

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DROPBOX, INC.,
Petitioner,

v.

ENTANGLED MEDIA, LLC
Patent Owner.

Case No. IPR2024-00285
U.S. Patent No. 8,484,260

**REQUEST FOR REHEARING FOLLOWING INSTITUTION DECISION
PURSUANT TO 37 C.F.R § 42.71(d)**

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PETITIONER’S EXHIBIT LIST

Exhibit	Description
Ex-1001	U.S. Patent No. 8,484,260 (the “’260 patent”)
Ex-1002	File History of the ’260 patent
Ex-1003	Declaration of Dr. Patrick McDaniel
Ex-1004	CV of Dr. Patrick McDaniel
Ex-1005	U.S. Patent Publication 2007/0016621 (“Havewala”)
Ex-1006	U.S. Patent Publication 2002/0046232 (“Adams”)
Ex-1007	U.S. Patent No. 8,874,691 (“Saridakis”)
Ex-1008	U.S. Patent Publication 2005/0289218 (“Rothman”)
Ex-1009	Dropbox, Inc.’s <i>Sotera</i> Stipulation
Ex-1010	The Linux Information Project, “Metadata Definition.” 2006.
Ex-1011	Wayback printout, “NTFS Master File Table (MFT)”, NTFS.com
Ex-1012	Eberspächer, Jörg and Schollmeier, Rüdiger. “Peer-to-Peer Systems and Applications.” (2005), Chapter 5 First and Second Generation of Peer-to-Peer Systems.
Ex-1013	Frystyk, Henrik. “The World-Wide Web.” (1994).
Ex-1014	Wayback printout, “POSIX® 1003.1 Frequently Asked Questions (FAQ Version 1.10)”
Ex-1015	Sandberg, Russel. “The Sun Network File system: Design, Implementation and Experience.” (2001).
Ex-1016	Wayback printout – “File systems”
Ex-1017	Webpage printout – “Multics”

Ex-1018	Sandberg, Russel, et al. “Design and implementation of the Sun network file system.” Proceedings of the summer 1985 USENIX conference. 1985.
Ex-1019	[Reserved]
Ex-1020	Wayback printout – Napster
Ex-1021	Shuler, Rus. “How Does the Internet Work?” (2002).
Ex-1022	Fox, Geoffrey and Pallickara, Shrideep. “Peer-to-Peer Interactions in Web Brokering Systems.” (2002).
Ex-1023	Wayback printout – Introduction to Linux Loadable Kernel Modules
Ex-1024	Webpage printout – Deploying your hardware and software systems
Ex-1025	Wayback printout – Invasion of the Data Snatchers
Ex-1026	Warrick, R. Drake. “File Management: My Computer and Explorer.” (2002).
Ex-1027	MacManus, Richard. “Microsoft has 97% of OS market, says OneStat.com.” (2006)
Ex-1028	Alan Freedman, Computer Desktop Encyclopedia, Ninth Edition, Osborne/McGraw-Hill, 2001.

I. INTRODUCTION

Petitioner respectfully requests rehearing pursuant to 37 C.F.R. § 42.71(d) for claims 1-8 of U.S. Patent 8,484,260 (the “’260 Patent”). In its Decision Denying Institution (“Decision”), the Board:

1. **Overlooked** the evidence in the Petition showing that Havewala discloses “a **request to operate** on a file at a first device”;
2. **Misapprehended** the evidence in the Petition showing that Havewala discloses “**intercepting the request** by a software client on the first device”;
3. **Misapprehended** limitation 1[D]’s requirements; and
4. **Misapprehended** limitation 1[D]’s “determining” step as narrowly tied to the “request” limitations.

It is respectfully submitted that had the Board not adopted Patent Owner’s arguments resulting in misapprehending and overlooking the evidence provided in the Grounds of the Petition, that the Board would have instituted this IPR. Petitioner sets forth the detailed basis for this Request for Rehearing below, as required by 37 C.F.R. § 42.71(d). This Request is timely filed and is permitted under 37 C.F.R. §§ 42.71(c) and 42.71(d) without prior authorization of the Board.

II. SPECIFIC BASIS FOR REQUESTED RELIEF

A. The Decision Overlooked the Petition’s Evidence of the Full Scope of Havewala’s Disclosed “Request to Access”

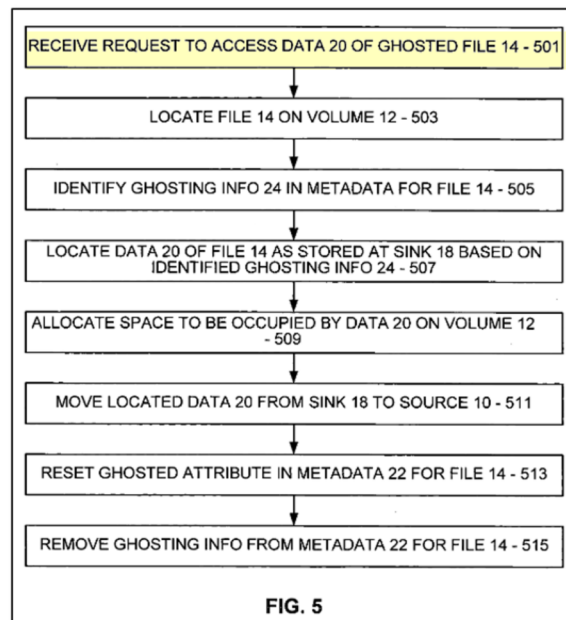
The Board denied Petitioner’s Grounds 1, 2, and 3 based on its finding that Havewala does not disclose limitation 1[C]: “**intercepting the request** by a software client on the first device.” Decision at 16. In particular, the Board explained that “the request” in limitation 1[C] relies on limitation 1[A] for its antecedent basis. Decision at 17. Limitation 1[A] recites: “**accepting a request** to operate on a file at a first device” Thus, according to the Decision, the claim “requires that the same ‘request’ be both accepted and intercepted.” *Id.*

Then, in analyzing Havewala’s disclosures, the Board concluded that the same “request” is not both accepted and intercepted. The Board found that Petitioner relied exclusively on Havewala’s “open” command as the disclosed “request to operate on a file,” and further found that this “open” command was not intercepted as required by limitation 1[C]. Decision at 17-18.

Petitioner respectfully disagrees with the Board’s analysis which misapprehended and overlooked that Havewala discloses limitations 1[A] and 1[C]. Specifically, the Board misapprehended Havewala’s disclosed “request to access” that encompasses both Havewala’s “open” and “read” commands, all of which are

covered by the claimed “request to operate on a file.”¹ Decision at 16. The Petition provided unchallenged evidence that Havewala uses the terms “open,” “read,” and “request to access” all to describe the same action of a “request to operate on a file” that is recited by limitations 1[A] and 1[C].

For instance, the Petition points to Figure 5 and highlights that “Havewala confirms that its system ‘receive[s] [a] request to access’ or open the file that is ghosted on the first device.” Pet. at 20, 21; *see also* Ex-1005, FIG. 5.



¹ A request to access, open, or read a file, is more than just the communicated message. The overall request includes the initial communication to access the file and the resulting various operations (e.g., open and read commands) to process the overarching request. *See* Ex-1005, FIG. 5 and FIG. 6.

Moreover, the Petition also cites to Havewala's paragraphs 59 and 66, which further confirm Havewala's use of "request to access," "open," and "read," as all being part of the same "request to operate on a file." Pet. at 21. For example, Havewala specifically discloses that "**a request to access** the stored data 20 of the ghosted file 14 may be received from an application" (Ex-1005, ¶ 59) and that the "application 30 wishing to **read** such data 20 from such file 14 typically achieves such a function by issuing an **open command** to the file system with regard to the file 14, and then issuing a **read command** to the file system 16 with regard to such **opened** file 14" (*id.*, ¶ 66). This single "request to operate on a file" (*i.e.*, opening and reading) a file is (i) identical to the request in the challenged patent (EX-1001 8:31-35), and (ii) is irrefutable and unchallenged evidence of the claimed request.

Having overlooked this important evidence for limitation 1[A], the Board carried forward its misunderstanding in analyzing limitation 1[C]. The Board determined that the Petitioner "relie[d] on a different feature [*i.e.*, "read"] than it relied on for the same 'request' [*i.e.*, "open"] in limitation 1[A]." Decision at 19. However, Havewala's "open" and "read" are not unrelated, as shown above, but part of Havewala's disclosed process for requesting to operate on a file. Therefore, as further discussed below, the Board overlooked strong evidence that Havewala plainly discloses limitation 1[C] by intercepting an application's "read" command, which is part of the request to operate on the file.

B. The Board Misapprehended or Overlooked the Petition’s Evidence of Havewala’s Disclosure of the Claimed “Request”

Limitation 1[C] requires “intercepting the request by a software client on the first device.” The Board determined that Petitioner did not sufficiently show that Havewala teaches this limitation. Decision at 20. Its reasoning was three-fold: (1) Petitioner pointed to Havewala’s “open” message for “accepting a request” in limitation 1[A] and Havewala’s “error” message for “intercepting the request” in limitation 1[C], such that “Petitioner fails to adequately demonstrate that Havewala teaches the same ‘request’ is first accepted and then intercepted” (Decision at 18); (2) Havewala’s “error” message is not a request but instead a response to the “open” message (*id.* at 18-19); and (3) to the extent that Petitioner pointed to Havewala’s “read” command for “intercepting the request” in limitation 1[C], it is not the same “request” on which Petitioner relied for “accepting a request” in limitation 1[A] (*id.* at 19-20). But, in so concluding, the Board misapprehended the scope of Havewala’s disclosed “request to access” and overlooked Petitioner’s arguments outlining how such “request” is intercepted per limitation 1[C] in Havewala.

1. The Board Misapprehended Havewala’s Open and Read Commands as Unrelated Requests.

The Board’s analysis of limitation 1[C] misapprehends Havewala’s “open” and “read” commands as two unrelated “requests.” Decision at 16. Because of this, the Board determined that the Petition only relied on “open” commands as providing

the antecedent basis for “the request” recited in limitation 1[C]. *Id.* at 17. Therefore, according to the Board, the Petition’s relying on “read” commands for the same claimed request was an “inconsistency [that was] fatal to Petitioner’s argument.” *Id.* at 19. However, as noted above, Havewala’s “open,” and “read” commands are both part of the same “request to operate on a file.” Stated differently, Havewala’s application 30 requests accessing or opening the file, which is followed by a number of sequential steps, which includes a read command intercepted by the ghost filter, that all form part of the same “request to operate on a file” as recited element 1[A]. Thus, it is respectfully submitted that the Board overlooked key evidence in Havewala disclosing “intercepting the request” to operate on a file as required by limitation 1[C].

The Board acknowledged that the Petition pointed to evidence in Havewala disclosing that “the ghosting filter **stores the read command** in a queue or the like for **awaiting further processing** (step 613).” Decision at 19; Pet. at 34; Ex-1005, ¶ 71. However, the Board determined that “Petitioner fail[ed] to articulate any further argument about *how* Havewala’s processing of the ‘read’ command allegedly satisfies” limitation 1[C]. Decision at 19. In doing so, respectfully, the Board overlooked critical evidence and arguments.

First, the Board overlooked the evidence that Havewala’s ghosting filter receives and stores the read command in a queue. This receiving and storing is the

claimed “intercepting.” The read command that is part of Havewala’s request to operate on a file is stored in the queue to await further processing. Pet. at 33 – 34; Ex-1005 ¶ 64. To store the read command, the ghosting filter first receives it. Indeed, the Petition cites to step 613 of Havewala (Pet. at 34) which follows step 611 of Figure 6, which the Board relied on in analyzing limitation 1[C] (Decision at 19). At step 611, the ghosting filter “receive[s] read command for ghosted file from [application] 30.” Ex-1005, FIG. 6. Then, at step 613, the ghosting filter stores the read command in a queue. *Id.*; Pet. at 34. In other words, the request to access is neither stored nor processed until after ghosting filter intercepts (e.g., receives and stores for later processing) the request on its way to the file system.

Second, Petitioner respectfully asserts that the Board overlooked that the Petition summarized the evidence from Havewala for limitation 1[C]:

Therefore, Havewala discloses “**intercepting the request** [e.g., **ghosting filter 26 intercepting an access request**] by a software client [e.g., Havewala’s ghosting manager and ghosting filter] on the first device [e.g., computer device/source 10].

Pet. at 34. The Petition explicitly analogized the claimed “intercepting the request” to Havewala’s “ghosting filter 26 intercepting an **access request**,” which includes the open and read commands.

As a result, Petitioner respectfully asserts that the Board misapprehended the

arguments and overlooked Havewala's disclosures, as it is clear that Havewala's ghosting filter intercepts the request to operate on a file (in the form of the read command) and stores it in a queue for further processing before sending it to the file system.

2. The Board Overlooked Havewala's Ghosting Filter Intercepting the Error Message to Effectuate the Entirety of the Request to Access

The Board found that "Petitioner point[ed] to two different features of Havewala [error message and open command] for teaching the same required 'request' in claim 1." Decision at 18. However, as presented in the Petition, the error message was only presented as independent and supplemental evidence of interception of the overall request to access the file. The Petition primarily pointed to Havewala's ghosting filter that itself intercepted the request to access the file (here in the form of the read command). *See supra* II(B)(1).

That said, Havewala's interception of the error message is further independent evidence of meeting limitation 1(C) because Havewala's "request to access" includes a series of steps including the open and read commands, and also the related error message from the file system, which are all part of the claimed "request to operate on a file."

Thus, in deciding that Havewala fails to disclose "intercepting the request by a software client," Petitioner respectfully asserts that the Board (1) overlooked

Havewala's receipt of the request to access the file via the read command, and (2) excluded the "error message," which are all part of the claimed "request to operate on a file."

C. The Board Misapprehends Claim 1 by Ignoring the Full Language of Limitation 1[D]

Limitation 1[D] states: "determining by the software client...if the file is a virtual file of a corresponding file physically stored on a second device by reviewing the file metadata."

Patent Owner misled the Board into adopting a narrow and incorrect reading of limitation 1[D]. Patent Owner contended, and the Board agreed, that Havewala's ghosting filter "does not determine whether a file is virtual." Decision at 20. Instead, Patent Owner argued that Havewala makes that determination "based on whether the requested file's data has been removed" and not based on "metadata" as required by limitation 1[D]. *Id.* at 21. Patent Owner also noted that "the ghosting filter learns that a file has been 'ghosted' not by analyzing any file metadata, but simply by receiving an error message from the file system." *Id.* at 20-21. Patent Owner further contended that "to the extent the ghosting filter checks the file's metadata to learn where the file is located, that occurs only after the file system has already determined whether the file is virtual." *Id.* at 21. The Board agreed on each of these points.

However, the evidence in Havewala is clear that the file system (and the

ghosting filter) does not learn from the error message alone whether the requested file is the claimed virtual file or not, rather the file system only learns that “the ghosted file 14 does not contain removed data 20 and thus return[ed] [the] error which the ghosting filter 26 will intercept.” Pet. at 33; Ex-1005, ¶ 64. The Petition also makes clear that the file system is unaware whether a file is virtual. Pet. at 24-29. A file system may return a missing data error for several reasons (*e.g.*, the file may be corrupt or damaged), which cannot provide any certainty whether that file is the claimed virtual file. In fact, paragraph 68 of Havewala even states that the “ghosting filter 26 intercepts such returned error and **perceives** based thereon that the file 14 at issue is in fact in a **ghosted format** (step 605),” *i.e.*, this is just an initial **perception** that the file is in the ghosted format, but it is not until the “ghosting filter 26 itself commands the file system 16 to retrieve the ghosting information 24 from such ghosted file 14 and **in fact receives such ghosting information 24** (step 607)” that it determines whether it is a ghosted file. In other words, the only way that the ghosting filter can determine whether a file is virtual, and if so, the location of its corresponding physical file, is by examining the file’s metadata.

Moreover, the Board observed that limitation 1[D] “recited that a determination is made as to whether the file represented in the file system on the first device is a virtual file of a corresponding file physically stored on a second device (*i.e.*, a ghosted file).” Decision at 21. However, due to Patent Owner’s misleading

arguments, the Board subsequently misapprehended the claim language as requiring only that the software client determine whether the file is virtual and disregarded the requirement to determine the virtual file has “a corresponding file physically stored on a second device by reviewing metadata.” *Id.*

The claimed “virtual file” is a specific type of file—one that corresponds to “[a] file physically **stored on a second device.**” Thus, the claim language requires the software client to determine whether the virtual file is the claimed virtual file by using metadata to determine the location of the virtual file’s corresponding physical file at a second device. As shown in the Petition, Havewala discloses exactly this. Pet. at 37-38.

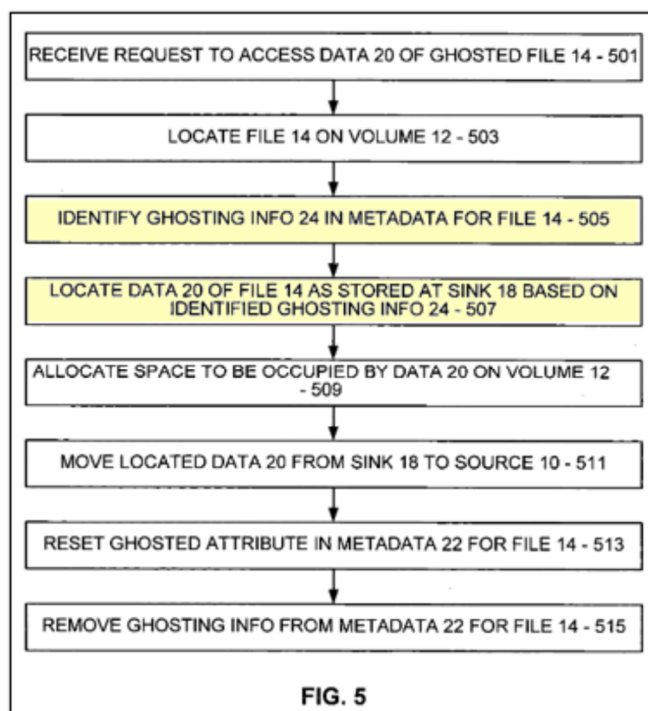
In concluding that Havewala’s ghosting filter merely determines the virtual status of a file “based on the receipt of a return error message, not any file metadata,” the Board relies on paragraph 68 of Havewala which states: “the ghosting filter 26 intercepts such returned error and *perceives based thereon* that the file 14 at issue is in fact in a **ghosted format** (step 605).” Decision at 22. Petitioner does not dispute that the ghosting filter initially **perceives** that a file is in **ghosted format** upon intercepting the error message. But, as discussed above, merely **perceiving the file format** is not what the claim requires. Rather, the software client must determine “if the file is a virtual file **of a corresponding file physically stored on a second device** by reviewing file metadata.”

The Petition points to strong evidence in Havewala showing that the ghosting filter, “upon interception” of the error message, “employs the file system 16 to obtain the ghosting information 24 from the metadata 22 for the ghosted file 14,” (Ex-1005, ¶ 64) to *confirm* that it is the claimed virtual file (*i.e.*, a virtual file of a corresponding file physically stored on a second device):

Havewala further discloses that after such interception, the ghosting filter “obtain[s] the **ghosting information 24 from the metadata 22** for the ghosted file 14” (*id.*, ¶64) and that the “data 20 of the file 14 as stored at the sink 18 is located based on such identified ghosting information” (*id.*, ¶60).

Pet. at 38.

Furthermore, the operations “shown in Figure 5, below, [] are ‘performed with the aid of a **ghosting** filter.’” *Id.*; Ex-1005, FIG. 5, ¶ 64. The ghosting filter “identif[ies] ghosting info 24 in **metadata** for file 14” then “based on identified ghosting info” (*i.e.*, upon reviewing metadata) “locate[s] data 20 of file 14 as stored at sink 18” (confirming that file is the claimed virtual file of a corresponding file physically stored on a second device). Pet. at 39; Ex-1005, FIG. 5.



While Havewala’s ghosting filter cannot determine from the error message that the file is the claimed virtual file, nothing in the claim language precludes the software client from making a determination that the file is virtual via some means other than metadata, *and then* performing the required step of reviewing metadata to confirm that the virtual file is the claimed virtual file—one that corresponds to a physical file stored on a second device.

Thus, Patent Owner misled the Board to misapprehend the claim language of limitation 1[D] and the Board overlooked evidence in Havewala disclosing that the ghosting filter “determinin[es] ... if the file is a virtual file of a corresponding file physically stored on a second device by reviewing file metadata.”

D. Board Incorrectly Ties Limitation 1[A] and 1[C]’s Request to Limitation 1[D]’s Metadata

Respectfully, the Board also misapprehended limitation 1[D] and the corresponding arguments regarding Havewala by tying the “determining” limitation to the claimed “request” in limitations 1[A] and [C]. Decision at 22-23. Specifically, the Board determined that Petitioner failed to show that Havewala teaches the “determining” limitation because (1) “‘Open’ requests are not intercepted by the client software, and thus cannot be used to satisfy this limitation,” and (2) “Petitioner fails to explain adequately how ‘read’ requests use file metadata.” *Id.* at 22.

The Board appears to have found that “determining by the software client...if the file is a virtual file...by reviewing file metadata...” is somehow based on the earlier recited “request to operate on the file.” However, the language of limitation 1[D] is not tied or limited to the “request” in any way.

To the extent the Board interprets the claim to require an order of operations between limitations 1[A], [C], and [D] by requiring that the “request” is accepted and intercepted prior to the ghosting filter determining if a file is a virtual file of a corresponding file physically stored on a second device by reviewing file metadata,” it would be improper to do so. The language of limitation 1[D] is not linked to the “request” of limitations 1[A] and 1[C]. Patent Owner could have based the determining limitation on the claimed request but chose not to do so. *See Altiris Inc.*

v. Symantec Corp., 318 F.3d 1363 (Fed. Cir. 2003). Thus, there is no order of operation for limitations 1[A], [C], and [D] mandated by the claim.

In improperly tying the “determining” limitation to the “request” limitations, the Board overlooked the Petitioner’s argument that when the ghosting filter (*i.e.*, software client) “obtains the **ghosting information 24 from the metadata 22** for the ghosted file 14 [Ex-1005, ¶64] and that the ‘data 20 of the file 14 as stored at the sink 18 is **located** based on such identified ghosting information’ (*id.*, ¶60).” Petition at 38. In any event, Havewala’s “request to access” a file, which corresponds to the claimed “request to operate on a file,” includes a series of steps, and the ghosting filter’s analysis of the virtual file’s metadata occurs in sequence after the initial request to access the file is made (as well as the open and read commands).

III. CONCLUSION

For the foregoing reasons, and those discussed in the Petition, Petitioner respectfully request that a rehearing be granted and that the Board reconsider its decision and institute trial in this proceeding.

Dated: July 8, 2024

Respectfully Submitted,

/ Dion M. Bregman /

Dion M. Bregman

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.105, lead counsel for Petitioner hereby certifies that on July 8, 2024, copies of this PETITIONER'S REQUEST FOR REHEARING FOLLOWING INSTITUTION DECISION UNDER 37 C.F.R. § 42.71(d) was sent via email to counsel of record in this proceeding:

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Dated: July 8, 2024

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