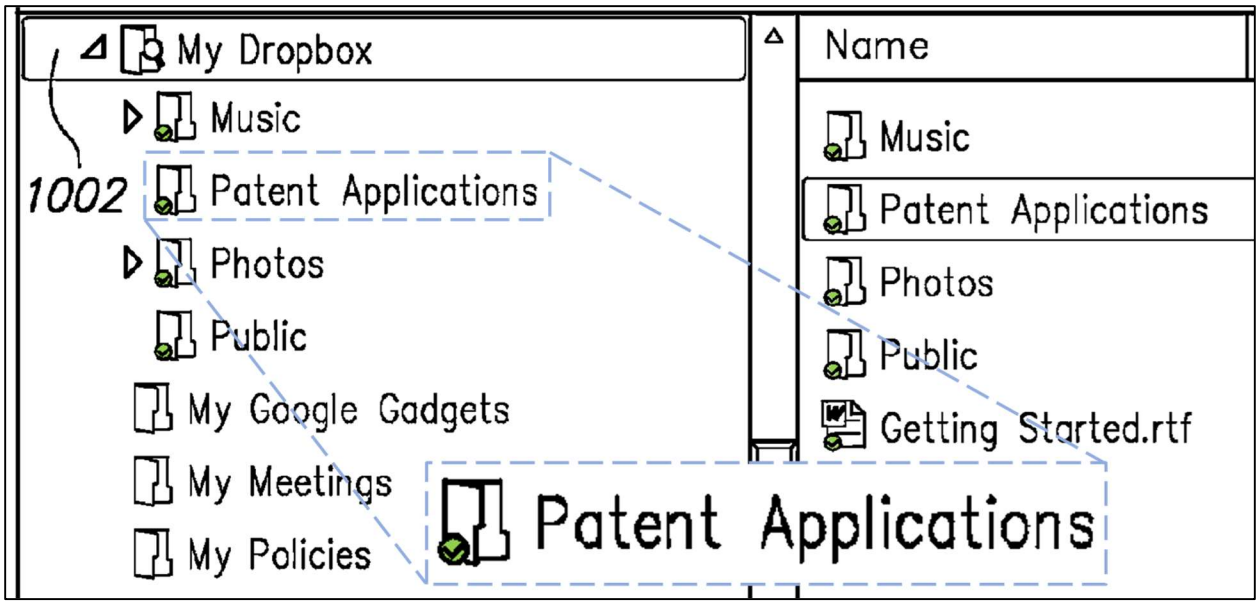


EX1003, FIG. 10

Third, because Houston discloses the **Figure 10 interface** as "an interface for interacting with shared folders," a POSITA would have understood that such an interface would be displayed on either a client where a user initiates sharing a folder (*e.g.*, client 108a, "*first node*") or another where a user is invited to access a shared folder (*e.g.*, client 108b, "*second node*"). In the latter case, the **"Patent Applications" folder** would represent a shared folder displayed among other folders in the interface (*i.e.*, "*a representation of the at least one folder in a location among one or more folders on the file explorer interface*"). *See, e.g.*, EX1003, Figure 2 (illustrating a new folder to share named "Patent Applications"); *see also id.*, 7:49–58 (describing synchronizing a shared folder at an invited user's client device).

Indeed, in Figure 10, Houston illustrates the "Patent Applications" folder with a **"people" icon** to indicate that it is a shared folder. *See, e.g.*, EX1011 ("shared folders are shown with a blue 'people' icon"). EX1002, ¶98.

Fourth, Houston's Figure 10 reveals **checkmark overlays** on the lower left corners of the icons for the folders and one file in the "My Dropbox" folder 1002, but not on the conventional, local folders (*e.g.*, "My Meetings"). EX1002, ¶99.



EX1003, FIG. 10 (excerpted)

A POSITA would have understood that the **checkmark overlays** indicate that these folders and file are synchronized with the host system 110. *See* EX1003, 7:21–23 ("Assume a first user has a folder that is synchronized with host system 110. Referring to FIG. 10, the "My Dropbox" folder 1002 is such a folder."); *see, e.g.*, EX1011 ("Files or folders that in sync with the cloud are represented by with green

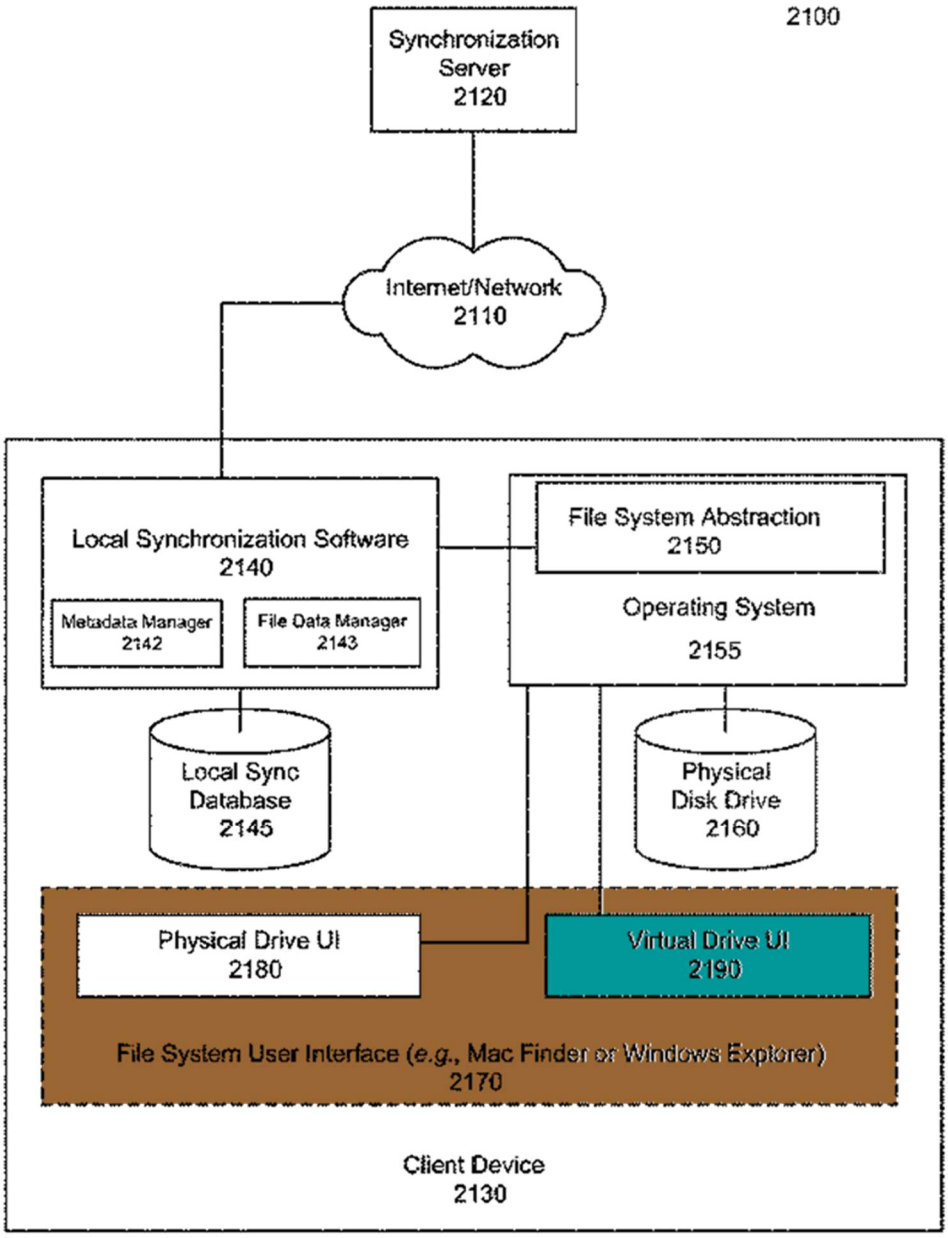
check mark . . .”). As Dr. Mowry explains, a POSITA would have further understood that no checkmark overlay would show on these icons when they were first created in the moments before contents of these folders and file were synchronized with the host system 110. EX1002, ¶100. A POSITA would appreciate that the brief absence of checkmark overlays indicated that the folders and file had not yet been synchronized with the host system 110. Thus, at the very moment these icons were created (*i.e.*, “*when the creation of the representation of the at least one folder is caused*”), the client would not have stored any file within the folders, including the “Patent Applications” folder (*i.e.*, “*the storage at the second node does not store the at least one file*”). *Id.*

ii. Combination of Houston and Garcia

To the extent PO contends that Houston alone does not render element 1[h] obvious, the combination of Houston and Garcia renders it obvious. EX1002, ¶101.

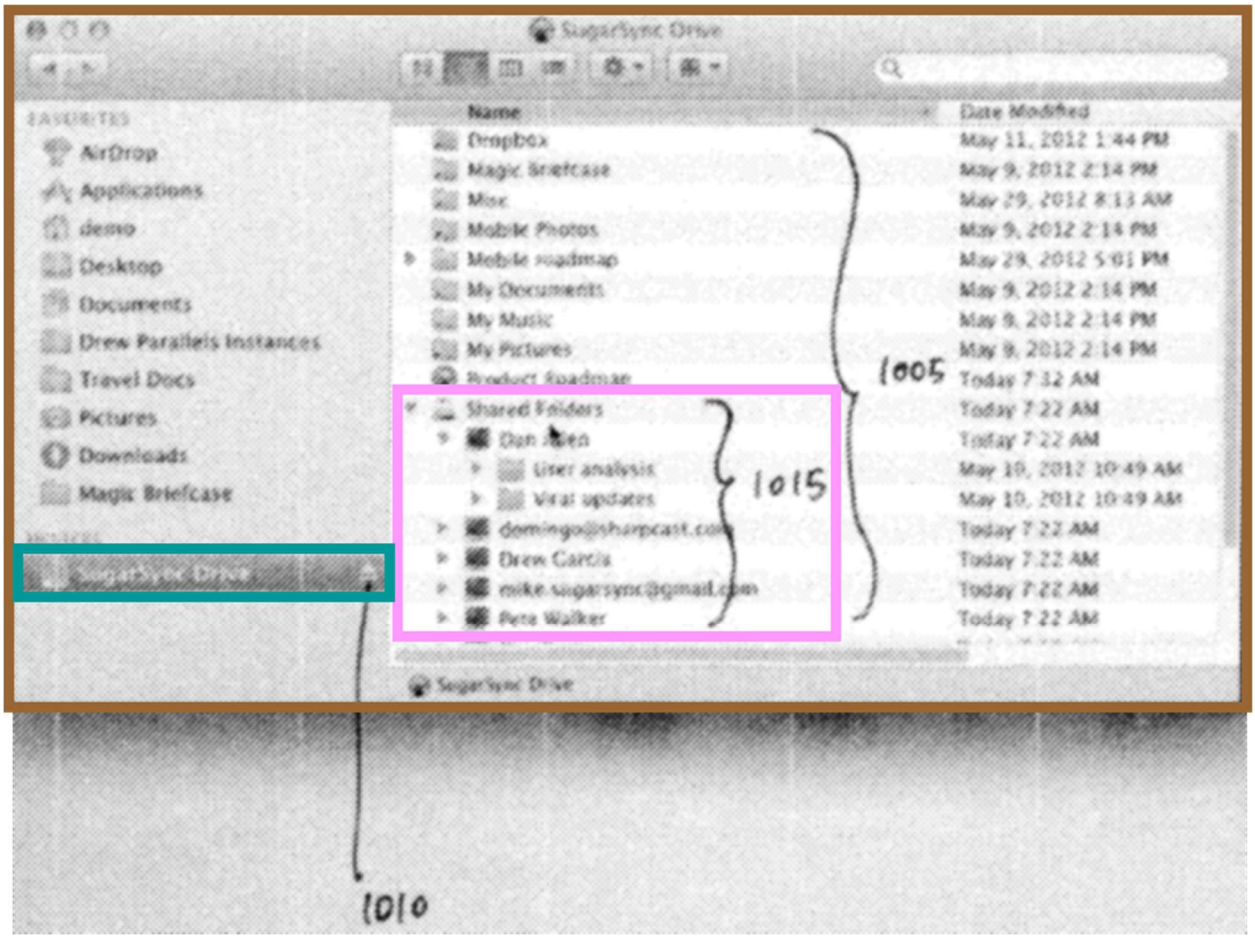
First, Garcia discloses a synchronization system 2100 that includes a synchronization server 2120 in communication with a client device 2130 via an internet/network 2110. *See* EX1004, 6:36–67, Figure 21. Garcia describes that “all synchronized objects… are stored on server 2120 and are accessible from any client device having access to the server 2120.” *Id.*, 6:45–48; *see also id.*, 2:37–41. Garcia further explains that “[w]ithin client device 2130 is local synchronization client software 2140” (*i.e.*, “*code configured to be stored on a storage at the second*

node"). *Id.*, 7:1–2. The software 2140 "functions to synchronize client device 2130 with the synchronization server 2120." *Id.*, 7:2–3. Moreover, the software 2140 is "operatively coupled to a file system abstraction module 2150, within operating system 2155" of the client device 2130. *Id.*, 7:22–24. The operating system 2155 is "connected to a **user interface 2170** (e.g., MAC FINDER or WINDOWS EXPLORER) which displays the physical drive user interface 2180 and the **virtual drive user interface 2190.**" *Id.*, 7:25–29. The **user interface 2170** thus corresponds to "*a file explorer interface*." EX1002, ¶102.



EX1004, FIG. 21

Second, consistent with its description of Figure 21, Garcia illustrates a **virtual drive 1010** displayed in an **interface** (*i.e.*, "*a file explorer interface*") in Figure 10. "The **virtual drive** appears as a separate disk drive on the user's local client device" in the **interface**. *Id.*, 5:27–30; Figure 20a (step 2015). EX1002, ¶103.



EX1004, FIG. 10 (excerpted)

Third, Garcia explains that "any file in folders 1005 in the synchronization system may be accessed through [the] **virtual drive 1010**" and that "[n]ot only are all of the user's folders that have been synchronized to or stored on server 220 accessible through the virtual drive, but also all of the **folders 1015 shared with the user by other users**" (*i.e.*, "*creation of a representation of the at least one folder in a location among one or more folders on the file explorer interface*"). *Id.*, 10:59–63, 11:7–10; *see also id.*, 7:14 ("Physical disk drive 2160 stores the user's local files."), 7:26–28. EX1002, ¶104.

Fourth, Garcia discloses that "[a] user is enabled to access and edit any item within any folder displayed in the virtual drive." EX1004, 5:32–34. Garcia explains that, "when a user double clicks on a file or item in a remote folder in the virtual drive, the server downloads its copy of the file/item to the local synchronization software client (i.e., the client currently being used by the user)." *Id.*, 5:35–39. In other words, when a remote folder—including a shared folder (*e.g.*, one of the **folders 1015**)—is displayed in the **virtual drive 1010**, any file in that folder is not downloaded to and is not stored in the storage of the client device until the user double clicks on the file (*i.e.*, "*the storage at the second node does not store the at least one file when the creation of the representation of the at least one folder is caused*"). EX1002, ¶105.

iii. Motivation to Combine Houston and Garcia and Reasonable Expectation of Success in Combining Houston and Garcia

As discussed above in Section X.A.1.g.iii, a POSITA would have been motivated to modify Houston's system based on and informed by Garcia's teachings. A POSITA would have been further motivated to modify Houston's system such that, when an icon for a shared folder is created in Houston's Figure 10 interface at an invited user's client, the client does not store a file in the shared folder, as taught by Garcia. This would have provided the added benefit of allowing the invited user to have more control over what is downloaded from the shared folder and when,

rather than letting the system download any file in the shared folder automatically onto the invited user's client from the host system 110. A POSITA would have implemented this modification using basic computer programming principles to modify Houston's host system to include Garcia's teachings and would have had a reasonable expectation of success. *See* Sections X.A.1.g.iii and X.A.1.g.iv. EX1002, ¶106.

Accordingly, Houston alone or in view of Garcia renders obvious element 1[h] and a POSITA would have been motivated to combine the teachings of these references and would have had a reasonable expectation of success. EX1002, ¶107. For these same reasons, a POSITA would have been motivated to combine the teachings of these references for all subsequently discussed claims and limitations in this Ground. *Id.*

i) 1[i]

The combination of Houston and Garcia renders element 1[i] obvious. Houston does not explicitly disclose a collaborator providing an indication to open a file in a shared folder (*e.g.*, the "Patent Applications" folder). However, Garcia discloses element 1[i]. In particular, Garcia discloses that, "when a user double clicks on a file or item in a remote folder in the virtual drive, the server downloads its copy of the file/item to the local synchronization software client (i.e., the client currently being used by the user)" (*i.e.*, "*detect, at the second node, an indication to*

open the at least one file in the at least one folder"). EX1004, 5:35–39. EX1002, ¶108.

Therefore, Houston in view of Garcia renders obvious element 1[i]. *Id.*, ¶109.

j) 1[j]

The combination of Houston and Garcia renders element 1[j] obvious. Houston does not explicitly disclose a client of a collaborator retrieving a file in a shared folder (*e.g.*, the "Patent Applications" folder) in response to the collaborator providing an indication to open the file. However, Garcia discloses element 1[j]. For instance, Garcia discloses that, "when a user double clicks on a file or item in a remote folder in the virtual drive, the server downloads its copy of the file/item to the local synchronization software client (i.e., the client currently being used by the user)" and "[t]he user can then edit the file/item as desired" (*i.e.*, "*in response to detection of the indication to open the at least one file in the at least one folder, cause retrieval of the at least one file via the at least one network for permitting display of the at least one file at the second node*"). EX1004, 5:35–40. EX1002, ¶110.

Therefore, Houston in view of Garcia renders obvious element 1[j]. EX1002, ¶111.

For the above reasons, Houston in view of Garcia renders claim 1 obvious. *Id.*, ¶112.

2. Claim 2

Houston in view of Garcia renders obvious claim 1, as discussed above. Houston discloses the additional limitation of claim 2. As discussed above with respect to elements 1[d] and 1[e], Houston's host system 110 receives the **email address** (*i.e.*, "*indication associated with at least one email address*") to notify the collaborator when the host system 110 receives an indication of the user clicking on the **"Share folder" button** (*i.e.*, "*an indication to share the at least one folder*"), via the same user interface window 400. *See* Sections X.A.1.e and X.A.1.f; EX1003, Figure 4. In other words, Houston discloses "*the indicia associated with the email address is not received separately from the indication to share the at least one folder*," as recited in the alternative by claim 2. EX1002, ¶113.

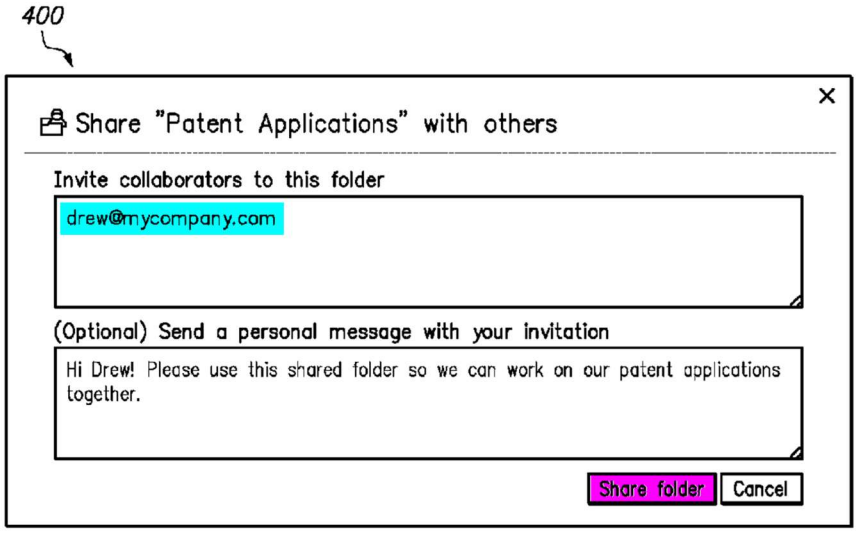


FIG. 4

EX1003, FIG. 4

To the extent PO argues that Houston's host system 110 receives the **email address** and the indication of the user clicking on the **"Share folder" button** separately, then Houston discloses "*the indicia associated with the email address is received separately from the indication to share the at least one folder*," as recited in the alternative by claim 2. EX1002, ¶114.

Therefore, Houston in view of Garcia renders claim 2 obvious.[8] *Id.*, ¶115.

3. Claim 3

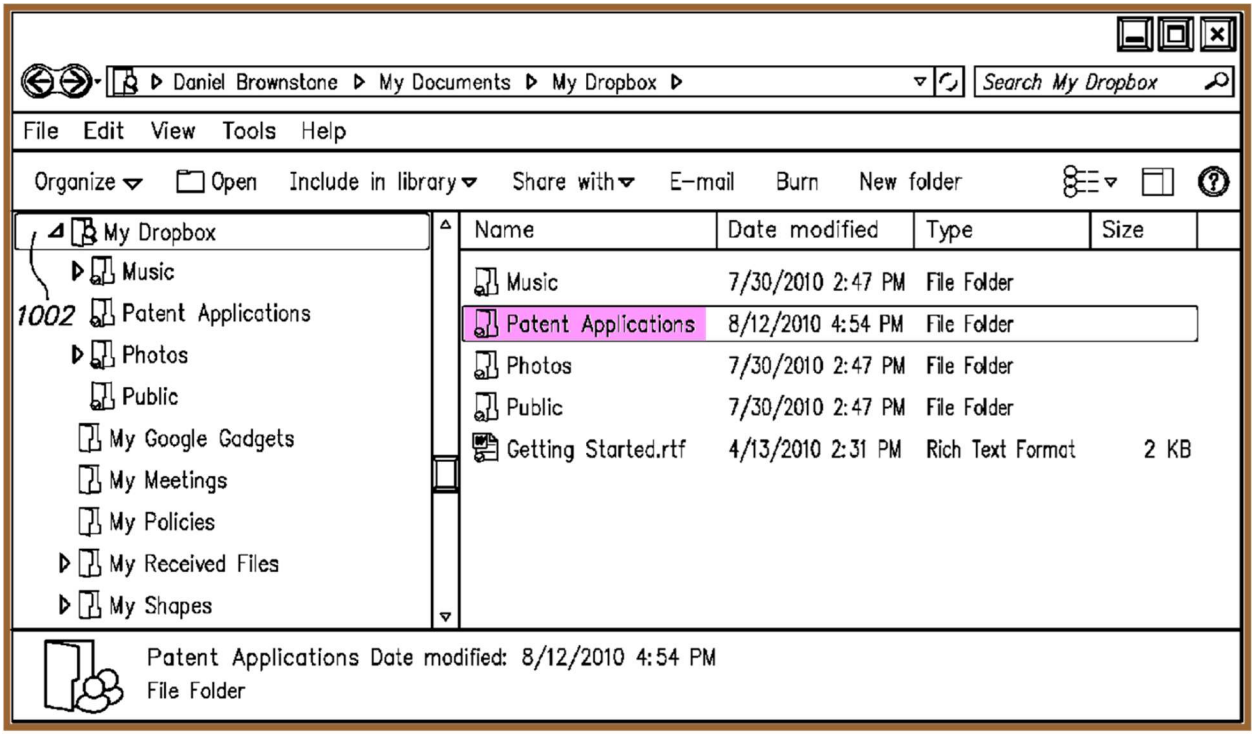
Houston in view of Garcia renders obvious claim 1, as discussed above. The combination of Houston and Garcia discloses the additional limitation of claim 3. EX1002, ¶116.

First, Garcia discloses that, "when a user double clicks on a file or item in a remote folder in the virtual drive, the server downloads its copy of the file/item to the local synchronization software client (i.e., the client currently being used by the user)" and "[t]he user can then edit the file/item as desired." EX1004, 5:35–39. Thus, before the user double clicks on a file in a remote folder, which includes a shared folder (*e.g.*, one of the **folders 1015**), there is an icon for the file in the folder

[8] *See Brown v. 3M*, 265 F.3d 1349, 1352 (Fed. Cir. 2001) (construing a claim limitation reciting "at least one of" followed by a list of elements ending with "or" as only requiring at least one of the elements in the list).

but the content of the file does not get downloaded until the user double clicks on the icon (*i.e.*, "*an additional representation on the file explorer interface is caused to be created that represents the at least one file*"). EX1002, ¶117.

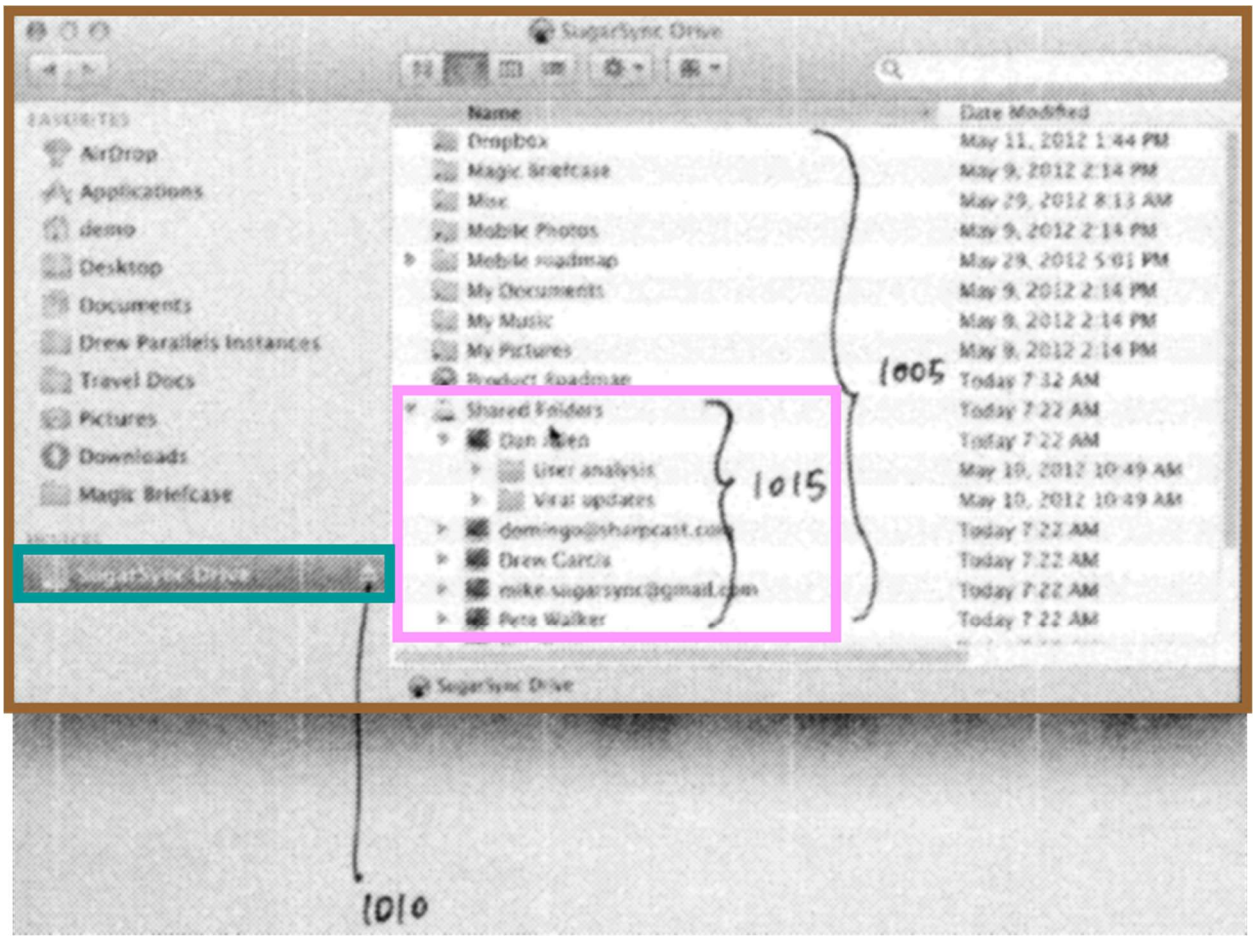
Second, as explained for element 1[h], Houston discloses displaying a representation of a shared folder (*e.g.*, the **"Patent Applications" folder**) in an **interface** that is a "*file explorer interface*" and not a web page. *See* EX1003, Figure 10. EX1002, ¶118.



EX1003, FIG. 10

As also explained for element 1[h], Garcia discloses displaying a representation of a shared folder (*e.g.*, one of the **folders 1015**) in an **interface**. EX1004, Figure 10. The **interface** corresponds to the application FINDER that is

part of and runs on Macintosh operating systems. *See id.*, 7:25–29. ("a user interface 2170 (e.g., MAC FINDER or WINDOWS EXPLORER) which displays… the virtual drive user interface 2190."). Thus, Garcia's **interface** is a "*file explorer interface*," which "*is of a file explorer client application and not a web page*." EX1002, ¶119.



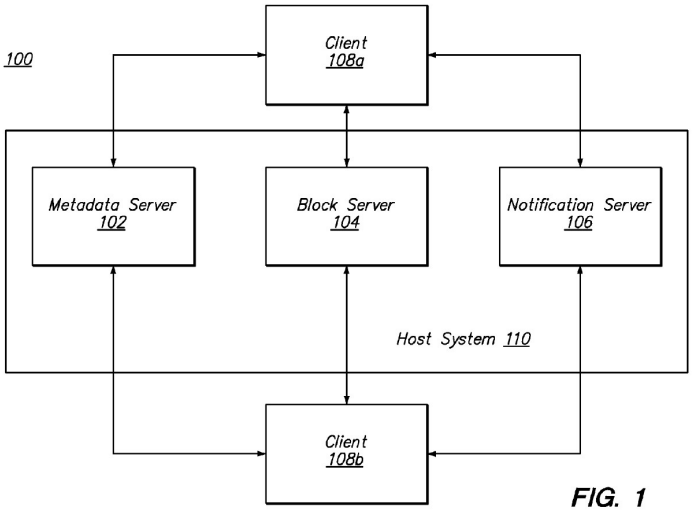
EX1004, FIG. 10 (excerpted)

Therefore, Houston in view of Garcia renders claim 3 obvious. EX1002, ¶120.

4. Claim 4

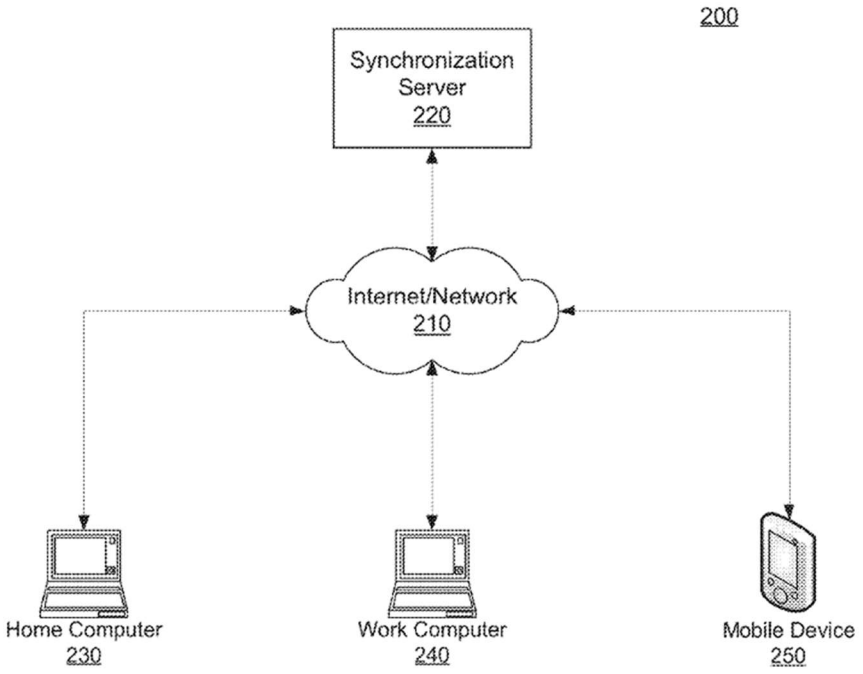
Houston in view of Garcia renders obvious claim 3, as discussed above. The combination of Houston and Garcia discloses the additional limitation of claim 4. EX1002, ¶121.

First, Houston discloses "a host system and clients for maintaining synchronized shared folders." EX1003, 2:57–58, Figure 1. "Host system 110 further includes a metadata server 102; a block server 104; and a notification server 106" (*i.e.*, "*at least one server*"). *Id.*, 2:60–62. Houston explains that "[m]etadata server 102 receives requests from clients to update the server's copy of synchronized folders" and "[b]lock server 104 receives, stores, and serves blocks of data constituting synchronized files" (*i.e.*, "*the at least one folder and the at least one file are stored and synchronized utilizing at least one server*"). *Id.*, 2:63–67. EX1002, ¶122.



EX1003, FIG. 1

Similarly, Garcia discloses "a system… for enabling a user to synchronize, manage, and share folders across a plurality of client devices and a synchronization server." EX1004, 3:13–16. In Figure 2, Garcia illustrates client devices in communication with a synchronization server 220. *Id.*, 8:8–26. Garcia explains that "[w]hen a user synchronizes an object to the synchronization server, the synchronization server stores a copy of the object." *Id.*, 8:29–31; *see also id.*, 6:45–48, 7:54–55 ("an object may be a folder or a file"). Therefore, when a user shares a folder containing a file with another user, the folder and the file are stored and synchronized utilizing the synchronization server 220. EX1002, ¶123.



EX1004, FIG. 2

Second, as discussed above for element 1[g], the combination of Houston and Garcia renders obvious "*the apparatus is further configured such that the at least*

one email message is sent without including the at least one file as an attachment of the at least one email message." *See* Section X.A.1.g. For at least the same reasons, the combination of Houston and Garcia renders obvious "*avoiding the at least one file from having to be communicated to… at the second node*." EX1002, ¶124.

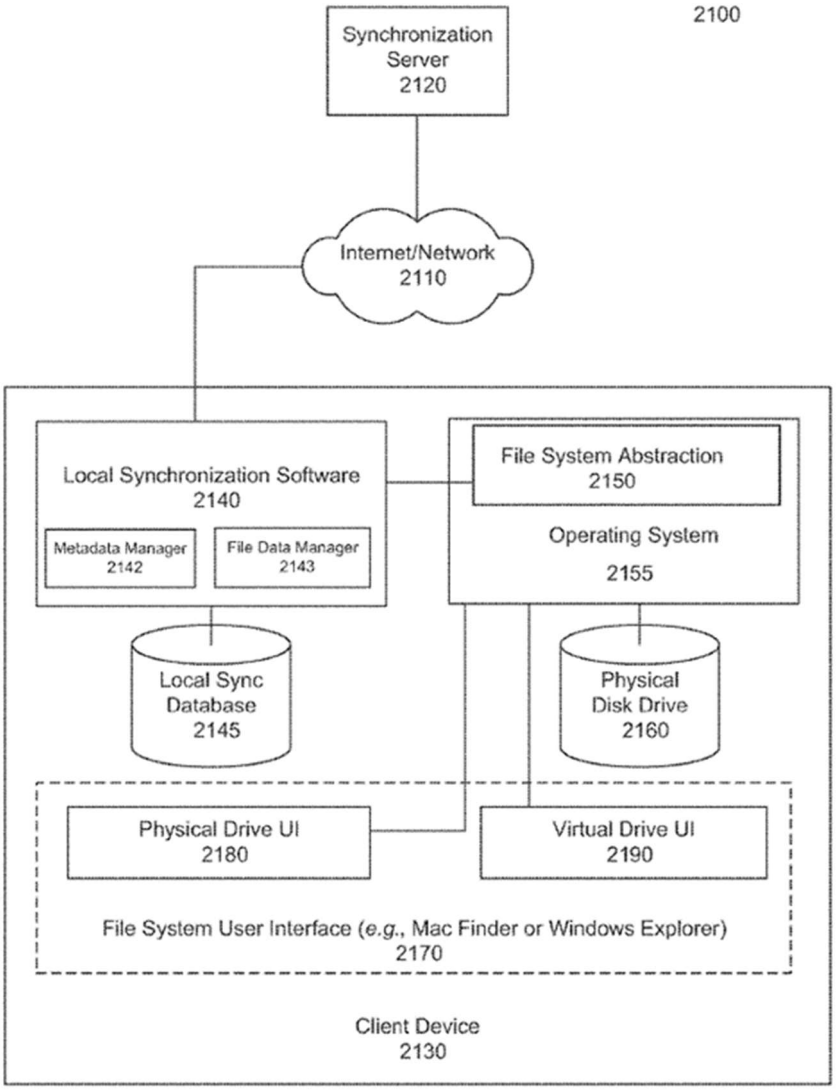
Third, as discussed above for element 1[h], the combination of Houston and Garcia renders obvious "*the storage at the second node does not store the at least one file when the creation of the representation of the at least one folder is caused*." *See* Section X.A.1.h. Indeed, Garcia discloses that "when a user double clicks on a file or item in a remote folder in the virtual drive, the server downloads its copy of the file/item to the local synchronization software client (i.e., the client currently being used by the user)" (*i.e.*, "*avoiding the at least one file from having to be… stored at the second node until the at least one file is requested by a user at the second node using the additional representation.*"). EX1004, 5:35–39. EX1002, ¶125.

Therefore, Houston in view of Garcia renders claim 4 obvious. EX1002, ¶126.

5. Claim 5

Houston in view of Garcia renders obvious claim 1, as discussed above. Garcia discloses the additional limitation of claim 5. For at least the same reasons discussed above with respect to claim 3, Garcia discloses "*the file explorer interface*

displays representations of files." Furthermore, Garcia discloses that the representations of files are in a file system of an operating system of a client device. According to Garcia, "[t]he local synchronization software 2140 is operatively coupled to a **file system** abstraction module 2150, within operating system 2155" of the client device 2130 (*i.e.*, "*a file system of an operating system of the second node*"). EX1004, 7:22–24, Figure 21. EX1002, ¶127.



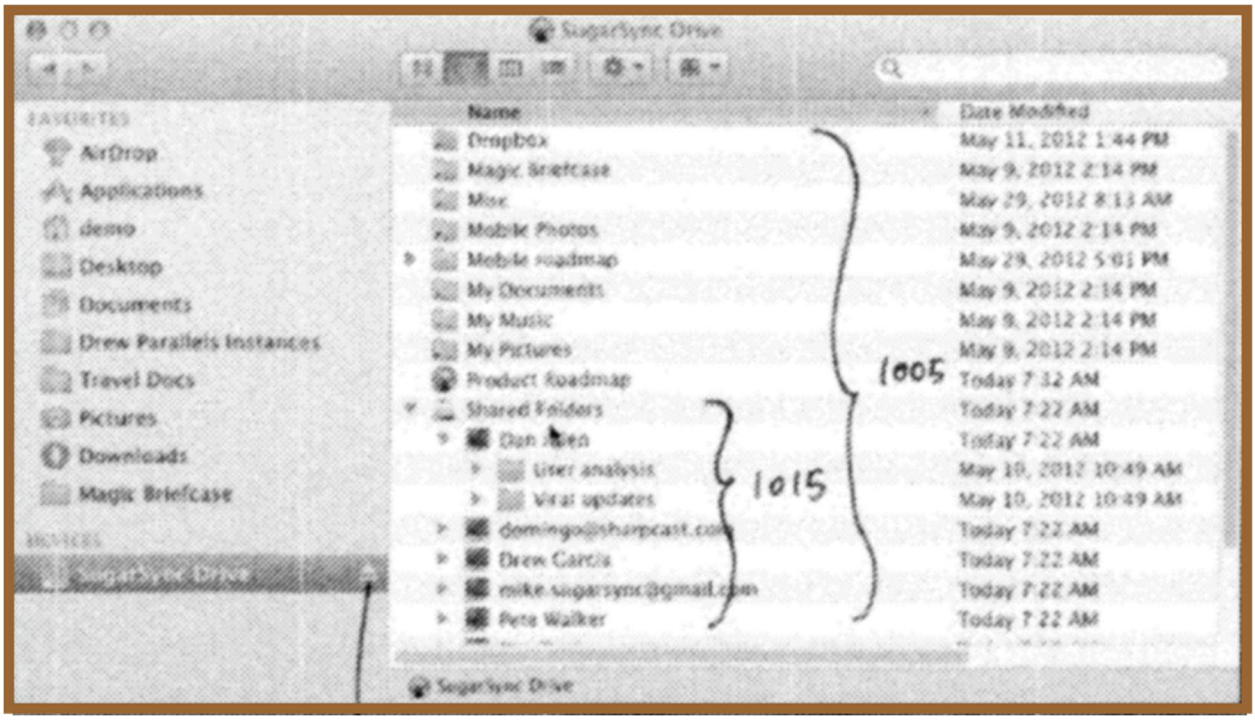
EX1004, FIG. 21

Garcia also explains that "[t]he file system abstraction module 2150 functions to process and normalize the metadata related to the synchronized objects so that the file system user interface module 2170 is able to display the virtual drive 2190." *Id.*, 7:29–33. Thus, Garcia discloses "*the file explorer interface displays representations of files in a file system of an operating system of the second node*." EX1002, ¶128.

Therefore, Houston in view of Garcia renders claim 5 obvious. *Id.*, ¶129.

6. Claim 6

Houston in view of Garcia renders obvious claim 1, as discussed above. Garcia discloses the additional limitation of claim 6. As explained above for claim 3, Garcia's **interface** in Figure 10 corresponds to the application FINDER that is part of and runs on Macintosh operating systems (*i.e.*, "*the file explorer interface is part of an operating system*"). *See* EX1004, 7:25–29. ("operating system 2155 is also connected to a user interface 2170 (e.g., MAC FINDER or WINDOWS EXPLORER)"). EX1002, ¶130.



EX1004, FIG. 10 (excerpted)

Therefore, Houston in view of Garcia renders claim 6 obvious. EX1002, ¶131.

7. Claim 7

a) 7[preamble]

Regardless of whether the preamble is limiting, Houston discloses it for at least the same reasons discussed above for element 1[preamble]. EX1002, ¶132.

b) 7[a]

Houston discloses element 7[a]. For at least the same reasons discussed above for elements 1[a] and 1[c], Houston discloses "*display, at a first node, a first user interface element [and] a second user interface element*." In addition, Houston

discloses, in the same user interface window 400 that is displayed at client 108a (*i.e.*, "*first node*") and includes the **text box** (*i.e.*, "*second user interface element*") for email address(es), a **"Share folder" button** (*i.e.*, "*a third user interface element*"). EX1003, Figure 4. EX1002, ¶133.

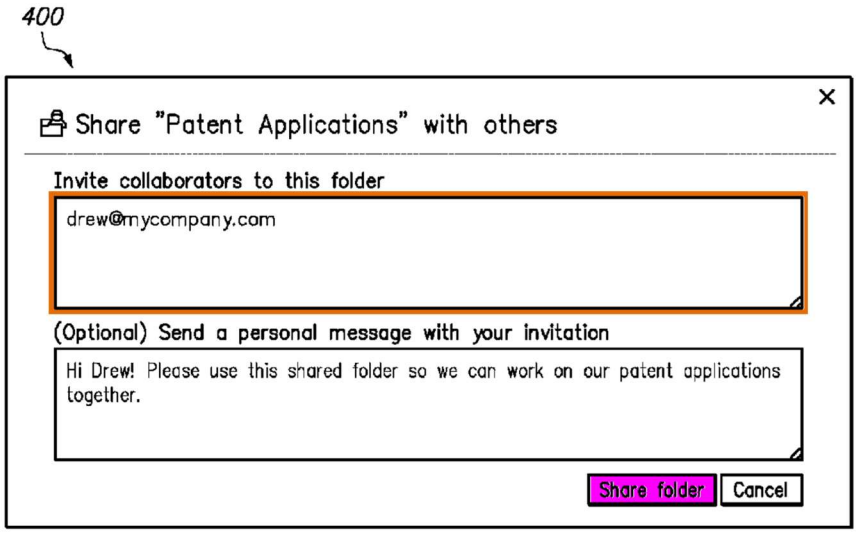


FIG. 4

EX1003, FIG. 4

Therefore, Houston discloses element 7[a]. EX1002, ¶134.

c) 7[b]

Houston discloses element 7[b] for at least the same reasons discussed above for element 1[b]. A data object includes a folder. *See, e.g.*, EX1004, 5:9–11 ("the objects are folders that may contain documents"); *cf.* EX1001, 4:22–25 ("Exemplary data objects that may be requested via a data object identification request include a file, a program component, a data base record, video data, audio data, markup

language, binary data, text data, an output of a service."), 27:43–48, 43:35–44. EX1002, ¶135.

d) 7[c]

Houston discloses element 7[c] for at least the same reasons discussed above for element 1[d]. The "*at least one object associated with at least one email address*" is an email address. *See, e.g.*, element 17[b] ("*the at least one object associated with at least one email address being the at least one email address*"). EX1002, ¶136.

e) 7[d]

Houston discloses element 7[d] for at least the same reasons discussed above for elements 1[e] and 7[a]. EX1002, ¶137.

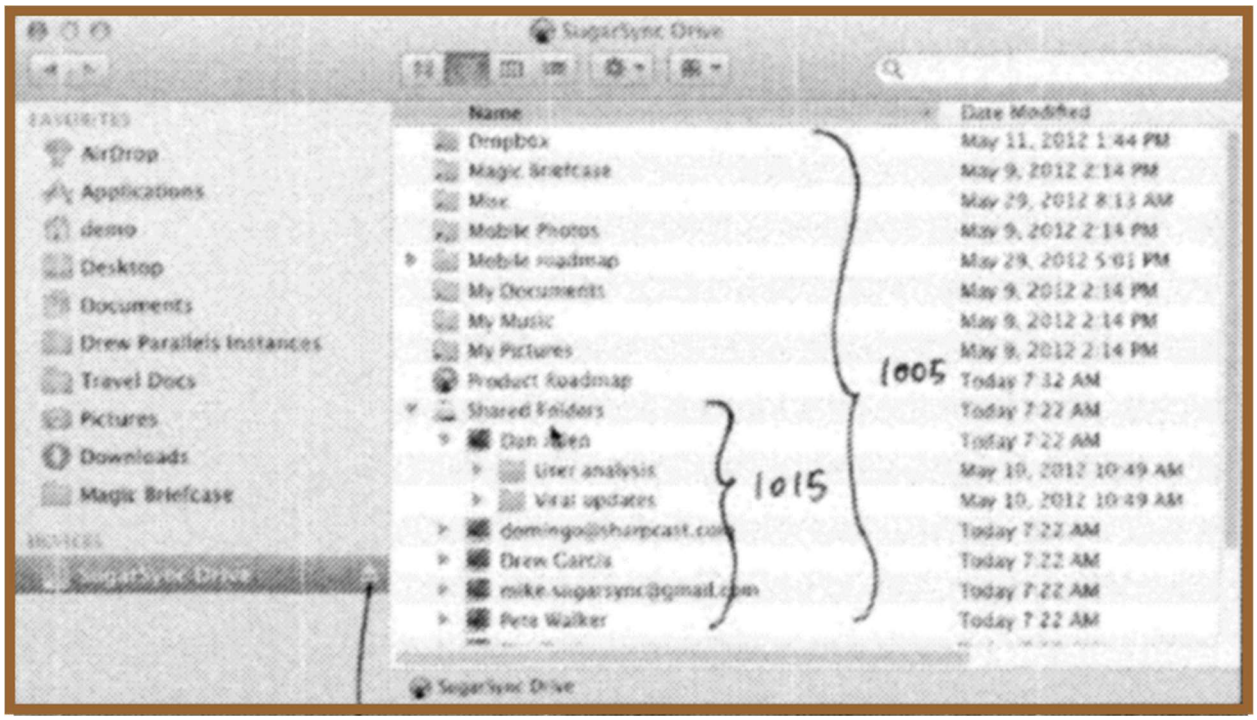
f) 7[e]

Houston alone or in combination with Garcia renders obvious element 7[e] for at least the same reasons discussed above for elements 1[f] and 1[g]. EX1002, ¶138.

g) 7[f]

Houston alone or in combination with Garcia renders obvious element 7[f] for at least the same reasons discussed above for element 1[h]. In addition, as discussed above for claims 3 and 6, Garcia's **interface** (*i.e.*, "*file explorer interface*") corresponds to the application FINDER that is part of and runs on Macintosh

operating systems. *See* EX1004, Figure 10, 7:25–29. ("operating system 2155 is also connected to a user interface 2170 (e.g., MAC FINDER or WINDOWS EXPLORER)"). Thus, Garcia's **interface** corresponds to "*a file explorer interface of a client-based file explorer application*." EX1002, ¶139.



EX1004, FIG. 10

Therefore, Houston in view of Garcia renders obvious element 7[f]. EX1002, ¶140.

For the above reasons, Houston in view of Garcia renders claim 7 obvious. *Id.*, ¶141.

8. Claim 8

Houston in view of Garcia renders obvious claim 7, as discussed above. Houston discloses the additional limitation of claim 8 for at least the same reasons discussed above for claim 4. EX1002, ¶142.

Thus, Houston in view of Garcia renders claim 8 obvious. *Id.*, ¶143.

9. Claim 17

a) 17[preamble]

Regardless of whether the preamble is limiting, Houston discloses it. For example, Houston discloses "[a] method for synchronizing a shared folder over a network." EX1003, claim 1; *see also* Section X.A.1.a. EX1002, ¶144.

b) 17[a]

Houston discloses element 17[a] for at least the same reasons discussed above for elements 1[a], 1[b], 7[a], and 7[b]. EX1002, ¶145.

c) 17[b]

Houston discloses element 17[b] for at least the same reasons discussed above for elements 1[c], 1[d], 7[a], and 7[c]. EX1002, ¶146.

d) 17[c]

Houston discloses element 17[c] for at least the same reasons discussed above for elements 1[e], 7[a], and 7[d]. EX1002, ¶147.

e) 17[d]

Houston in combination with Garcia renders element 17[d] obvious for at least the same reasons discussed above for elements 1[f] and 1[g] and claim 4. In addition, Garcia explicitly discloses sending an email with a link. EX1004, 10:32–34, 10:38–40 ("icon 915… places the link onto the clipboard to be copied into an email"), 11:39–43, claim 3, Figures 11–12. A POSITA would have understood the link in Garcia's email to be a "*Hypertext Transfer Protocol (HTTP) link*," as was conventional. A POSITA would also have known that Garcia's email was partially pre-written (*e.g.*, at least the "From" and "To" fields). Because neither Houston nor Garcia expressly requires user's approval for an email to be sent or received, a POSITA would have understood the email to be automatically received by a receiving node (*e.g.*, Houston's client 108b) to which the email is addressed, without any user involvement, as was the norm. *See, e.g.*, EX1008, ¶40 ("an email application on a computing device may be configured to receive emails from one or more different services"). EX1002, ¶148.

Therefore, Houston in combination with Garcia renders element 17[d] obvious. *Id.*, ¶149.

f) 17[e] and 17[f]

The combination Houston and Garcia renders elements 17[e] and 17[f] obvious. For example, Houston discloses that the servers of its host system

synchronize folders and store files therein. EX1003, 2:63-66 ("Metadata server 102 receives requests from clients to update the server's copy of synchronized folders and provides clients with a list of metadata for files being synchronized. Block server 104 receives, stores, and serves blocks of data constituting synchronized files."). Houston further discloses that "a web interface" (*i.e.*, "*at least one web page*") that "allows access to shared folders from any computer with network access." EX1003, 2:10–12. EX1002, ¶150.

Similar to Houston, Garcia discloses that "[w]hen a user synchronizes an object to the synchronization server, the synchronization server stores a copy of the object." EX1004, 8:29–31; *see also id.*, 5:9–11 ("the objects are folders that may contain documents (e.g., EXCEL, POWERPOINT, or WORD documents), email/calendar items, video files, and/or photos"). Garcia discloses, and illustrates in Figure 13, a web interface 1305 (*i.e.*, "*at least one web page*"), which includes a **Shared Folders tab 1335**. *Id.*, 11:44–50, Figure 13. EX1002, ¶151.



EX1004, FIG. 13 (excerpted)

A POSITA would have understood that Garcia's synchronization server 220 (1) would have displayed the web interface 1305 at a client device, and (2) just like it displays "a list of folders 1345" in the My Cloud tab 1330, would have displayed a list of shared folders, including creating and displaying an icon for any new shared folder (*i.e.*, "*a first representation of the at least one folder*"), in the **Shared Folders tab 1335**. *See, e.g.*, EX1004, Figure 2; Figure 10; 10:60–61 ("any file in folders

1005 in the synchronization system may be accessed through a virtual drive 1010"), 11:7–10 ("Not only are all of the user's folders that have been synchronized to or stored on server 220 accessible through the virtual drive, but also all of the folders 1015 shared with the user by other users."). EX1002, ¶152.

Therefore, Houston in combination with Garcia renders elements 17[e] and 17[f] obvious. *Id.*, ¶153.

g) 17[g]

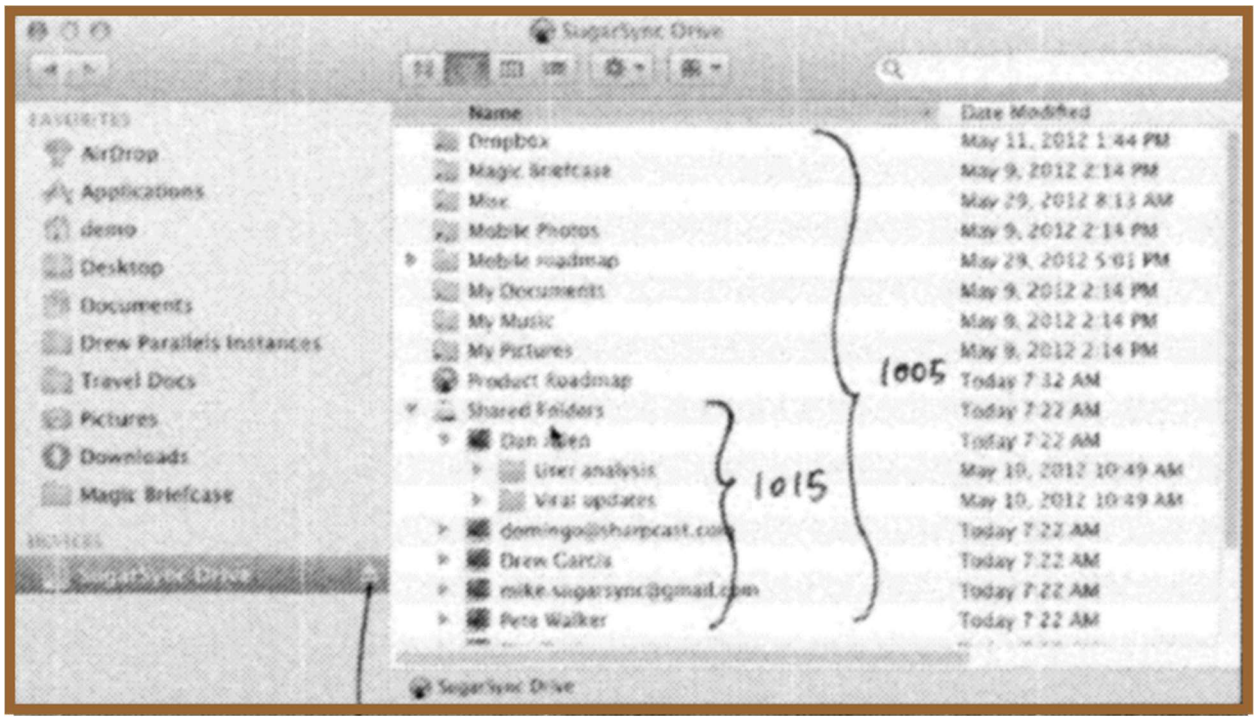
Houston alone or in combination with Garcia renders obvious element 17[g] for at least the same reasons discussed above for elements 1[h] and 7[f]. EX1002, ¶154.

For the above reasons, Houston in view of Garcia renders claim 17 obvious. *Id.*, ¶155.

10. Claim 18

Houston in view of Garcia renders obvious claim 17, as discussed above. The combination of Houston and Garcia renders obvious the additional limitation of claim 18. As discussed above for element 17[d], Houston alone or in combination with Garcia renders obvious "*at least one email… includes an Hypertext Transfer Protocol (HTTP) link*." As discussed above for element 17[g], which refers to elements 1[h] and 7[f], Garcia's **interface** corresponds to a file explorer interface of a client-based file explorer application. *See* EX1004, Figure 10. A POSITA would

have known that (1) clicking the HTTP link would have opened a web page in a web browser that is separate from a file explorer interface of a client-based file explorer application and (2) the user would be able to access the shared folder from the web page or the file explorer interface. EX1002, ¶156.



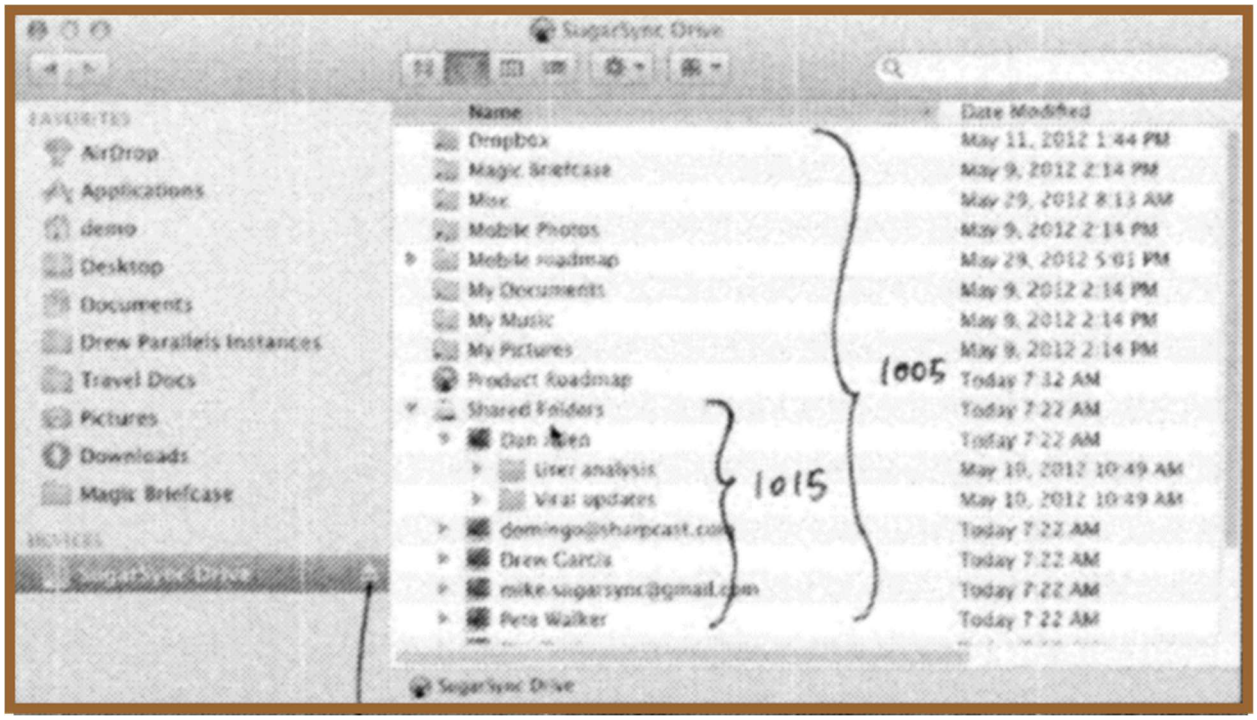
EX1004, FIG. 10

Therefore, Houston in view of Garcia renders claim 18 obvious. EX1002, ¶157.

11. Claim 19

Houston in view of Garcia renders obvious claim 17, as discussed above. Garcia discloses the additional limitation of claim 19. As also discussed above for claim 3, Garcia's **interface** corresponds to a file explorer interface of a client-based

file explorer application, namely the application FINDER that is part of and runs on Macintosh operating systems. *See* EX1004, Figure 10, 7:25–29. ("operating system 2155 is also connected to a user interface 2170 (e.g., MAC FINDER or WINDOWS EXPLORER)"). FINDER is not a web browser. EX1002, ¶158. Moreover, as can been seen in Figure 10, Garcia's **interface** does not include a web page displayed via a web browser. *Id.*



EX1004, FIG. 10

Therefore, Houston in view of Garcia renders claim 19 obvious. EX1002, ¶159.

12. Claim 20

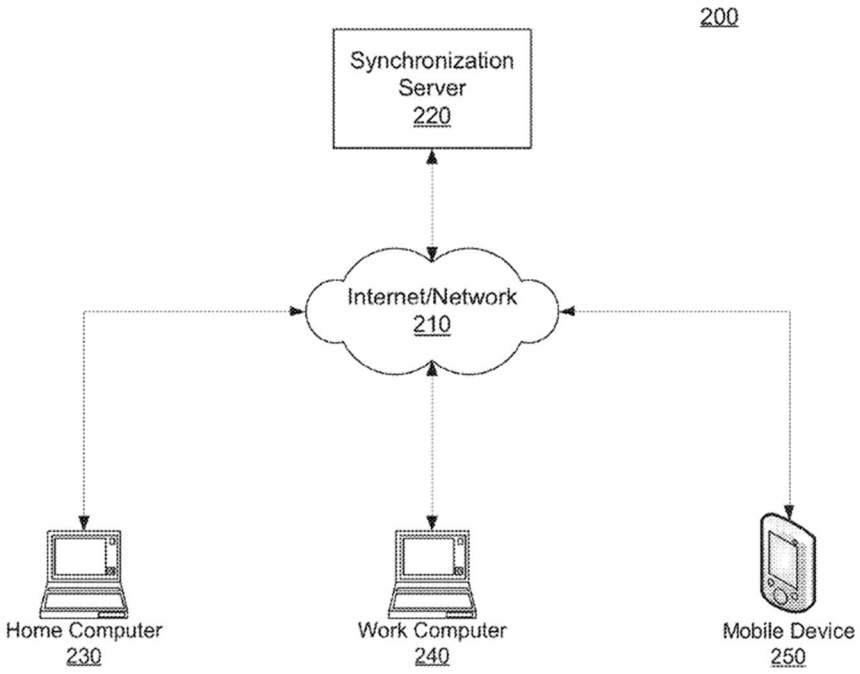
Houston in view of Garcia renders obvious claim 17, as discussed above. Garcia discloses the additional limitation of claim 20 for at least the same reasons discussed above for claim 6. EX1002, ¶160.

Therefore, Houston in view of Garcia renders claim 20 obvious. *Id.*, ¶161.

13. Claim 21

Houston in view of Garcia renders obvious claim 17, as discussed above. Houston in combination with Garcia discloses or renders obvious the additional limitation of claim 21. EX1002, ¶162.

For example, as discussed above for elements 17[e] and 17[f], a POSITA would have understood that Garcia's synchronization server 220 would have displayed the web interface 1305 (*i.e.*, "*the at least one web page*") at a client device. *See* EX1004, Figure 2. Referring to Figure 2, a POSITA would have understood that, for a client device to receive the web interface 1305, the synchronization server 220 would have sent a communication (*i.e.*, "*a second communication*") to the client. EX1002, ¶163.



EX1004, FIG. 2

Thus, Garcia discloses or at least renders obvious "*the receipt of the at least one web page is caused by sending a second communication*," as recited in the alternative by claim 21. EX1002, ¶164.

Therefore, Houston in view of Garcia renders claim 21 obvious.[9] EX1002, ¶165.

B. Ground 2: Claims 1–8 and 17–21 are Obvious over Houston, Garcia, and Manzano

As explained above in Section X.A, the combination of Houston and Garcia renders obvious claims 1–8 and 17–21. However, to the extent PO contends that

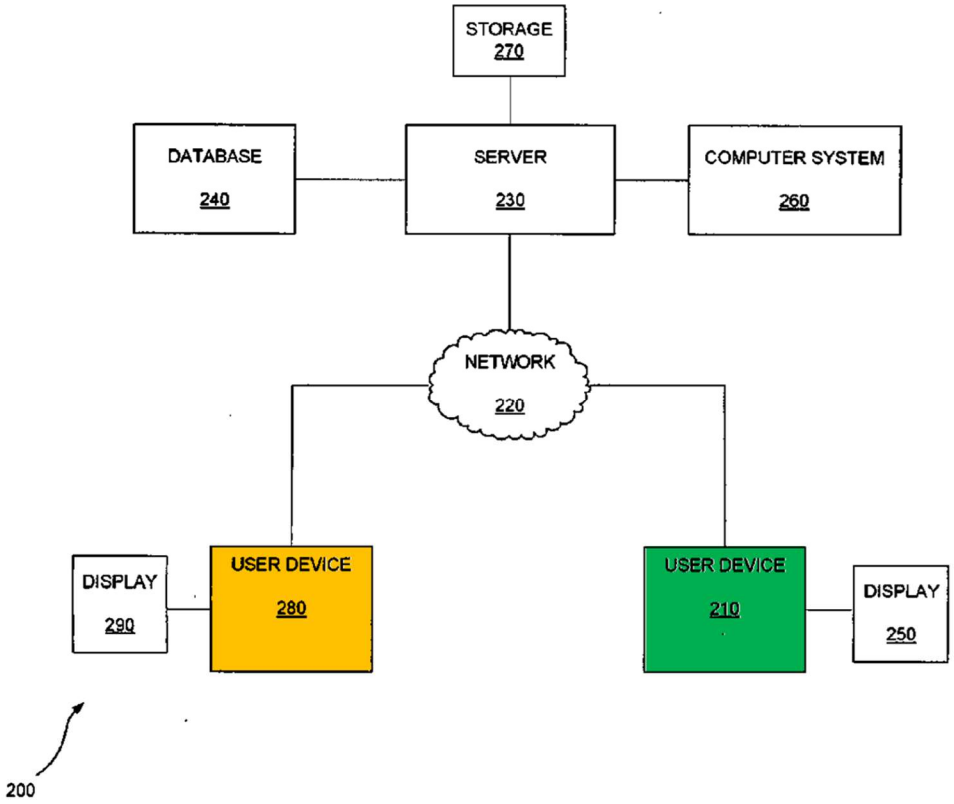
[9] *See Brown*, 265 F.3d at 1352.

this combination does not disclose, teach, suggest, or render obvious (1) "*the storage at the second node does not store the at least one file when the creation of the representation of the at least one folder is caused*" as recited by element 1[h], (2) "*an additional representation on the file explorer interface is caused to be created that represents the at least one file*" as recited by claim 3, (3) "*the storage at the second node does not store any file in the at least one data object when the creation of the representation of the at least one data object is caused*" as recited by element 7[f], and (4) "*a second representation of the at least one folder*" as recited by element 17[g] and to the extent PO further contends that a representation of a folder in a file explorer interface implies that at least one file in the folder is not downloaded when the representation of the folder is caused[10], the combination of Houston, Garcia, and Manzano renders these features obvious. EX1002, ¶166.

For example, Manzano relates to "sharing of electronic files among electronic devices." EX1005, ¶2. Manzano discloses a computer network system 200 comprising a server 230 linked to user devices 210, 280 via a network 260. *Id.*, ¶29, Figure 2. **User device 210** corresponds to a "*first node*" and **user device 280** to a

[10] Unlike claims 1 and 7, claim 17 does not require that the second node does not store at least one file or any file in the at least folder when the creation of the second representation of the at least one folder or data object is caused. EX1002, ¶166.

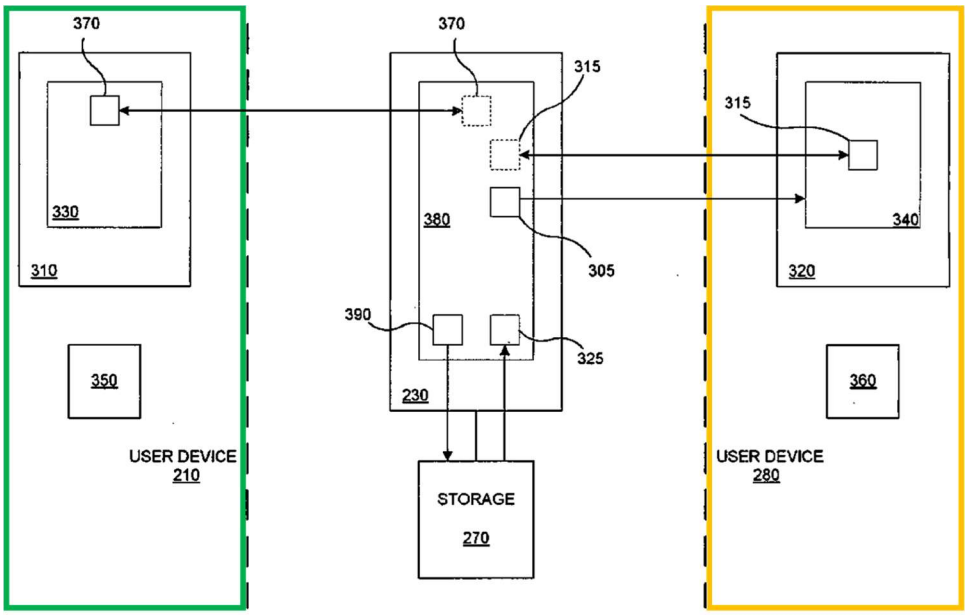
"*second node*." According to Manzano, "[u]ser devices 210, 280 include or are otherwise coupled to a computer screen or display 250, 290, respectively." *Id.*, ¶30. EX1002, ¶167.



EX1005, FIG. 2

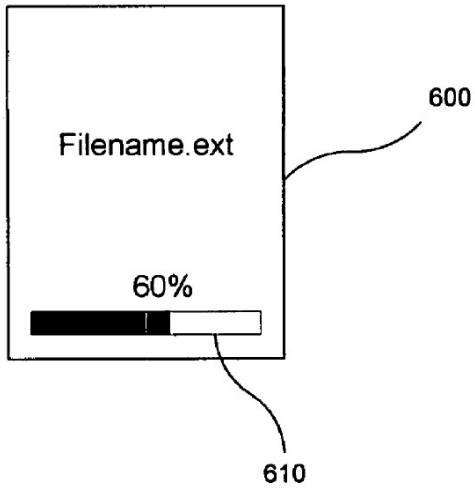
Manzano teaches that "a file-transfer application" may be transferred from the server 230 to the user devices 210, 280 and that "[o]nce installed on the user devices 210, 280, the file-transfer application provides file-transfer clients 310, 320 executable by the user devices 210, 280, respectively." *Id.*, ¶32; *see also id.*, Figure 3. "Also included in the file-transfer application are user interfaces 350, 360 that are

displayable on the displays 250, 290, respectively" and "correspond to respective electronic folders or windows into which files may be placed." *Id.* EX1002, ¶168.



EX1005, FIG. 3

Manzano discloses that "file icons, such as the icon 600, in a workspace displayed on display device 290 can visually indicate whether a corresponding file (such as a file, the transfer of which may be as is discussed herein with reference to FIG. 3) has been downloaded to or is otherwise stored on (i.e., is local to)… the user device 280." *Id.*, ¶50, Figure 6; *see also id.*, ¶52 ("'workspace' corresponds to a respective electronic folder"). Manzano explains that, if a shared file "is not local to **user device 280**, the icon 600 may be ghosted (i.e., semi-transparent) or otherwise be visually configured to indicate the non-local status of the file." *Id.*, ¶50. EX1002, ¶169.



EX1005, FIG. 6

Thereafter, at the request of a user of the **user device 280**, the file may be downloaded, after which the icon 600 will become "unghosted." *Id.*, ¶51 ("[A] user may right-click or otherwise indicate the icon 600, and from a resultant pop-up contextual menu (not shown), for example, that appears on the display 290, make a selection from the menu to request receipt or download of the associated file, at which time the icon 600 will become unghosted or will otherwise be visually configured to indicate the pending-local or local status of the file."). Thus, Manzano discloses that a storage at a second node does not store a shared file until the user at the second node expressly requests that the file be downloaded. EX1002, ¶170.

i. Motivation to Combine Houston, Garcia, and Manzano

A POSITA would have been motivated to further modify Houston's system as modified by Garcia's teachings (the "Houston-Garcia system") according to and informed by Manzano's teachings such that the Houston-Garcia system would not

store a file in a shared folder at a second node until the user at the second node requests the file be downloaded. EX1002, ¶171.

First, Houston, Garcia, and Manzano are from the same field of endeavor. *See, e.g.*, *Medtronic*, 721 F.2d at 1574–75; M.P.E.P. §2141. These references are directed to sharing electronic content among electronic devices over a network. For example, Houston discloses a system that enables "[s]ynchronization of folders shared among multiple clients over a network." EX1003, Abstract, 1:53–54, Figure 1. Similarly, Garcia discloses a system "for enabling a user to synchronize, manage, and share files and folders across a plurality of client devices and a synchronization server." EX1004, Abstract, Figure 2. Manzano relates "to sharing of electronic files among electronic devices" using a computer network system. EX1005, ¶¶2, 29, Figure 2. Thus, all three references are directed to sharing electronic content among electronic devices over a network. EX1003, Abstract, 1:53–54; EX1004, Abstract; EX1005, ¶¶2, 29. Accordingly, a POSITA would have understood that Manzano's teachings were directly applicable to the Houston-Garcia system. EX1002, ¶172.

Second, configuring the Houston-Garcia system to not store a file in a shared folder at a second node until the user at the second node requests the file be downloaded, as taught by Manzano, would have yielded expected, predictable results. *KSR*, 550 U.S. at 416; M.P.E.P. §2143(I)(A). The Houston-Garcia system causes display of a shared folder at a second node. *See* Section X.A.1.h. Manzano

discloses that a storage at a second node does not store a shared file until the user at the second node expressly requests that the file be downloaded. EX1005, ¶¶50–52, Figure 6. A POSITA would have combined the elements of the Houston-Garcia system and the elements taught by Manzano—namely, the shared folder of the Houston-Garcia system, and not downloading a shared file in a folder as taught by Manzano—using known and routine computer programming principles to modify the Houston-Garcia system to not store a file in a shared folder at a second node until the user at the second node requests the file be downloaded. This result would have been readily predictable and recognized by a POSITA. EX1002, ¶173.

Third, a POSITA would have been motivated to combine the teachings of Manzano with the Houston-Garcia system because not storing a file in a shared folder at a second node until the user at the second node requests the file be downloaded would have been obvious to try. *KSR*, 550 U.S. at 421; M.P.E.P. §2143(I)(E). There were only a few known and predictable choices for presenting a file in a shared folder to a recipient—*e.g.*, (1) download the file automatically, or (2) download the file upon the recipient's request. A POSITA would have pursued these potential solutions with a reasonable expectation of success because the analysis would have simply involved trying each one of these solutions. *See, e.g., CRFD Research*, 876 F.3d at 1347 ("[A] person of ordinary skill would have two

predictable choices … providing [the] person of ordinary skill with a simple design choice" of choosing one solution or the other). EX1002, ¶174.

Fourth, the modification of the Houston-Garcia system to include Manzano's teachings of not storing a file in a shared folder at a second node until the user at the second node requests the file be downloaded would have been readily implemented by simply modifying the Houston-Garcia system to not store a file in a shared folder at a second node until the user at the second node requests the file be downloaded. A POSITA would have implemented this modification using basic computer programming principles to modify the Houston-Garcia system to include Manzano's teachings of not storing a file in a shared folder at a second node until the user at the second node requests for the file to be downloaded. This modification would have been well within the knowledge and skillset of a POSITA. EX1002, ¶175.

Fifth, a POSITA would have recognized the benefit of not storing a file in a shared folder at a second node until the user at the second node requests the file be downloaded. For instance, such a feature would have allowed the recipient of the shared folder to have more control over what to download from the shared folder and when, rather than letting the system download any file in the shared folder automatically onto the recipient's device. EX1002, ¶176.

ii. Reasonable Expectation of Success in Combining Houston, Garcia, and Manzano

A POSITA would also have had a reasonable expectation of success. The combination of the Houston-Garcia system and Manzano represents a straight-forward implementation of not storing a file in a shared folder at a second node until the user at the second node requests the file be downloaded, which a POSITA would have been familiar with and been able to implement. The reasons a POSITA would have expected success parallel those that provide motivation for this combination—including because Houston, Garcia, and Manzano are all directed to sharing electronic content among electronic devices over a network. EX1003, Abstract, 1:53–54; EX1004, Abstract; EX1005, ¶¶2, 29; *see also* Section X.B.i. Moreover, a POSITA would have had a reasonable expectation of success in implementing in the Houston-Garcia system not storing a file in a shared folder at a second node until the user at the second node requests the file be downloaded because each of Houston's and Garcia's underlying specifications was designed to be extensible and flexible in their application. *See* EX1003, 9:40–42 ("the disclosure of the present invention is intended to be illustrative, but not limiting, of the scope of the invention"); EX1004, 12:27–28 ("the above disclosure of the present invention is intended to be illustrative and not limiting of the invention"). EX1002, ¶177.

Accordingly, the combination of Houston, Garcia, and Manzano renders claims 1–8 and 17–21 obvious and a POSITA would have been motivated to combine the teachings of these references. EX1002, ¶178.

C. Grounds 3 and 4: Claims 17–21 are Obvious over Houston, Garcia, and Wu or over Houston, Garcia, Manzano, and Wu

As explained above in Sections X.A and X.B, the combination of Houston and Garcia and the combination of Houston, Garcia, and Manzano render obvious claims 17–21, respectively. However, to the extent PO contends that these combinations do not disclose, teach, suggest, or render obvious "*the at least one email… is at least partially pre-written*" as recited by element 17[d], Wu teaches this feature. EX1002, ¶179.

For example, Wu discloses "[a] system and method of producing E-mail [by using templates to] reduce the time consumed for producing E-mail." EX1006, Abstract; *see also id.*, ¶6. Wu explains that "the subject or content of an email may be used repeatedly in some occasions, and it is a waste of time to enter repeatedly the same information." *Id.*, ¶5. Accordingly, Wu discloses a system and a method of producing email by using predetermined templates. *See id.*, ¶¶7, 8, 17–32, Figures 1 and 2. Wu explains that "common information entered for an email is pre-stored in different databases." *Id.*, ¶9. In other words, because Wu's emails include pre-

written content from templates, these emails are at least partially pre-written. EX1002, ¶180.

i. Motivation to Combine Houston, Garcia, and Wu or Houston, Garcia, Manzano, and Wu

A POSITA would have been motivated to further modify the Houston-Garcia system or the Houston-Garcia system as modified by Manzano (the "Houston-Garcia-Manzano" system) according to and informed by Wu's teachings such that the Houston-Garcia system or the Houston-Garcia-Manzano system would generate an email with body text that is at least partially pre-written. EX1002, ¶181.

First, implementing the Houston-Garcia system or the Houston-Garcia-Manzano system to generate an email with body text that is at least partially pre-written, as taught by Wu, would have yielded expected, predictable results. *KSR*, 550 U.S. at 416; M.P.E.P. §2143(I)(A). The Houston-Garcia system and Houston-Garcia-Manzano system generate an email. *See* Sections X.A.9.e and X.B. Wu discloses a system and method of producing email by using predetermined templates such that the email is partially pre-written. EX1006, ¶¶7–9, 17–32, Figures 1 and 2. A POSITA would have combined the elements of the Houston-Garcia system or the Houston-Garcia-Manzano system with the elements taught by Wu—namely, the email of the Houston-Garcia system or the Houston-Garcia-Manzano system, and the use of templates to generate a partially pre-written email as taught by Wu—using

known and routine computer programming principles to modify the Houston-Garcia system or the Houston-Garcia-Manzano system to generate an email that is at least partially pre-written. This result would have been readily predictable and recognized by a POSITA. EX1002, ¶182.

Second, the modification of the Houston-Garcia system or the Houston-Garcia-Manzano system to include Wu's use of templates to generate a partially pre-written email would have been readily implemented by simply modifying the Houston-Garcia system or the Houston-Garcia-Manzano system to use of templates to generate a partially pre-written email. A POSITA would have implemented this modification using basic computer programming principles to modify the Houston-Garcia system or the Houston-Garcia-Manzano system to include Wu's teachings of using of templates to generate a partially pre-written email. This modification would have been well within the knowledge and skillset of a POSITA. EX1002, ¶183.

Third, Wu expressly disclosed the benefits of generating an email with body text that is at least partially pre-written. For instance, Wu's use of templates would have resulted in "producing an E-mail quickly to reduce the time and episodes of entering the related information of an E-mail." EX1006, ¶6. Wu pointed out that "it is a waste of time to enter repeatedly the same information" when "the subject or content of an email may be used repeatedly in some occasions." EX1006, ¶5. As Houston suggests, such occasions would have been present in the Houston-Garcia

system or the Houston-Garcia-Manzano system where "any number of clients 108 may be sharing synchronized folders via host system 110." EX1003, 3:23–24. EX1002, ¶184.

ii. Reasonable Expectation of Success in Combining Houston, Garcia, and Wu or Houston, Garcia, Manzano, and Wu

A POSITA would also have had a reasonable expectation of success. The combination of the Houston-Garcia system or the Houston-Garcia-Manzano system with Wu represents a straight-forward implementation of using of templates to generate a partially pre-written body of an email, which a POSITA would have been familiar with and been able to implement. The reasons a POSITA would have expected success parallel those that provide motivation for this combination. *See* Section X.C.i. Moreover, a POSITA would have had a reasonable expectation of success in implementing in the Houston-Garcia system or the Houston-Garcia-Manzano system the use of templates to generate partially pre-written body text of an email because each of Houston's, Garcia's, and Manzano's underlying specification was designed to be extensible and flexible in their application. *See* EX1003, 9:40–42 ("the disclosure of the present invention is intended to be illustrative, but not limiting, of the scope of the invention"); EX1004, 12:27–28 ("the above disclosure of the present invention is intended to be illustrative and not limiting of the invention"); EX1005, ¶40 ("the invention is not limited to the details

thereof"; "substitutions and modifications are intended to be embraced within the scope of the invention"). EX1002, ¶185.

Accordingly, the combination of Houston, Garcia, and Wu and the combination of Houston, Garcia, Manzano, and Wu render claims 17–21 obvious and a POSITA would have been motivated to combine the teachings of these references. EX1002, ¶186.

XI. CONCLUSION

Petitioner requests institution of an *inter partes* review of the '520 patent and cancellation of claims 1–8 and 17–21.

Respectfully Submitted,

Dated: January 22, 2024

/Scott Bertulli/
Scott Bertulli, Lead Counsel
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XII. APPENDIX OF CLAIM LISTING[11]

Independent Claim 1

1[preamble]: "An apparatus, comprising: at least one non-transitory memory storing instructions; and one or more processors in communication with the at least one non-transitory memory, wherein the one or more processors execute the instructions to:"

1[a]: cause, at a first node, display of a first interface with a first user interface element;

1[b]: receive, from the first node via at least one network, an indication of at least one folder via the first user interface element, utilizing the first interface;

1[c]: cause, at the first node, display of a second interface with a second user interface element;

1[d]: receive, from the first node via the at least one network, indication associated with at least one email address via the second user interface element, utilizing the second interface;

1[e]: receive, from the first node via the at least one network, an indication to share the at least one folder;

[11] 37 C.F.R. §42.24(a)(1) ("The word count… does not include… appendix of exhibits or claim listing.")

1[f]: based on the receipt of the indication of the at least one folder, the indicia associated with the at least one email address, and the indication to share the at least one folder via the at least one network; generate at least one email message identifying the at least one folder and including a reference to the at least one folder, without including at least one file in the at least one folder as an attachment of the at least one email message;

1[g]: send, to a second node via the at least one network, the at least one email message, without including the at least one file in the at least one folder as an attachment of the at least one email message;

1[h]: based on the receipt of the indication of the at least one folder, the indicia associated with the at least one email address, and the indication to share the at least one folder via the at least one network; cause, utilizing code configured to be stored on a storage at the second node and further configured to cooperate with a file explorer interface, creation of a representation of the at least one folder in a location among one or more folders on the file explorer interface, where the storage at the second node does not store the at least one file when the creation of the representation of the at least one folder is caused;

1[i]: detect, at the second node, an indication to open the at least one file in the at least one folder; and

1[j]: in response to detection of the indication to open the at least one file in the at least one folder, cause retrieval of the at least one file via the at least one network for permitting display of the at least one file at the second node.

Dependent Claim 2

The apparatus of claim 1, wherein the apparatus is configured such that at least one of: the indicia associated with the email address is received separately from the indication to share the at least one folder; the indicia associated with the email address is not received separately from the indication to share the at least one folder; the apparatus is configured to control whether the storage at the second node stores or does not store the at least one file; the apparatus is configured to not control whether the storage at the second node stores or does not store the at least one file; the code is configured to control whether the storage at the second node stores or does not store the at least one file; or the code is configured to not control whether the storage at the second node stores or does not store the at least one file.

Dependent Claim 3

The apparatus of claim 1, wherein the apparatus is configured such that, when the creation of the representation of the at least one folder is caused, an additional representation on the file explorer interface is caused to be created that represents

the at least one file, where the file explorer interface is of a file explorer client application and not a web page.

Dependent Claim 4

The apparatus of claim 3, wherein the apparatus is configured such that the at least one folder and the at least one file are stored and synchronized utilizing at least one server, and wherein the apparatus is further configured such that the at least one email message is sent without including the at least one file as an attachment of the at least one email message, and the storage at the second node does not store the at least one file when the creation of the representation of the at least one folder is caused, both for avoiding the at least one file from having to be communicated to and stored at the second node until the at least one file is requested by a user at the second node using the additional representation.

Dependent Claim 5

The apparatus of claim 1, wherein the apparatus is configured such that the file explorer interface displays representations of files in a file system of an operating system of the second node.

Dependent Claim 6

The apparatus of claim 1, wherein the apparatus is configured such that the file explorer interface is part of an operating system of the second node.

Independent Claim 7

7[preamble]: A system, comprising: at least one non-transitory memory storing instructions; and one or more processors in communication with the at least one non-transitory memory, wherein the one or more processors execute the instructions to:

7[a]: display, at a first node, a first user interface element, a second user interface element, and a third user interface element;

7[b]: receive, from the first node via at least one network, information associated with at least one data object via the first user interface element;

7[c]: receive, from the first node via the at least one network, at least one object associated with at least one email address via the second user interface element;

7[d]: receive, from the first node via the at least one network, a message associated with a selection of the third user interface element;

7[e]: based on the receipt of the information associated with the at least one data object, the at least one object associated with the at least one email address, and

the message associated with the selection of the third user interface element via the at least one network; send, to a second node via the at least one network, at least one email message identifying the at least one data object and including a reference to the at least one data object, without including a file attachment with the at least one email message;

7[f]: based on the receipt of the information associated with the at least one data object, the at least one object associated with the at least one email address, and the message associated with the selection of the third user interface element via the at least one network; cause, utilizing code configured to be stored on a storage at the second node and further configured to cooperate with a file explorer interface of a client-based file explorer application, creation of a representation of the at least one data object in a location among one or more folders on the file explorer interface, where the storage at the second node does not store any file in the at least one data object when the creation of the representation of the at least one data object is caused.

Dependent Claim 8

The system of claim 7, wherein the system is configured such that the email message is sent without including the file attachment with the at least one email message, and the storage at the second node does not store any file when the creation of the representation of the at least one data object is caused, both for avoiding the

at least one file from having to be communicated to and stored at the second node until the at least one file is requested by a user at the second node.

Independent Claim 17

17[preamble]: A method, comprising:

17[a]: causing, at a first node, display of: a first user interface element, for collecting information associated with at least one folder,

17[b]: a second user interface element, for collecting at least one object associated with at least one email address, the at least one object associated with at least one email address being the at least one email address or an alias associated with the at least one email address, and

17[c] a third user interface element, for detecting an indication of a selection thereof to cause an initiation of a sharing of the at least one folder;

17[d]: causing generation of at least one email, based on the information associated with the at least one folder, the at least one object associated with the at least one email address, and the detection of the indication of the selection of the third user interface element to cause the initiation of the sharing of the at least one folder, where the at least one email: identifies the information associated with the at least one folder, includes an Hypertext Transfer Protocol (HTTP) link, does not include a file attachment, for permitting avoidance of at least one file from being

communicated to and stored at the second node until an initiation of the communication of the at least one file by a user of the second node is detected and the communication commences via at least one server that stores the at least one file, is at least partially pre-written, and is automatically caused to be received without requiring user involvement after the detection of the indication of the selection of the third user interface element to cause the initiation of the sharing of the at least one folder;

17[e]: receiving, from the second node and at at least one server, a signal for causing creation of a first representation of the at least one folder, in a location among one or more folders, that is stored at the at least one server and that is displayable via at least one web page;

17[f]: causing, at the second node, receipt of the at least one web page, that results in display, at the second node and via the at least one web page, the first representation of the at least one folder that is stored at the at least one server; and

17[g]: causing, at the second node, receipt of code for storage at the second node and cooperation with a file explorer interface of a client-based file explorer application, for being utilized to: cause creation of a second representation of the at least one folder, in a location among one or more folders, that is stored at the second node and that is displayable via the file explorer interface of the client-based file explorer application.

Dependent Claim 18

The method of claim 17, wherein the email and the file explorer interface are displayed via separate interfaces for permitting access to the at least one folder via multiple different interfaces based on a detection of an indication that the HTTP link has been selected.

Dependent Claim 19

The method of claim 17, wherein the file explorer interface of the client-based file explorer application is displayed via an interface that does not include a web page displayed via a web browser.

Dependent Claim 20

The method of claim 17, wherein the file explorer interface is part of an operating system of the second node.

Dependent Claim 21

The method of claim 17, wherein at least one of: the first user interface element, the second user interface element, and the third user interface element are caused by sending a first communication; the receipt of the at least one web page is

caused by sending a second communication; or the receipt of the code is caused by sending a third communication.

TABLE OF EXHIBITS

Exhibit	Description
1001	U.S. Patent No. 11,611,520
1002	Declaration of Dr. Todd Mowry
1003	U.S. Patent No. 8,825,597 ("Houston")
1004	U.S. Patent No. 9,633,125 ("Garcia")
1005	U.S. Patent Application Publication No. 2010/0005138 ("Manzano")
1006	U.S. Patent Application Publication No. 2007/0011246 ("Wu")
1007	[Reserved]
1008	U.S. Patent Application Publication No. 2012/0278404 ("Meisels")
1009	U.S. Patent Application Publication No. 2013/0067303 ("Kantor")
1010	[Reserved]
1011	"SugarSync now allows you to work directly in Windows Explorer," D. Mihovilovic, May 6, 2009
1012	Internet Archive Declaration of Nathaniel E Frank-White
1013	*Motion Offense, LLC v. Dropbox, Inc.*, WDTX-6:20-cv-00251, Jury Verdict Form, May 19, 2023, Dkt. 382
1014	'520 Patent File History
1015	U.S. Patent No. 6,351,776 ("O'Brien")
1016	U.S. Patent Application Publication No. 2008/0320397 ("Do")

Exhibit	Description
1017	"Supporting File Sharing Through Improved Awareness," T. Whalen, August 2008
1018	*Motion Offense, LLC v. Dropbox, Inc.*, WDTX-6:23-cv-00303, First Amended Complaint for Patent Infringement, July 26, 2023, Dkt. 22
1019	[Reserved]
1020	[Reserved]
1021	[Reserved]
1022	[Reserved]
1023	*Motion Offense, LLC v. Dropbox, Inc.*, WDTX-6:23-cv-00303, Plaintiff's Disclosure of Preliminary Infringement Contentions, September 20, 2023

CERTIFICATE UNDER 37 CFR § 42.24(d)

Under the provisions of 37 CFR § 42.24(d), the undersigned hereby certifies that the word count for the foregoing Petition for *Inter Partes* Review totals 12,703, which is less than the 14,000 words allowed under 37 CFR § 42.24(a)(1)(i).

Respectfully submitted,

Dated: January 22, 2024

/Scott Bertulli/
Scott Bertulli
Reg. No. 75,886

CERTIFICATE OF SERVICE

I hereby certify that on January 22, 2024, I caused a true and correct copy of the foregoing materials:

- Petition for *Inter Partes* Review of U.S. Patent No. 11,611,520 under 35 U.S.C. § 312 and 37 C.F.R. § 42.104
- Appendix of Claim Listing
- Exhibit List
- Exhibits for Petition for *Inter Partes* Review of U.S. Patent No. 11,611,520 (EX1001-1006, EX1008-1009, EX1011-1018, EX1023)
- Petitioner's Ranking and Explanation of Material Differences Between Petitions
- Power of Attorney
- Fee Authorization
- Word Count Certification Under 37 CFR § 42.24(d)

to be served via Express Mail on the following correspondent of record as listed on USPTO Patent Center:

The Caldwell Firm, LLC
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with a courtesy copy via electronic mail on the following counsel and litigation counsel of record:

Derek Dahlgren (ddahlgren@devlinlawfirm.com)

DATED: January 22, 2024

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