

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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NETAPP, INC. and HEWLETT PACKARD ENTERPRISE CO.,  
Petitioner,

v.

KOM SOFTWARE, INC.,  
Patent Owner.

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Case IPR2019-00601  
Patent 7,392,234 B2

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Before KIMBERLY McGRAW, DANIEL J. GALLIGAN, and  
BRENT M. DOUGAL, *Administrative Patent Judges*.

DOUGAL, *Administrative Patent Judge*.

DECISION  
Institution of *Inter Partes* Review  
35 U.S.C. § 314

## I. INTRODUCTION

### A. Background

NetApp, Inc. and Hewlett Packard Enterprise Co. (collectively “Petitioner”) filed a Petition to institute an *inter partes* review of claims 1–7, 45–57, and 59 (the “challenged claims”) of U.S. Patent No. 7,392,234 B2 (“the ’234 patent”). Paper 3 (“Pet.”). KOM Software, Inc. (“Patent Owner”) filed a Preliminary Response. Paper 9 (“Prelim. Resp.”).

The standard for institution is set forth in 35 U.S.C. § 314(a), which provides that an *inter partes* review may not be instituted “unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” We have authority to institute under 37 C.F.R. § 42.4(a). For the reasons described below, we conclude that Petitioner has shown a reasonable likelihood it would prevail in establishing the unpatentability of the challenged claims. We, therefore, institute an *inter partes* review of the ’234 patent in this proceeding.

### B. Related Proceedings

The parties state that the ’234 patent is involved in (1) *KOM Software Inc. v. Hitachi Vantara Corp.*, Case No. 1-18-cv-00158 (D. Del.); (2) *KOM Software Inc. v. Hewlett Packard Enterprise Co.*, Case No. 1-18-cv-00159 (D. Del.); and (3) *KOM Software Inc. v. NetApp, Inc.*, Case No. 1-18-cv-00160 (D. Del.). Pet. 68; Paper 8, 2. The parties also state that the ’234 patent is involved in IPR2019-00603 and that both IPR2019-00591 and IPR2019-00592 involve related patents. Pet. 68; Paper 8, 2–3.

### C. The ’234 Patent

The ’234 patent (Ex. 1001), titled “Method and system for electronic file lifecycle management,” relates generally to methods that associate a set of policies with each electronic file or storage used for each electronic file,

where the policies control the lifecycle of the associated electronic files stored on the system. Ex. 1001, [57], 2:44–53, 4:66–5:11, 5:33–6:60. As shown in Figure 2, reproduced below, a virtual filing cabinet can be used to manage the lifecycle of a file.

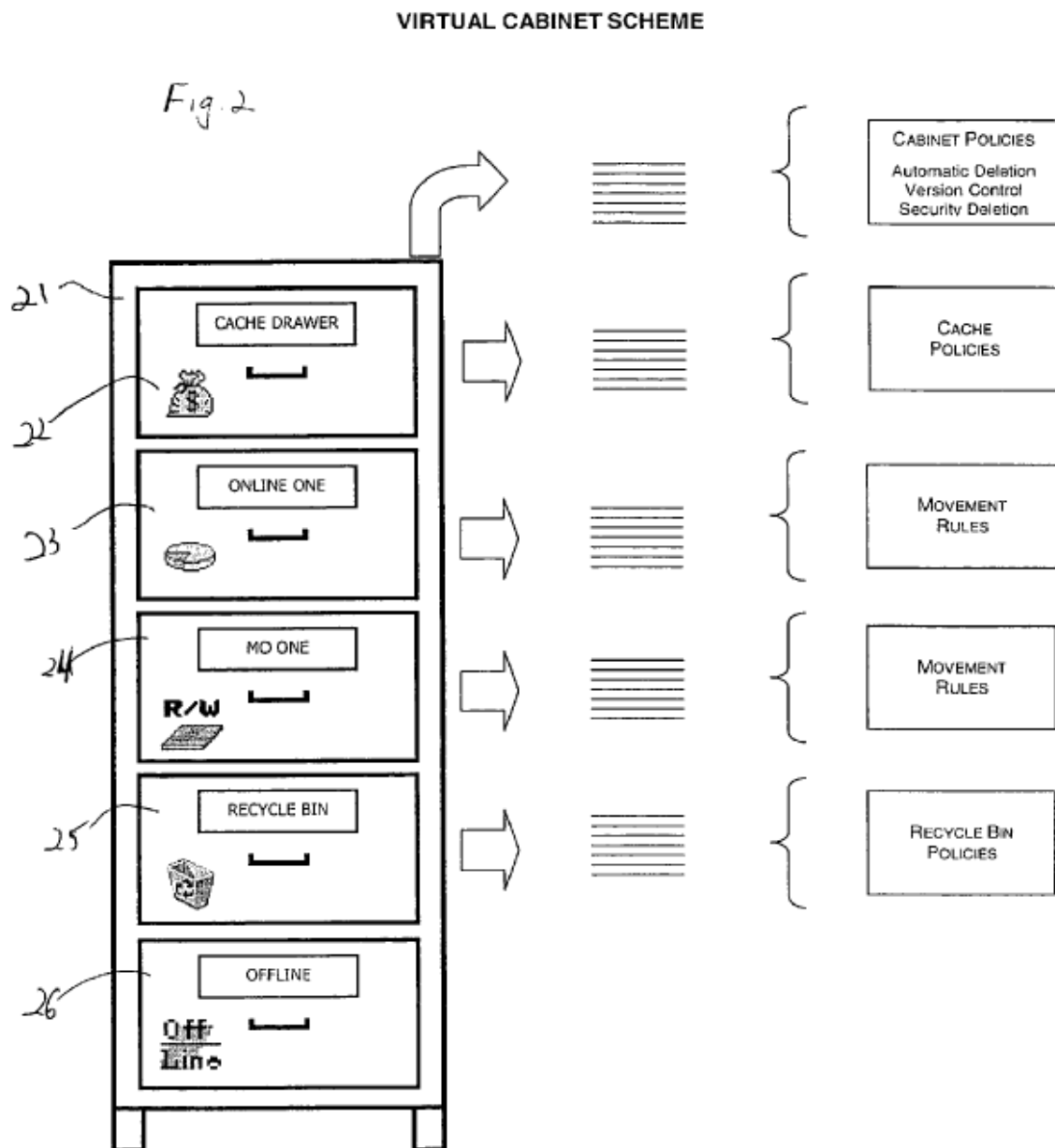


Figure 2 above illustrates a virtual filing cabinet. *Id.* at 3:65. Files can be automatically moved between virtual drawers of the filing cabinet based on managing policies “and as such, a file’s lifecycle is managed from

file creation to file deletion in an automated fashion.” *Id.* at [57]. The virtual cabinet and drawers can span multiple storage media and can be indefinite in size. *Id.* at 4:29–34.

*D. Illustrative Claim*

Of the challenged claims, claims 1, 45, and 51 are independent. Each of dependent claims 2–7, 46–50, 52–57, and 59 depends directly or indirectly from its respective independent claim 1, 45, or 51. Illustrative claim 1, with bracketed material added, is reproduced below.

1. [a] A computer-implemented method of managing a file lifecycle, the method comprising the steps of storing data on a storage medium comprising:

[b] associating a set of lifecycle policies with a file in a file system, wherein said lifecycle policies relate to aspects of file classification and file disposition including at least one of: file creation, file retention, file reference, file non-use, file security, file protection, file preservation, file storage locations within a storage medium, cost effective storage of a file, or file expiration;

[c] storing said file on said storage medium accessible by a computer according to said set of lifecycle policies;

[d] automatically determining from the associated lifecycle policies whenever said file is to be moved;

[e] automatically moving said file according to the associated lifecycle policies to another storage location within said storage medium or within a different storage medium whenever the associated lifecycle policies determine that said file is to be moved; and

[f] receiving an access request for said file from an application;

[g] providing transparent access to said requested file based on said associated set of lifecycle policies, regardless of where said file is located, and independently of said application requesting access to said file.

Ex. 1001, 14:1–28.

*E. Level of Ordinary Skill*

Petitioner states that a person of ordinary skill “would have held either a bachelor’s degree in computer engineering or computer science with two years of experience in the field of data storage management or a master’s degree in either discipline with an emphasis on data storage management.” Pet. 9 (citing Ex. 1002, Declaration of Darrell Long, Ph.D. ¶¶ 33–36).

Patent Owner does not contest Petitioner’s definition of the level of ordinary skill at this stage of the proceeding. Prelim. Resp. 6. We are persuaded, on the present record, that Petitioner’s proposal is consistent with the problems and solutions in the ’234 patent and prior art of record. *See, e.g., In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (“In determining this skill level, the court may consider various factors including type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” (citations and internal quotations omitted)). Therefore, we adopt Petitioner’s definition of the level of ordinary skill in the art for the purposes of this Decision.

*F. Claim Construction*

The Petition was accorded a filing date of January 24, 2019. Paper 4, 1. In an *inter partes* review for a petition filed on or after November 13, 2018, a claim “shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. § 282(b).” 37 C.F.R. § 42.100(b); *see* Changes to the Claim Construction Standard for Interpreting Claims in Trial Proceedings Before the Patent Trial and Appeal Board, 83 Fed. Reg. 51,340 (Oct. 11,

2018) (codified at 37 C.F.R. § 42.100(b) (2019)) (amending 37 C.F.R. § 42.100(b) effective November 13, 2018).

Neither party asserts that any construction of claim terms is required to resolve issues in dispute. *See* Pet. 9–10 (stating that Petitioner analyzes the claims using the “same constructions it presented in district court”); Prelim. Resp. 7 (stating Patent Owner does not take a position on claim construction for any terms of the ’234 patent at this time). For purposes of this Decision, we do not find it necessary to expressly construe any claim terms. *See, e.g., Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (“[W]e need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy’ . . . .” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

*G. The Alleged Ground of Unpatentability*

Petitioner contends that the challenged claims are unpatentable under 35 U.S.C. § 103(a) based on the following ground:<sup>1</sup>

References	Claims Challenged
Sitka <sup>2</sup> and Cannon <sup>3</sup>	1–7, 45–57, and 59

*1. Sitka (Ex. 1005)*

Sitka “relates to data storage and, more particularly, to systems and methods for hierarchical storage management [(HSM)].” Ex. 1005, 1:9–11. “The system and method are especially useful in managing the storage of larger files that include graphic imagery.” *Id.* at 1:65–67. The system can

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<sup>1</sup> Petitioner supports its challenge with a Declaration of Darrell Long, Ph.D. (Ex. 1002).

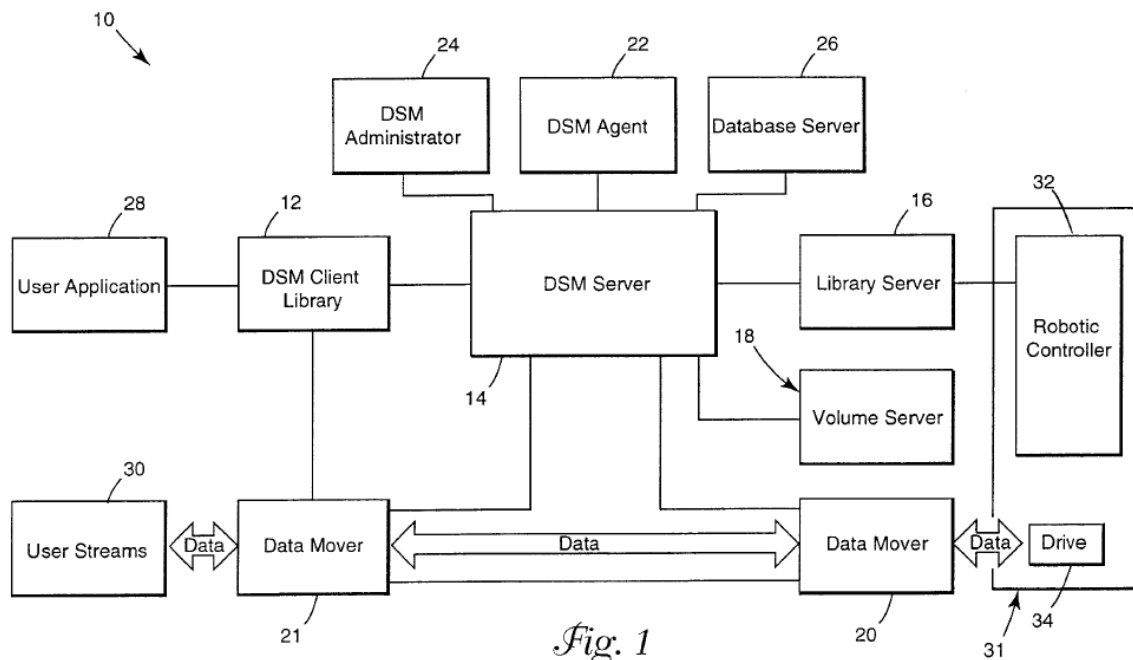
<sup>2</sup> Ex. 1005, U.S. Pat. 6,330,572 B1 (Dec. 11, 2001) (“Sitka”).

<sup>3</sup> Ex. 1006, U.S. Pat. 6,021,415 (Feb. 1, 2000) (“Cannon”).

be used to group multiple images for storage and to apply processes to multiple images in a batch. *Id.* at 2:4–13, 2:33–53.

Sitka describes its system as a “directed storage management (‘DSM’) system” that “allows a system administrator to introduce, on a selective and reconfigurable basis, significant direction concerning storage management policies including migration.” *Id.* at 8:13–17. Sitka explains that its system differs from a “simple” HSM system because clients and an administrator “have the ability to direct a file to a particular location” and the system “provides a much broader set of data-movement policies than a typical HSM.” Sitka, 8:17–26.

Figure 1 of Sitka, reproduced below, illustrates the architecture of the DSM system.



As shown in Figure 1, the DSM system 10 is implemented as a software system having a collection of logical software components. *Id.* at 8:50–52. The DSM server works in conjunction with DSM Agents 22 to implement policies set up by the administrator, including migrating files

from one DSM storage location to another or deleting files of a certain age. *Id.* at 16:66–17:14. The DSM server is also connected to a database server that maintains information including “file metadata, including the security attributes and media locations of each file [and] . . . policy parameters used by the DSM server and DSM agents.” *Id.* at 17:15–30.

Sitka teaches numerous policies for maintaining copies of files in stores and dealing with media and volumes. *Id.* at 17:32–43. Exemplary policies include: (1) a migration policy (*id.* at 17:44–53), (2) a deletion policy (*id.* at 17:54–18:1), (3) a chunking policy (*id.* at 18:4–10), (4) a volume selection policy (*id.* at 18:10–19), (5) a drive selection policy (*id.* at 18:20–22), (6) a shelf management policy (*id.* at 18:23–38), (7) an inventory policy (*id.* at 18:39–42), and (8) various miscellaneous policies (*id.* at 18:42–45).

For example, Sitka’s migration policy is used to migrate files from one DSM store to another, “e.g., from a RAID disk to a magneto optical (MO) drive and/or to a tape drive.” *Id.* at 17:2–6. Sitka discloses that a migration policy may consider factors such as (1) remaining free space, (2) target stores (e.g., collecting like media in one place), (3) ranking criteria such as age and recent use, and (4) a migration time window. *Id.* at 17:44–53, 8:31–32.

## 2. Cannon

Cannon “relates to the storage of digital data signals.” Ex. 1006, 1:9–10. “[T]he subsystem creates a contiguous managed file by aggregating selected received user files in accordance with certain predetermined criteria.” *Id.* at 2:20–24. The system manages storage space by reclaiming



space when certain criteria are met, after files have been deleted from the storage. *Id.* at [57]; *see also id.* at 2:48–62.

## II. ANALYSIS

We turn now to Petitioner’s asserted ground of unpatentability and Patent Owner’s arguments to determine whether Petitioner has met the threshold standard of 35 U.S.C. § 314(a).

### A. *Claims 1–7, 45–57, and 59 — Alleged Obviousness over Sitka and Cannon*

Petitioner asserts that claims 1–7, 45–57, and 59 would have been obvious over Sitka and Cannon. *See* Pet. 8–9, 19–68. Patent Owner opposes. *See* Prelim. Resp. 7–18. For the reasons set forth below, we determine Petitioner has demonstrated a reasonable likelihood of prevailing on its assertion that claims 1–7, 45–57, and 59 are unpatentable over Sitka and Cannon.

#### 1. *Independent Claims 1, 45, and 51*

Petitioner asserts that Sitka and Cannon teach or suggest each limitation of independent claims 1, 45, and 51. Pet. 23–38, 51–64. For example, Petitioner asserts that Sitka<sup>4</sup> teaches the computer-implemented

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<sup>4</sup> Sitka claims priority to U.S. provisional application 60/092,853, filed on July 15, 1998. Petitioner’s discussion of Sitka cites to Sitka, as well as the priority application (’853 provisional). Because Patent Owner does not assert that the challenged claims of the ’234 patent are entitled to the benefit of a filing date earlier than Sitka’s filing date, we do not include Petitioner’s cites to the ’853 provisional herein. *See Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1326–28 (Fed. Cir. 2008) (discussing parties’ respective burdens of production in the context of prior art and priority); *see also Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378–

methods of managing a file lifecycle as required by independent claims 1, 45, and 51.<sup>5</sup> *Id.* at 23 (citing Ex. 1005, 1:15–30, 8:50–52, 3:64–4:8, 10:17–31; Ex. 1002 ¶ 65). Petitioner further asserts that Sitka teaches or suggests all of the additional limitations of claim 1. *Id.* at 23–38.

Petitioner relies on Cannon primarily in the case that “*Sitka* [is] deemed not to provide an explicit example of associating policies with individual files.” *Id.* at 20. Petitioner asserts that “[i]t would have been obvious to one of ordinary skill to associate *Sitka*’s policies with individual files in view of *Cannon*” as a matter of design choice and, *inter alia*, to provide additional control over file management. *Id.* at 19–23 (citing Ex. 1002 ¶¶ 57–64); *see also id.* at 25–26.

We have reviewed the Petition, Patent Owner’s Preliminary Response, and the parties’ supporting evidence. On this record, we determine Petitioner has shown a reasonable likelihood that Sitka, as well as the combination of Sitka and Cannon, teaches each limitation of claims 1, 45, and 51 and has demonstrated sufficiently, for purposes of this Decision, that one of ordinary skill in the art would have had reason to combine the teachings of the references in the manner proposed by Petitioner. Pet. 8–9, 19–68; Ex. 1002 ¶¶ 57–157. We address Patent Owner’s arguments to the contrary below.

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1380 (Fed. Cir. 2015) (discussing burdens of production in *inter partes* review).

<sup>5</sup> Independent claims 45 and 51 include limitations similar to claim 1 discussed herein. Petitioner’s analysis of these claims is similar to the analysis of claim 1. *Compare* Pet. 51–59 and 60–64, *with id.* at 23–38. Patent Owner argues the three independent claims together without distinction. We focus on claim 1 for ease of clarity; however, our analysis and conclusions apply equally to the other two independent claims.

*i. Transparent Access Regardless of File Location*

Patent Owner argues that Sitka and Cannon do not teach or suggest “the step[] of storing data on a storage medium comprising:” “providing transparent access to said requested file . . . , regardless of where said file is located” as required by element [g] of claim 1. *See generally* Prelim. Resp. 11–13. Independent claims 45 and 51 recite the same or similar limitations.

Petitioner asserts that the limitations of claim element 1[g], and the corresponding limitations of claims 45 and 51, are disclosed by both Sitka and Cannon. *See* Pet. 34–38. For example, Petitioner argues that transparent access requires “‘access [to] the file regardless of the file’s new location and without having to know where the file is physically located’” because this is how the term was defined during prosecution of the ’234 patent.<sup>6</sup> Pet. 35 (quoting Ex. 1004, 58). Petitioner asserts that Sitka teaches transparent access because, among other things, Sitka teaches that “data can be stored on particular volumes without knowledge of the media type of the volume” (*id.* at 35 (quoting Ex. 1005, 2:54–56) and “that the DSM server process ‘translate[s] requests for files into requests for data transfer to or from specific media/volume locations’” (*id.* (quoting Ex. 1005, 9:44–46)). Petitioner asserts that, “because *Sitka*’s DSM server translates file requests into requests from media/volume locations, the server requires only a request for a ‘file,’ and not a request tied to a specific location,” thus teaching that transparent access is provided “regardless of where said file is located.” *Id.* at 35–36.

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<sup>6</sup> Patent Owner does not contest Petitioner’s assertion of what is required for transparent access. *See generally*, Prelim. Resp. 11–13.

Petitioner also asserts that even if Sitka did not disclose providing transparent access, this is taught by Cannon. *Id.* at 37 (citing Ex. 1006, 2:24–25, 6:56–58). Petitioner contends it would have been “obvious to provide access to *Sitka*’s files in a ‘transparent’ manner based on *Cannon*’s teachings to simplify user and application access to files and because of *Cannon*’s teaching that such transparency is ‘[e]specially advantageous.’” *Id.* at 37 (citing Ex. 1006, 3:34–35, Ex. 1002 ¶ 91).

Patent Owner responds that neither Sitka nor Cannon teach “providing transparent access” to a requested file as required by the independent claims. Prelim. Resp. 11–13. Patent Owner first argues that “Sitka teaches away from transparent access when it recites: ‘when a user requests a particular file, . . . not currently loaded into the longer-term storage device, the system *generates a request for personnel to physically locate the media and load it into the storage device.*’” Prelim. Resp. 11–12 (quoting Ex. 1005, 1:59–60 (Patent Owner’s emphasis)).

We disagree with Patent Owner. First, Patent Owner quotes from the Sitka’s background, rather than from the description of the invention. As can be seen above, Petitioner does not rely on Sitka’s background for teaching or suggesting the relevant limitation. Pet. 34–37. Further, Patent Owner does not identify, and we do not see, anything in Sitka that would require the system to be used with offline storage media where a person is required to physically locate the media. Finally, a teaching away requires more than just the description of an embodiment or the prior art. Patent Owner has not identified any disclosures that criticize, discredit, or otherwise discourage the solution claimed. *See In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004).

Patent Owner also contends Sitka does not disclose providing “transparent access” to a requested file because certain embodiments require “manual media operations” that “may require mounting one or more volumes, which could take some time.” Pet. 11–12 (citing Ex. 1005, 9:44–48, 9:66–67, 19:56–57) (emphasis omitted). These arguments are not persuasive as Petitioner does not appear to rely on these embodiments, and nothing in Sitka would appear to require that the system use manual media operations. Based on the current record, Petitioner has shown a reasonable likelihood that Sitka teaches providing “transparent access” to a requested file as required by the independent claims.

Patent Owner also argues Cannon does not teach “transparent access . . . *regardless of where said file is located*” as recited in claim element 1[g]. See Prelim. Resp. 12–13, 15–16. Patent Owner contends that Cannon’s system merely describes “a single way of transparently accessing an individual file” based on how the file is stored and not regardless of *where* it is stored. *Id.* at 13 (citing Ex. 1006, 6:56–59). Patent Owner further contends that because some of Cannon’s devices are described as “direct access storage devices,” this must mean that other devices are indirect storage devices that “obviously cannot be considered ‘transparent access . . . regardless of where said file is located.’” *Id.* at 14.

Patent Owner’s argument is against Cannon individually, where Petitioner’s position is based on the combination of Sitka and Cannon. One cannot show nonobviousness by attacking references individually where the Petitioner’s position is based on combinations of references. See *In re Keller*, 642 F.2d 413, 425 (CCPA 1981) (citations omitted) (explaining that obviousness must be considered in light of “what the combined teachings of

the references would have suggested to those of ordinary skill in the art”). Additionally, Patent Owner’s arguments raise factual issues that are best resolved upon a more fully developed record.

*ii. Providing Access Independently of the Application Requesting Access*

Patent Owner argues that Sitka and Cannon do not teach or suggest “the step[] of storing data on a storage medium comprising:” “providing transparent access to said requested file . . . , independently of said application requesting access” as required by element [g] of claim 1. *See generally* Prelim. Resp. 13–16. Corresponding limitations are recited in independent claims 45 and 51.

Petitioner argues that Sitka “provides access independently of the application requesting access because it utilizes an API that translates requests into DSM server requests by way of the DSM client library.” Pet. 36 (citing Ex. 1002 ¶ 90; Ex. 1005, 9:24–36). Petitioner further explains “any user application may interface with the DSM server through the DSM client library, and, from the perspective of the server, the requests appear identical, having been translated by the client API in the DSM client library.” *Id.* at 36–37.

Patent Owner argues that because the use of “APIs to require login and password-protected logins for access . . . is dependent on the use of a database application and logins,” Sitka “teaches away from providing transparent access to a file independent of the user application requesting access.” Prelim. Resp. 14. However, this argument does not address Petitioner’s contention that “any user application” can request access and that any such requests appear identical to the DSM server because they have been translated by the client API. Pet. 36–37.

*iii. Motivation to Combine Sitka and Cannon*

Petitioner provides various reasons that a person of ordinary skill in the art would have combined Sitka's teachings of file policies with Cannon's teachings of associating policies with individual files, including that doing so would "provide additional control over file management." Pet. 21 (citing Ex. 1002 ¶ 62); *see id.* at 19–23, 25–26 (discussing rationale to combine).

Patent Owner asserts that "Petitioners provide no explanation why a person of skill in the art would combine the teachings of Sitka with Cannon to perform any of the limitations of the independent claims" and that "they rely exclusively on generic and conclusory statements." Prelim. Resp. 16–17. Patent Owner provides one example stating that "Petitioners assert 'Sitka and Cannon render obvious this feature' with respect to 'associating a set of lifecycle policies with a file,' without providing any supporting reasons for this conclusion in the Petition." *Id.* at 17 (quoting Pet. 24).

The line quoted by Patent Owner from the Petition is followed by approximately two pages (Pet. 24–26) of explanation and discussion which is not addressed by Patent Owner. Further, Patent Owner does not address the additional approximately four pages of explanation and discussion specifically addressing the "**Rationale for Combining Sitka and Cannon.**" Pet. 19–23.

Patent Owner also argues that Petitioner needed to "explain how to reconcile [certain of] the teachings of Sitka" with those of Cannon because "[a] person of skill in the art would not combine" them in the manner set forth by Petitioner. Prelim. Resp. 17. On this record, however, we determine Petitioner provides sufficient explanation and articulated

reasoning with rationale underpinning supporting its assertion of obviousness. *See* Pet. 19–23, 25–26.

In view of the present record, we determine that Petitioner has shown a reasonable likelihood that it would prevail in establishing that independent claims 1, 45, and 51 would have been obvious over Sitka and Cannon.

*2. Dependent Claims 2–7, 46–50, 52–57, and 59*

Petitioner contends Sitka and Cannon teach or suggest all of the limitations of dependent claims 2–7, 46–50, 52–57, and 59. Pet. 39–51, 59–60, and 64–68. We have reviewed Petitioner’s arguments and supporting evidence regarding these claims and determine that Petitioner has shown a reasonable likelihood of establishing that claims 2–7, 46–50, 52–57, and 59 are unpatentable over Sitka and Cannon.

At this time, Patent Owner has not made any arguments specific to these dependent claims. Based on our review of the present record, we are persuaded that Petitioner has established a reasonable likelihood it would prevail in showing that claims 2–7, 46–50, 52–57, and 59 would have been obvious over Sitka and Cannon.

### III. SUMMARY

After considering the evidence and arguments presented, we determine that Petitioner has demonstrated a reasonable likelihood of showing at least one challenged claim of the ’234 patent is unpatentable. Accordingly, we institute *inter partes* review of all challenged claims of the ’234 patent on all presented challenges.



At this stage of the proceeding, the Board has not made a final determination as to the patentability of any challenged claim or any underlying factual and legal issues, including claim construction.

#### IV. ORDER

For the reasons given, it is

ORDERED that an *inter partes* review of all challenged claims (1–7, 45–57, and 59) of the '234 patent and trial is instituted with respect to all grounds set forth in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial, which shall commence on the entry date of this Decision.

IPR2019-00601  
Patent 7,392,234 B2

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