

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MICROSOFT CORPORATION,
Petitioner,

v.

DAEDALUS BLUE, LLC,
Patent Owner.

IPR2021-00831
Patent 8,671,132 B2

Before SALLY C. MEDLEY, HYUN J. JUNG, and
ARTHUR M. PESLAK, *Administrative Patent Judges*.

MEDLEY, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)

Dismissing-in-Part and Denying-in-Part Patent Owner's Motion to Exclude
37 C.F.R. § 42.4(c)

I. INTRODUCTION

Microsoft Corporation (“Petitioner”) filed a Petition for *inter partes* review of claims 15–25 of U.S. Patent No. 8,671,132 B2 (Ex. 1001, “the ’132 patent”). Paper 1 (“Pet.”). Daedalus Blue, LLC (“Patent Owner”) filed a Preliminary Response. Paper 7. In accordance with Board authorization, Petitioner filed a Reply to the Preliminary Response (Paper 13) and Patent Owner filed a Sur-Reply (Paper 15).¹ Upon review of these papers, we instituted *inter partes* review, pursuant to 35 U.S.C. § 314, as to claims 15–25 based on the challenges set forth in the Petition. Paper 17 (“Decision to Institute” or “Dec.”).

Subsequent to institution, Patent Owner filed a Patent Owner Response (Paper 30, “PO Resp.”), Petitioner filed a Reply to Patent Owner’s Response (Paper 34, “Pet. Reply”), and Patent Owner filed a Sur-Reply (Paper 38, “Sur-Reply”). Patent Owner filed a Motion to Exclude (Paper 42, “Mot. Exc.”), Petitioner filed an Opposition (Paper 43, “Opp. Mot. Exc.”), and Patent Owner filed a Reply (Paper 44, “Reply Mot. Exc.”). On August 10, 2022, we held an oral hearing. A transcript of the hearing is of record. Paper 50 (“Tr.”).

For the reasons that follow, we conclude that Petitioner has proven by a preponderance of the evidence that claims 15–25 of the ’132 patent are unpatentable.

¹ The parties filed confidential and non-confidential versions of their briefs. Certain confidential party briefs and exhibits are now publicly available and we refer to those versions. Paper 21; Ex. 2030, 5:17–7:21.

A. Related Matters

The parties indicate that related district court litigations are *Daedalus Blue, LLC v. Microsoft Corp.*, No. 6:20-cv-01152-ADA (W.D. Tex.) and *Daedalus Blue, LLC v. Oracle Corp. et al.*, No. 6:20-cv-00428-ADA (W.D. Tex.) (terminated). Pet. 3–4; Paper 4, 2.

B. The '132 Patent

The '132 patent relates to “policy-based data management on a distributed storage system.” Ex. 1001, 1:9–10. The '132 patent addresses the shortcomings that “many known distributed storage systems have no method of prioritizing operations” and “current distributed storage systems are not capable of storing data using prioritized operations within multiple platforms.” *Id.* at 1:33–34, 1:40–42. Accordingly, the '132 patent seeks to provide “a data management system, method, and apparatus that prioritize files within the network, with clients that operate based on a plurality of different operating platforms.” *Id.* at 2:7–10.

Figure 1, reproduced below, illustrates an embodiment with a network that includes a number of client workstations that may operate on multiple different operating system platforms. *Id.* at 5:19–26.

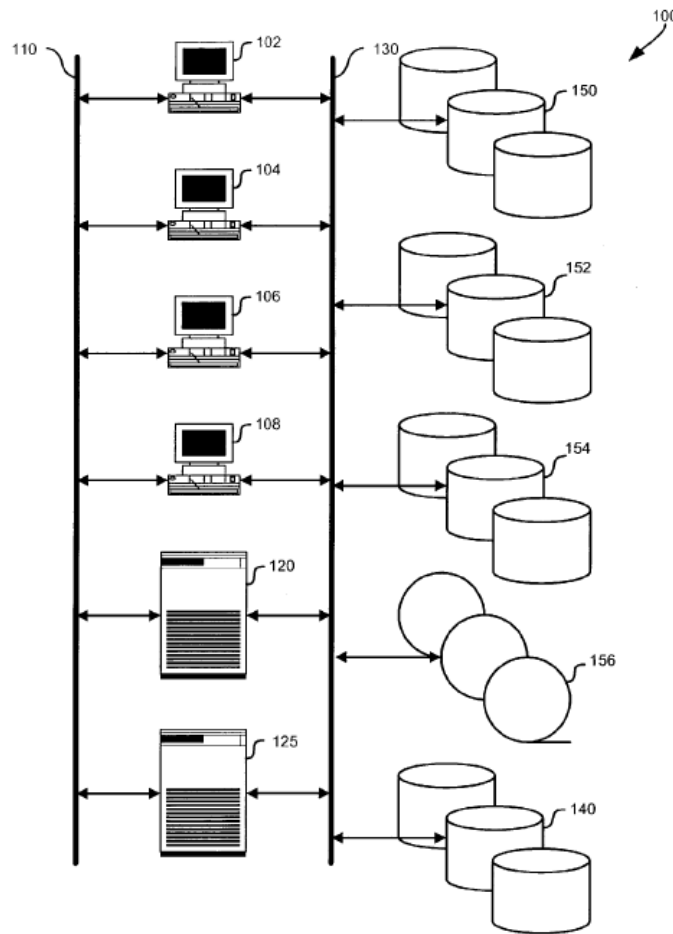


Fig. 1

Figure 1 is a schematic block diagram of network 100 with clients 102, 104, 106, and 108. *Id.* at 5:19–22. “The network 100 is preferably configured to bear large amounts of traffic, particularly data packets and messaging packets related to data storage, retrieval, and maintenance.” *Id.* at 5:29–31. Clients 102, 104, 106, and 108 are connected to local area network (LAN) 110, along with metadata servers 120 and 125. *Id.* at 5:32–35. Storage area network (SAN) 130 includes storage pools 150, 152, 154, and 156. *Id.* at 5:48–51. The storage pools “may vary in storage type, configuration, location, accessibility, etc.” *Id.* at 5:51–53.

Id. at 9:35–44. Based on the file attributes, file evaluation module 350 selects a service class for file 310, as well as a storage pool. *Id.* at 9:45–64. File evaluation module 350 returns a set of file metadata 360 that includes storage pool and service class designations 362 and 364 for use in subsequent file retrieval and usage. *Id.* at 10:4–20. File transmission module 300 receives storage pool designation 362 and routes file 310 to the corresponding storage pool. *Id.* at 10:37–40.

C. Illustrative Claim

Petitioner challenges claims 15–25 of the '132 patent. Claims 15 and 23 are independent, and claims 16–22, 24, and 25 depend therefrom. Claim 15 is reproduced below.

15. A method for handling files within a policy-based data management system, the method comprising:
 - providing a policy set comprising at least one service class rule;
 - receiving one or more attributes of a file from one of a plurality of clients, the clients comprising at least two different computing platforms;
 - applying the service class rule to the file to assign a service class to the file; and
 - conducting operations on the file in a manner according to the service class.

Ex. 1001, 16:21–31.

D. Instituted Grounds of Unpatentability

We instituted *inter partes* review based on the following grounds of unpatentability under 35 U.S.C. § 103(a)² as follows (Dec. 6–7, 36):

² The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), amended several provisions of 35 U.S.C., including § 103.

Claim(s) Challenged	35 U.S.C §	Reference(s)/Basis
15–21, 23–25	103(a)	Gelb ^{3,4} , Tivoli ⁵
22	103(a)	Gelb, Tivoli, Callaghan ⁶
15–21, 23–25	102	Devarakonda ⁷

II. DISCUSSION

A. Principles of Law

To prevail in its challenges to Patent Owner’s claims, Petitioner must demonstrate by a preponderance of the evidence that the claims are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d) (2019). To establish anticipation, each and every element in a claim, arranged as recited in the claim, must be found in a single prior art reference. *See Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008); *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383 (Fed. Cir. 2001). Although the elements must be arranged or combined in the same way as in the claim, “the reference need not satisfy an *ipsissimis verbis* test,” i.e., identity of terminology is not required. *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009); *accord In re Bond*, 910 F.2d 831, 832 (Fed. Cir. 1990).

Because the ’132 patent has an effective filing date before the effective date of the applicable AIA amendments, we refer to the pre-AIA versions of 35 U.S.C. §§ 102 and 103.

³ Petitioner also lists “in view of . . . the knowledge of a POSITA.” Pet. 9. Although we do not list such knowledge separately, we consider it as part of our obviousness analysis. *See Randall Mfg. v. Rea*, 733 F.3d 1355, 1362–63 (Fed. Cir. 2013).

⁴ U.S. Patent No. US 5,018,060, issued May 21, 1991 (Ex. 1005, “Gelb”).

⁵ “Tivoli Storage Manager: A Technical Introduction,” November 28, 2001 (Ex. 1006, “Tivoli”).

⁶ “NFS Illustrated,” 2000 (Ex. 1007, “Callaghan”).

⁷ U.S. Patent No. 7,269,612 B2, filed May 31, 2002, issued Sep. 11, 2007 (Ex. 1008, “Devarakonda”).

A patent claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) when in evidence, objective indicia of nonobviousness.⁸ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

B. Level of Ordinary Skill

In determining the level of ordinary skill in the art, various factors may be considered, including the “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.” *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (citation omitted). Petitioner, relying on the declaration testimony of Dr. Erez Zadok, argues that a person having ordinary skill in the art (“POSITA”) would have had “at least a bachelor’s degree in computer science, electrical engineering, computer engineering, or a similar discipline, along with two years of experience in the design, operation, or control of data management systems, storage systems, and/or distributed storage systems.” Pet. 13 (citing Ex. 1003 ¶¶ 30–34).

⁸ Patent Owner does not present any objective evidence of nonobviousness as to the challenged claims.

Patent Owner, relying on the declaration testimony of Dr. Christopher Jules White, argues that a POSITA would have had “at least a bachelor’s degree in computer science, electrical engineering, computer engineering, or a similar discipline, along with two years of experience in the design, operation, or control of networked data management systems, and/or distributed systems.” PO Resp. 6 (citing Ex. 2024 ¶ 47). Patent Owner further argues that “Dr. White’s opinions and the arguments in this paper apply under either proposed level of ordinary skill in the art.” *Id.* at 7 (citing Ex. 2024 ¶ 49).

We adopt Petitioner’s definition of the level of skill except that we delete the phrase “at least” to avoid ambiguity in the definition of the level of skill. Patent Owner’s proposed level overlaps substantially with Petitioner’s proposed level. Even if we adopted Patent Owner’s proposed level of qualifications, the outcome would remain the same.

C. Claim Construction

In an *inter partes* review, “[claims] of a patent . . . shall be construed using the same claim construction standard that would be used to construe the [claims] in a civil action under 35 U.S.C. 282(b), including construing the [claims] in accordance with the ordinary and customary meaning of such [claims] as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” *See* 37 C.F.R. § 42.100(b) (2020); *see also Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc).

“a plurality of clients”

Independent claims 15 and 23 recite “receiving one or more attributes of a file from one of a plurality of clients, the clients comprising at least two different computing platforms.” Patent Owner contends that the limitation

“plurality of clients” should be construed to mean “clients in a networked environment.” PO Resp. 8–10. Petitioner disagrees. Pet. Reply 2–4. Patent Owner’s proposed construction is relevant to our discussion below regarding whether Gelb is analogous art, and, therefore, we consider Patent Owner’s claim construction argument. For the reasons that follow, we decline to adopt Patent Owner’s proposed construction for the limitation “plurality of clients.”

Patent Owner argues that the ’132 patent “states without qualification or reservation that ‘the invention’ involves networked, distributed systems” that “dictate the meaning of the ‘plurality of clients.’” PO Resp. 8–9 (citing Ex. 1001, 1:7–10, 2:20–24; Ex. 2024 ¶¶ 52–53). Patent Owner further argues that “[a] storage area network system is an example of a distributed storage system, and a distributed storage system involves a networked environment in which clients (such as workstations and servers) are connected to storage resources.” *Id.* at 8 (citing Ex. 1001, 1:17–23, 5:22–26; Ex. 2024 ¶ 53). Patent Owner contends that the ’132 patent describes “that the problems the inventors sought to address were problems in distributed storage systems” and “in response to the problems and needs in the art that have not yet been fully solved by currently available storage area network systems.” *Id.* at 9 (citing Ex. 1001, 1:24–2:16, 2:20–24; Ex. 2024 ¶¶ 54–56). Patent Owner further contends that a “storage area network system is an example of a distributed storage system, and a distributed storage system involved a networked environment.” *Id.* (citing Ex. 1001, 1:17–20). Patent Owner concludes that “[b]ecause the inventors of the ’132 Patent addressed problems in the networked environments of distributed storage systems, the ‘plurality of clients’ refers to clients in a networked environment.” *Id.* at 9–10 (citing Ex. 2024 ¶ 57).

We begin with the language of the independent challenged claims. Claim 15 recites “[a] method for handling files within a policy-based data management system, the method comprising.” Ex. 1001, 16:21–22. Claim 23 recites “[a] storage device storing computer code executable by a processor to carry out a method comprising.” *Id.* at 16:61–62. The remaining limitations of the independent claims are the same and directed to (1) providing a policy set with at least one service class rule; (2) receiving one or more attributes of a file from one of a plurality of clients, the clients comprising at least two different computing platforms; (3) applying the service class rule to the file to assign a service class to the file; and (4) conducting operations on the file in a manner according to the service class. *Id.* at 16:23–31, 16:63–17:4. The involved claims do not recite a “distributed storage system,” a “storage area network system,” or a “networked, distributed system [environment].” Thus, even if Patent Owner were correct that an invention that involves a networked, distributed system environment dictates that the plurality of clients also be in the networked environment, the claims themselves don’t require a networked, distributed system environment. Indeed, the preamble of claim 23 recites “a storage device,” and the preamble of claim 15 recites a “data management system,” terms that are much broader than those the Patent Owner uses to describe “the invention.” PO Resp. 8–10.

Although Patent Owner never explains what “clients in a networked *environment*” means, Dr. White testifies that “a person of ordinary skill in the art would have understood the ‘plurality of clients’ to refer to clients in a networked distributed systems environment, such that each challenged claim requires a networked environment where clients communicate through a network.” Ex. 2024 ¶ 50. But, again, there is nothing in the claims that

recites a “networked distributed systems environment,” a “networked environment,” or “clients communicating through a network.” The method claims are directed *to performing certain steps to a file* from one of a plurality of clients. No networking or clients communicating through a network is claimed or even shown to be relevant to what is claimed. Indeed, in urging us to narrowly construe the term “plurality of clients,” Patent Owner does not discuss the claim language at all. PO Resp. 8–10. But, the name of the game is the claim. *In re Hiniker Co.*, 150 F.3d 1362, 1369 (Fed. Cir. 1998). Here, Patent Owner fails to direct us to anything in the claim language itself that would support Patent Owner’s construction of “plurality of clients,” and we find nothing that supports the argument.

Patent Owner also does not direct us to anything in the prosecution history of the application file that would support the argument for a narrow construction of the term “plurality of clients.” Rather, Patent Owner and Dr. White only discuss certain descriptions of the ’132 patent, while ignoring other descriptions. PO Resp. 8–10 (citing Ex. 1001, 1:7–10, 1:17–2:16, 2:20–24, 5:22–26). For example, the ’132 patent describes that “[t]he described embodiments are to be considered in all respects only as illustrative and not restrictive. *The scope of the invention is, therefore, indicated by the appended claims* rather than by the forgoing description.” Ex. 1001, 14:65–15:1 (emphasis added). Claim 15 has not changed since it was originally filed and only the preamble of claim 23 was amended slightly in response to a 35 U.S.C. § 101 rejection. Ex. 1002, 38–39, 226, 235. Thus, the claims before us are the same (claim 15) if not very similar (claim 23) to the claims that were originally filed as part of the specification. And, at the time of filing the original claims, Patent Owner chose its claims and specifically indicated that the scope of the invention “is indicated by the

appended claims rather than by the foregoing description.” Ex. 1001, 14:65–15:1. The claims before us, that are the same if not very similar to the original claims, do not support a construction of “plurality of clients” to be “clients in a networked environment” such that the clients communicate through a network.

The passages in the ’132 patent that Patent Owner relies on in support of its proposed construction are directed to, at most, networked or distributed storage devices accessed by clients. *Id.* at 1:7–10 (describing that the invention “relates to networking and data storage” and to a “method for policy-based data management on a distributed storage system”), 2:20–24 (describing that the clients of the distributed storage system “*may*, in some cases, be servers that transmit data between the distributed storage system and individual computers”). Moreover, the ’132 patent describes problems that occurred in networked storage systems and have not been shown by Patent Owner to require construing the broad claims to include clients in a networked environment. *Id.* at 1:24–2:16.

In any event, even if the disclosure in the ’132 patent relied on by Patent Owner were as restrictive as Patent Owner urges, which we find that it is not, our reviewing court has explained, “each claim does not necessarily cover every feature disclosed in the specification,” and “it is improper to limit the claim to other, unclaimed features.” *Ventana Med. Sys., Inc. v. BioGenex Labs., Inc.*, 473 F.3d 1173, 1181 (Fed. Cir. 2006). Furthermore, our reviewing court “has repeatedly cautioned against limiting the claimed invention to preferred embodiments or specific examples in the specification.” *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1346–47 (Fed. Cir. 2015); *SuperGuide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004) (noting that “it is important not to import into a claim

limitations that are not a part of the claim”). “[I]t is the *claims*, not the written description, which define the scope of the patent right.” *Williamson*, 792 F.3d at 1346–47 (alteration in original); *see also Phillips*, 415 F.3d at 1312 (noting that “[i]t is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude”). We decline Patent Owner’s invitation to limit the claims to unclaimed features.

For all of the above reasons, we decline to adopt Patent Owner’s construction of “plurality of clients” to mean “clients in a networked environment.”

“computing platforms”

Independent claims 15 and 23 recite “the clients comprising at least two different computing platforms.” Patent Owner contends that the limitation “computing platforms” should be construed to mean “operating systems.” PO Resp. 10–12. Petitioner disagrees and argues that “computing platforms” should be construed to mean “the combination of computer hardware and an operating system.” Pet. Reply 4–6. We understand that resolution of this issue is relevant only to Petitioner’s challenge based on *Devarakonda*. PO Resp. 2–3, 38–39 (arguing that *Gelb* alone fails to teach a plurality of clients but not addressing *Gelb* in combination with *Tivoli*), 55–59 (arguing that *Devarakonda* fails to disclose clients that comprise at least two different operating systems); Pet. Reply 15–16; Tr. 5:16–22, 7:24–8:3, 25:22–26:23. For reasons explained below, we need not decide Petitioner’s challenge based on *Devarakonda*. Accordingly, for purposes of our Decision, we need not construe “computing platforms.”

Other Terms

We need not otherwise construe any other terms in the claims. *See Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (holding that “only those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy”); *see also Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (citing *Vivid Techs.* in the context of an *inter partes* review).

D. Asserted Obviousness of Claims 15–21 and 23–25 over Gelb and Tivoli

1. Gelb

Gelb describes a need in storing computerized data “to insulate the application programmers from the current requirement that their respective programs must have some information about the physical parameters of the peripheral data storage.” Ex. 1005, 1:30–34. Accordingly, Gelb defines data classes that “are set up so as to enable a host processor to respond to data set parameters to implicitly select data storage units which can achieve the desired system operations for satisfying the data set parameters.” *Id.* at 4:14–20.

Figure 1, reproduced below, illustrates a data processing system embodiment that Gelb asserts “makes the data processing system easier to use by application programmers.” *Id.* at 5:55–56.

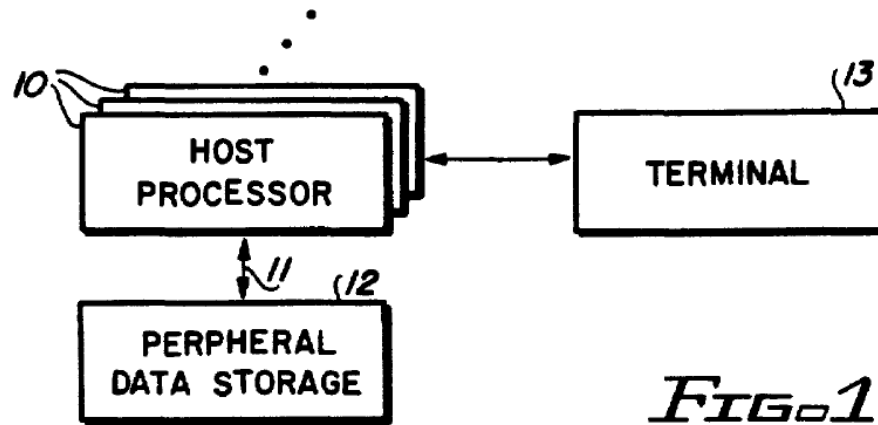


Figure 1 “shows a data processing system having a plurality of host processors 10 sharing a peripheral data storage system 12 via a plurality of input-output connections (such as I/O channels) 11.” *Id.* at 5:51–55.

Figure 7, reproduced below, illustrates a flowchart for the automatic selection of classes that occurs between declaring a data set and requesting data space in system 12 for the data set. *Id.* at 18:23–27.

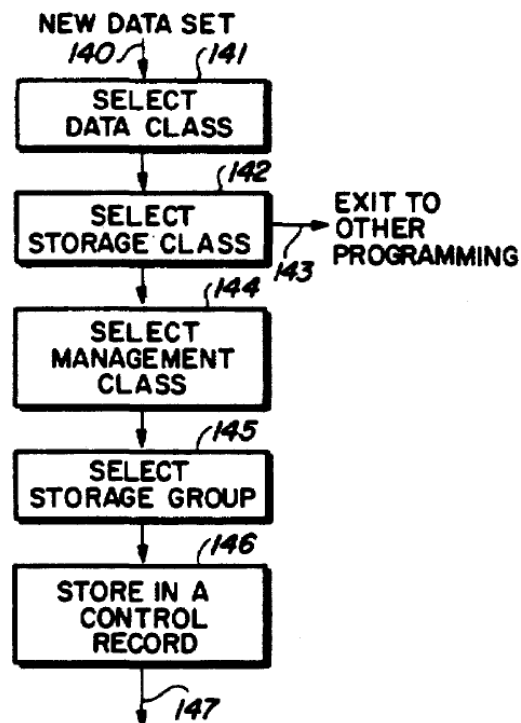


FIG. 7

The flowchart in Figure 7 begins with step 141, which is a “machine – implemented selection of a data class,” after a “data-set class selection request is received from a user program.” *Id.* at 18:47–54. “Upon selection of a data class, the second step 142 selects a storage class.” *Id.* at 18:64–65. If a storage class is selected, the flowchart moves on to step 144, where “a management class is machine selected.” *Id.* at 19:16–18. “The machine selection of a management class completes the logical machine-executed class selection process all of which is in preparation for selection of a storage group of volumes,” in step 145. *Id.* at 19:24–42. In step 146, “the identifications of the selected classes and the data set are retentively stored within the FIG. 1 illustrated data processing system as a control record.” *Id.* at 19:44–48. “At this time the data processing system is primed for receiving an allocation request(s) for the data set.” *Id.* at 19:55–57.

Figure 8, reproduced below, illustrates a flowchart for allocating data storage space in a peripheral storage device for a data set. *Id.* at 5:43–46.

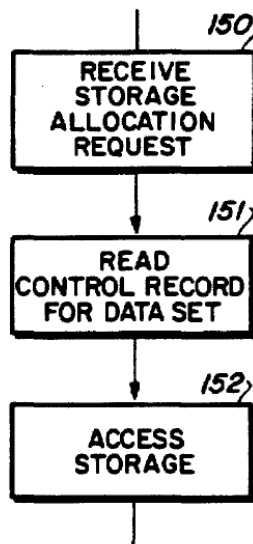


FIG. 8

The flowchart in Figure 8 begins with step 150, in which an allocation request for a data set is received from a user program. *Id.* at 19:59–62. In step 151, the pertinent control record is read to determine if a storage class was selected for the data set. *Id.* at 19:62–64. If a storage class was selected, the flowchart moves on to step 152, where “storage is accessed using the devices assigned to a storage group.” *Id.* at 19:68–20:2.

2. *Tivoli*

Tivoli provides that the “Tivoli Storage Manager is the core product of the Tivoli Storage Management product set” and “provides a solution for distributed data and storage management in an enterprise network environment.” Ex. 1006, 7. Tivoli describes the Tivoli Storage Manager as implemented as a client server software application with a server software component, client, and storage agent, among other products. *Id.* at 7–8. “The client software can run on different systems, including laptop computers, PCs, workstations, or server systems.” *Id.* at 8. Further, “[t]he storage agent software in conjunction with the server software enables the implementation of LAN-free backup solutions exploiting SAN infrastructure.” *Id.* Tivoli describes that the “server and client software is available on many different operating system platforms and can exploit different communication protocols.” *Id.* at 14.

3. *Discussion*

Petitioner contends that claims 15–21 and 23–25 are unpatentable under 35 U.S.C. § 103(a) as obvious over Gelb and Tivoli. Pet. 20–41. In support of its showing, Petitioner relies upon the declaration of Dr. Zadok. *Id.* (citing Ex. 1003). Patent Owner makes several arguments. PO Resp. 12–50. In support of its arguments, Patent Owner relies upon the declaration

of Dr. White. *Id.* (citing Ex. 2024). For the reasons that follow, we conclude that Petitioner has met its burden of proving by a preponderance of the evidence that each of the challenged claims 15–21 and 23–25 would have been obvious in view of the asserted prior art.

a. Whether Gelb is Analogous Art

Patent Owner argues that Gelb is not analogous art. PO Resp. 12–34. The test for determining whether a prior art reference constitutes analogous art to the claimed invention is “(1) whether the [prior] art is from the same field of endeavor, regardless of the problem addressed and, (2) if the reference is not within the field of the inventor’s endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved.” *See In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004). “Prior art is analogous if it is from the same field of endeavor or if it is reasonably pertinent to the particular problem the inventor is trying to solve.” *Circuit Check Inc. v. QXQ Inc.*, 795 F.3d 1331, 1335 (Fed. Cir. 2015). A reference is analogous art if either of these two tests is met. *Scientific Plastic Prods., Inc. v. Biotage AB*, 766 F.3d 1355, 1359 (Fed. Cir. 2014). The Federal Circuit has indicated that the scope of analogous art is to be construed broadly. *Wyers v. Master Lock Co.*, 616 F.3d 1231, 1238 (Fed. Cir. 2010) (“The Supreme Court’s decision in *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398 . . . (2007), directs us to construe the scope of analogous art broadly . . .”).

Patent Owner contends that “both the specification and the claims of the ’132 Patent reflect that” the “field of endeavor is distributed storage systems.” PO Resp. 13–14 (citing Ex. 2024 ¶¶ 67–69). According to Patent Owner, the ’132 patent expressly states that “the invention relates to a

system and method for policy-based data management on a distributed storage system” and that the invention overcomes “drawbacks with existing storage area networks, a type of distributed storage system.” *Id.* at 14 (citing Ex. 1001, 1:6–10).

Patent Owner argues that the claims also “reflect that the ’132 Patent’s field of endeavor is distributed storage systems.” *Id.* Patent Owner argues that the claims include “a plurality of clients, the clients including at least two different computing platforms” and that based on Patent Owner’s proposed construction for “a plurality of clients” the “clients [are] in a networked environment.” *Id.* at 14–15. Patent Owner further argues that “[t]hat construction follows from the specification’s statements that ‘the invention’ involves distributed storage systems.” *Id.*

For the reasons discussed above, we do not adopt Patent Owner’s construction for “plurality of clients” to mean “clients in a networked environment.” Thus, we disagree with Patent Owner that *the claims* reflect that the ’132 patent’s field of endeavor is distributed storage systems. During oral argument, Patent Owner represented that its “analogous art argument depends on the construction of clients in a networked environment . . . for the first prong.” Tr. 39:20–40:11; *see also* Sur-Reply 7–8 (“[t]he lack of clients in a networked environment takes *Gelb*’s single-machine mainframe out of the ’132 Patent’s field of endeavor of distributed storage systems, which involves networked computers”). Accordingly, we determine that Patent Owner has failed to show that *Gelb* is not relevant to the obviousness analysis and agree with Petitioner that “*Gelb*’s teachings

align closely to the subject matter of the '132 Patent and therefore are analogous.” Pet. Reply 6.⁹

For the sake of completeness, we also address Patent Owner’s arguments that Gelb is not reasonably pertinent to the problems the inventors of the '132 patent are trying to solve. PO Resp. 21–32. Patent Owner argues that the '132 patent defines distributed storage systems as the field of invention and consistent with that definition, all of the problems that it describes are “particular to distributed storage systems.” *Id.* at 21–22 (citing Ex. 1001, 1:7–2:3; Ex. 2024 ¶¶ 91–96). Patent Owner identifies four “distributed storage system problems.” *Id.* at 22. However, in doing so, Patent Owner defines the problems too narrowly. “[T]he reasonable-pertinence analysis must be carried out through the lens of a [person having ordinary skill in the art] who is considering turning to art outside her field of endeavor.” *Donner Tech., LLC v. Pro Stage Gear, LLC*, 979 F.3d 1353, 1360 (Fed. Cir. 2020). “Such a[n artisan]—resigned to considering art outside her field of endeavor—would thus not identify the problems so narrowly so as to rule out all such art.” *Id.* Patent Owner’s descriptions of the inventors’ problems improperly focuses on the specific components of a distributed storage system, effectively precluding consideration of references outside of what Patent Owner identifies as the '132 patent’s field of endeavor. *See* PO Resp. 23 (“*Gelb*, by contrast, has nothing to do with distributed storage systems”).

⁹ Patent Owner argues that “the petition appears to have overlooked the analogous art requirement.” PO Resp. 32–34. We disagree. Petitioner explains that both Gelb and Tivoli are generally directed to data storage systems that accept data from users or clients and routes the data to a storage device based on policies, which we find is a more accurate construction of the field of endeavor and reflects what is claimed. Pet. 35–37.

A reference is analogous if it is reasonably pertinent to at least one of the problems faced by the inventors. *See Donner Tech.*, 979 F.3d at 1361 (“[I]f the two references have ‘pertinent similarities’ such that [the asserted reference] is reasonably pertinent to *one or more of the problems* to which the [challenged] patent pertains, then [the asserted reference] is analogous art.” (emphasis added)). Patent Owner argues that one of the identified problems is:

The inability of existing distributed storage systems to accommodate varied storage scenarios, including that they did not permit a user to automatically select between multiple storage options and they did not address fields with varying storage or performance requirements or equipment with varying capacities and performance levels.

PO Resp. 22 (citing Ex. 1001, 1:47–2:3; Ex. 2024 ¶ 95). Aside from narrowly focusing on “distributed storage systems,” we agree with Patent Owner that the above identified problem of “not permit[ing] a user to automatically select between multiple storage options” and not addressing “fields with varying storage or performance requirements or equipment with varying capacities and performance levels” is one of the problems identified in the ’132 patent. Ex. 1001, 1:47–2:3. We agree with Petitioner that Gelb is reasonably pertinent, because it addresses the same problem, “namely that prior art storage access methods did not permit programmers to write code that would allow users to automatically select the appropriate storage devices based on ‘high or logical level’ concepts, such as ‘data sets, data bases and the like.’” Pet. Reply 11–12 (citing Ex. 1005, 1:33–37, 1:60–65, 2:19–21, 18:23–26; Ex. 1027 ¶¶ 40–42). We further agree with Petitioner that both Gelb and the ’132 patent describe that existing prior art systems “did not allow users to select from multiple storage devices using higher

level or logical concepts such as performance, file sizes and formats, and availability and reliability.” *Id.* (citing Ex. 1001, 1:47–2:3; Ex. 1005, 1:30–46). Petitioner argues, and we agree, that both Gelb and the ’132 patent solved the problem by classifying files and assigning them to higher-level or logical storage volumes based on such classifications. *Id.* (citing Ex. 1001, 2:45–49; Ex. 1005, 4:14–20; Ex. 1027 ¶ 43). For reasons discussed above, we are not persuaded by Patent Owner’s arguments that because “*Gelb* is not a distributed storage system,” it is not reasonably pertinent to the problem identified above. Sur-Reply 11. For all of these reasons, we determine that Gelb is relevant to the obviousness determination.

b. Whether Tivoli qualifies as Prior Art

We now address whether Petitioner has shown that Tivoli is a prior art printed publication under 35 U.S.C. § 102. *See* 35 U.S.C. § 311(b). Petitioner bears the burden to prove that it is. *See* 35 U.S.C. § 316(e). Whether a document qualifies as a printed publication under 35 U.S.C. § 102 is a question of law based on underlying findings of fact. *In re Enhanced Sec. Research, LLC*, 739 F.3d 1347, 1354 (Fed. Cir. 2014) (citing *In re Hall*, 781 F.2d 897, 899 (Fed. Cir. 1986)). The Federal Circuit “has interpreted § 102 broadly, explaining that even relatively obscure documents qualify as prior art so long as the public has a means of accessing them.” *Id.* (citing *In re Hall*, 781 F.2d at 899).

Our leading case on public accessibility is *In re Hall*, 781 F.2d 897 (Fed. Cir. 1986). In *Hall* we concluded that “a single cataloged thesis in one university library” constitutes “sufficient accessibility to those interested in the art exercising reasonable diligence.” *Id.* at 900. Thereafter, in *Constant v. Advanced Micro-Devices, Inc.*, we explained that “[a]ccessibility goes to the issue of whether interested members of the relevant public could obtain the information if they wanted to.” 848 F.2d 1560,

1569 (Fed. Cir. 1988). Therefore, “[i]f accessibility is proved, there is no requirement to show that particular members of the public actually received the information.” *Id.*

Id. at 739 F.3d at 1354 (alterations in original). The determination of whether a document is a “printed publication” under 35 U.S.C. § 102 involves a case-by-case inquiry into the facts and circumstances surrounding its disclosure to members of the public. *In re Klopfenstein*, 380 F.3d 1345, 1350 (Fed. Cir. 2004).

Petitioner asserts that Tivoli (Ex. 1006) is prior art under 35 U.S.C. § 102(b) because it was publicly available “at least by June 15, 2001 and no later than November 28, 2001.” Pet. 16. Petitioner further asserts that “Tivoli was published as part of IBM’s Redbook and Redpaper series” and that “[t]he Redbook brand is well known as referring to publicly disseminated documents.” *Id.* (citing Ex. 1010). Petitioner argues that the “public accessibility of Tivoli on November 28, 2001 is further established by the Internet Archive’s Wayback Machine, which preserved a webpage containing a PDF version of Tivoli.” *Id.* at 16–17 (citing Ex. 1011). Dr. Zadok testifies that Tivoli “serves as a technical introduction to the Tivoli Storage Manager, which was a popular storage management software system on the market prior to and at the time of the alleged invention.” Ex. 1003 ¶ 110.

Tivoli is a technical paper entitled “Tivoli Storage Manager A Technical Introduction.” Ex. 1006, 1. The front cover bears the indicia “IBM” and “ibm.com/redbooks.” *Id.* Tivoli also includes “Copyright International Business Machines Corporation 2000.” *Id.* at 2. Exhibit 1011 is an affidavit of Duncan Hall who declares that he is “a Records Request Processor at the Internet Archive.” Ex. 1011 ¶ 1. He further declares that

the “Internet Archive has created a service known as the Wayback Machine,” that “makes it possible to browse more than 450 billion pages stored in the Internet Archive’s web archive.” *Id.* ¶ 3. Mr. Duncan further explains that the “Internet Archive assigns a URL on its site to the archived files in the format `http://web.archive.org/web/[Year in yyyy][Month in mm][Day in dd][Time code in hh:mm:ss]/[Archived URL]` aka an ‘extended URL.’” *Id.* ¶ 5. Attached to Mr. Duncan’s affidavit is Exhibit B, that Mr. Duncan declares “are true and accurate copies of the Internet Archive’s records of the archived files for the URLs and the dates specified in the attached coversheet of each file.” *Id.* ¶ 6. The first page of “Exhibit B” contains the following:

`https://web.archive.org/web/20011128011008/http://www.redbooks.ibm.com/redpapers/pdfs/redp0044.pdf`. Ex. 1011, 4. Following the first page of “Exhibit B” is a copy of what appears to be the same version of Tivoli relied upon by Petitioner. *Compare id.* at 5–34 with Ex. 1006, 1–30.

Patent Owner argues that Petitioner’s contention that the public accessibility of Tivoli on November 28, 2001 is established by the Internet Archive’s Wayback Machine “does not move the needle.” PO Resp. 36 (citing Pet. 16–17; Ex. 1011). Patent Owner also argues that “the petition here does not argue that ordinarily skilled artisans would have even known to look for the specific webpage that purportedly hosted Tivoli before March 14, 2003 [the effective filing date of the ’132 patent], much less that they could have found it with reasonable diligence.” *Id.* at 36–37. Patent Owner further argues that Dr. Zadok’s testimony that Tivoli “serves as a technical introduction to the Tivoli Storage Manager, which was a popular storage management software system on the market prior to and at the time of the

alleged invention” fails to establish Tivoli’s public accessibility. *Id.* at 37 (citing Ex. 1003 ¶ 110).

We determine that Petitioner shows by a preponderance of the evidence that Tivoli is a prior art printed publication under 35 U.S.C. § 102. It is not disputed that Tivoli is a published *IBM document* or that Tivoli was published and available on the Internet November 28, 2001 *on an IBM website*. Ex. 1011; PO Resp. 36 (arguing only that a published document is not enough to show *public accessibility*).¹⁰ We give substantial weight to Dr. Zadok’s unrebutted testimony that Tivoli (*an IBM document* (Ex. 1011, 1)) “serves as a technical introduction to the Tivoli Storage Manager, which was a popular storage management software system on the market prior to and at the time of the alleged invention.” Ex. 1003 ¶ 110.¹¹ Based on Dr.

¹⁰ In support of the argument that “showing that a reference was posted to an Internet website is not enough to show public accessibility by skilled artisans,” Patent Owner cites to a nonprecedential PTAB decision. PO Resp. 36 (citing *Guardian All. Techs., Inc. v. Miller*, IPR2020-00031, Paper 27, at 13 (PTAB July 27, 2020)). We are not bound to follow nonprecedential PTAB decisions. In any event, in *Guardian*, the disputed reference was not posted on a well-known website, such as *an IBM website* as we have before us, and no accompanying declaration, like that made by Dr. Zadok was made of record in *Guardian*. For reasons provided in this Decision, we determine that Petitioner has shown that Tivoli is a prior art printed publication. The ’132 patent was originally assigned to IBM and Patent Owner does not direct us to rebuttal evidence to show that a published IBM document located on an IBM website at the time of the invention could not have been located by a person having ordinary skill in the art based on the facts before us.

¹¹ We disagree with Patent Owner that we should give no weight to Dr. Zadok’s unrebutted testimony in that regard. PO Resp. 37. We find that Dr. Zadok is qualified to opine as to what a person having ordinary skill in the art would or would not have known at the time of the invention. Ex. 1003 ¶¶ 6–26.

Zadok’s testimony, we find that a person having ordinary skill in the art at the time of the invention would have known about Tivoli Storage Manager (a software system). Moreover, we find that Tivoli Storage Manager (a software system) was an IBM product. Ex. 1006, 4 (“Tivoli Storage Manager *is the core product of the Tivoli Storage Management product set*” (emphasis added)); Ex. 1011, 4, 8. Based on the totality of the evidence in connection with the Petition, we determine that a person having ordinary skill in the art at the time of the invention wanting to learn more about the Tivoli Storage Manager software system would have looked to IBM’s website and would have been able to locate Tivoli. Ex. 1003 ¶ 110; Ex. 1011; Ex. 1006. Thus, we determine that the Petition and supporting evidence show by a preponderance of the evidence that Tivoli is a prior art printed publication under 35 U.S.C. § 102.

In connection with its Reply, Petitioner argues that “Tivoli was posted on IBM’s Redbook repository as of November 28, 2001.” Pet. Reply 13 (citing Ex. 1011). Petitioner further argues that “[t]he IBM Redbook repository was keyword searchable, allowing any interested users to obtain a ‘hit list of IBM Redbooks, Redpieces, Redpapers and Residencies’ simply by entering ‘[a] quick keyword search.’” *Id.* (quoting Ex. 1029) (alteration in original). Patent Owner argues that Petitioner “launched a new theory: that *Tivoli* was in the IBM Redbook Repository and that that repository was keyword-searchable” and that such “new theory about *Tivoli*’s alleged publication date” is untimely. Sur-Reply 12. We disagree with Patent Owner that Petitioner’s Reply presents a “new theory about Tivoli’s alleged publication date.” In the Petition, Petitioner relies on Exhibit 1011 to demonstrate that Tivoli was published on November 28, 2001 as part of IBM’s Redbook repository. Pet. 16–17; Ex. 1011.

As to newly presented Exhibit 1029 and the arguments presented with respect to Exhibit 1029, Petitioners are not prohibited from relying on new evidence and arguments in a reply, if the evidence and arguments are responsive to arguments made in a patent owner response. *See* 37 C.F.R. 42.23(b); Consolidated Trial Practice Guide (“Consolidated Practice Guide”)¹² at 73; *Hulu, LLC. v. Sound View Innovations, LLC*, IPR2018-01039, Paper 29 at 15 (PTAB Dec. 20, 2019) (precedential) (“For example, if the patent owner challenges a reference’s status as a printed publication, a petitioner may submit a supporting declaration with its reply to further support its argument that a reference qualifies as a printed publication”).

In the Patent Owner Response, Patent Owner argues that Petitioner failed to present evidence that a person having ordinary skill in the art could have found Tivoli with reasonable diligence. PO Resp. 36. In response, Petitioner presents Exhibit 1029 and argues that “[t]he IBM Redbook repository was keyword searchable, allowing any interested users to obtain a ‘hit list of IBM Redbooks, Redpieces, Redpapers and Residencies’ simply by entering ‘[a] quick keyword search.’” Pet. Reply 13 (quoting Ex. 1029) (alteration in original). Thus, we determine that Petitioner’s new evidence (Ex. 1029) and arguments regarding that evidence are responsive to Patent Owner’s challenges to Tivoli’s status as a printed publication.

Exhibit 1029 bears the indicia of the “Wayback Machine” and is dated November 28, 2001 (the same date as Tivoli). Ex. 1029. The exhibit also includes “IBM,” “Redbooks Online!” and describes that “[a] quick keyword search will provide you with a hit list of IBM Redbooks, Redpieces, Redpapers and Residencies. Or you can browse through our pre-selected

¹² Available at <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

categories.” *Id.* We find Exhibit 1029, along with the evidence submitted with the Petition discussed above, to further substantiate that Tivoli would have been accessible to a person having ordinary skill in the art at the time of the invention because it describes the general procedure of locating IBM Redbooks, like Tivoli, online. *See In re Hall*, 781 F.2d at 899 (accepting evidence regarding the general library procedure for cataloging as probative value of routine business practice to show the performance of the specific act of cataloging a document). Patent Owner’s arguments to the contrary are not based on the totality of the evidence and, therefore, do not overcome Petitioner’s showing. Sur-Reply 13–14 (arguing that the new evidence alone fails to show that Tivoli would have been located).

Based on the record before us, we conclude that Tivoli is a printed publication that was publicly available and accessible by persons interested and ordinarily skilled in the art prior to the effective filing date of the involved patent.

*c. Claim 15: “[a] method for handling files within a policy-based data management system” (preamble)*¹³

For the preamble, Petitioner contends, and we agree that Gelb teaches the recited limitation because it “relates to ‘computer-controlled peripheral data storage’ and ‘the global management of data storage’ in a ‘data storage system.’” Pet. 20 (quoting Ex. 1005, 1:9–11, 5:19–21). Petitioner further contends, and we agree, that Gelb’s data management system is “policy-based” because it teaches “automatic class selection,” and that it is for “handling files.” *Id.* at 20–21 (citing Ex. 1005, 4:25–43, 18:23–52, Figs. 6,

¹³ We need not determine whether the preamble is limiting because, regardless, Petitioner shows that Gelb meets the preamble.

7). Patent Owner does not dispute that Gelb describes the preamble. *See generally* PO Resp.

d. Claim 15: “providing a policy set comprising at least one service class rule”

Petitioner contends that Gelb teaches this limitation. Pet. 21. In particular, Petitioner contends, and we agree, that “Gelb teaches three ‘service classes’ assigned to each file (‘data set’): data class, storage class, and management class.” *Id.* (citing Ex. 1005, 4:25–43). We further agree with Petitioner’s contentions that “Gelb teaches a ‘policy set’ comprising multiple service class rules.” *Id.* at 23 (citing Ex. 1003 ¶¶ 131, 143–144; Ex. 1005, 11:53–57). Patent Owner does not dispute that Gelb describes the above limitation. *See generally* PO Resp.

e. Claim 15: “receiving one or more attributes of a file from one of a plurality of clients, the clients comprising at least two different computing platforms”

Petitioner contends that the combination of Gelb and Tivoli teaches the above limitation. Pet. 23. In particular, Petitioner contends that Gelb teaches a user providing “attributes of a file” before the system receives a file. *Id.* at 23–24 (citing Ex. 1003 ¶¶ 145–147; Ex. 1005, 4:44–49; 18:12–14, 18:47–59). Petitioner further contends that Gelb teaches that its user application programs are a plurality of clients and that the user application programs provide files to Gelb’s storage system. *Id.* at 24 (citing Ex. 1003 ¶ 148; Ex. 1005, 15:56–57, Fig. 4).

Petitioner alternatively argues that to the extent that clients are client computers, Tivoli teaches “a plurality of clients” and describes that “files are sent from the client[s] to the Storage Manager server.” *Id.* at 24–25 (citing Ex. 1003 ¶ 149; Ex. 1006, 8, Fig. 2). For purposes of this Decision, we

focus our analysis on Petitioner’s alternative showing that Tivoli meets the “plurality of clients” limitation. Petitioner contends, and we agree, that “Gelb combined with Tivoli teaches ‘receiving one or more attributes of a file from one of a plurality of clients.’” *Id.* at 25 (citing Ex. 1003 ¶ 151). We also agree with Petitioner’s contentions that Tivoli teaches that the clients comprise “at least two different computing platforms.” *Id.* (citing Ex. 1003 ¶¶ 152–153; Ex. 1006, 15–16, Table 3).

Patent Owner argues that Gelb alone fails to meet the above limitation, but does not contend that the combination of Gelb and Tivoli fails to meet the disputed limitation. PO Resp. 38–39. Patent Owner’s arguments attacking Gelb alone is unavailing, because the alternative challenge is based on the combined teachings of Gelb and Tivoli as set forth in the Petition. *See In re Keller*, 642 F.2d 413, 426 (CCPA 1981) (“[O]ne cannot show non-obviousness by attacking references individually where, as here, the rejections are based on combinations of references.”). Thus, Patent Owner’s arguments do not undermine Petitioner’s showing that the combination of Gelb and Tivoli meets the disputed limitation. Although Patent Owner presents arguments regarding why a person having ordinary skill in the art would not have been motivated to combine Gelb and Tivoli, which we address below, Patent Owner makes no arguments regarding Gelb in combination with Tivoli meeting the disputed limitation. PO Resp. 38–39; Pet. Reply 15 (arguing that Patent Owner does not dispute that Tivoli meets Patent Owner’s claim construction of a “plurality of clients” and “different computing platforms”); Sur-Reply 14–15.

f. Claim 15: “applying the service class rule to the file to assign a service class to the file; and”

For the above limitation, Petitioner contends, and we agree, that Gelb teaches applying a set of service class rules to the parameters received with a file and assigning a data class, storage class, and management class to the file. Pet. 25–26 (citing Ex. 1003 ¶¶ 154–158; Ex. 1005, 12:14–41). Patent Owner does not dispute that Gelb describes this limitation. *See generally* PO Resp.

g. Claim 15: “conducting operations on the file in a manner according to the service class”

Petitioner contends that Gelb teaches this limitation. Pet. 26. In particular, Petitioner contends, and we agree, that Gelb teaches a Data Facility Hierarchical Storage Manager (DFHSM) that conducts operations on a file according to a service class. *Id.* at 26–27 (citing Ex. 1003 ¶¶ 159–161; Ex. 1005, 7:64–66; 8:37–42; 16:56–59; 20:7–14). Patent Owner does not dispute that Gelb describes this limitation. *See generally* PO Resp.

*h. Independent Claim 23 and
Dependent Claims 16–21, 24 and 25*

Independent claim 23 is similar to claim 15. Ex. 1001, 15:5–15, 16:61–17:4. Petitioner’s showing for claim 23 is nearly the same as that for claim 15, while sufficiently accounting for the differences between claim 23 and claim 15. *See, e.g.*, Pet. 34–35. Patent Owner’s arguments for claim 23 are the same as its arguments for claim 15, which we have addressed. *See, e.g.*, PO Resp. 38–39. We are persuaded by Petitioner’s showing for claim 23, which we adopt.

Dependent claim 16 is similar in scope to dependent claim 24 and recites “[t]he method of claim 15, further comprising assigning a storage

pool to the file.” Ex. 1001, 16:32–33. Petitioner contends, and we agree, that Gelb describes “storage groups,” which are storage pools because storage group assignment indicates where the data is stored and that one storage pool (storage group) is assigned to a file. Pet. 27 (citing Ex. 1005, 5:7–11, 10:16–17, 10:35–37; Ex. 1003 ¶¶ 162–165), 35 (referring to showing for claim 16 in addressing claim 24; Ex. 1003 ¶ 197). Patent Owner does not make separate arguments with respect to claims 16 and 24. *See generally* PO Resp. We are persuaded by Petitioner’s showing, which we adopt.

Claim 17 depends from claim 16 and recites “wherein assigning the storage pool to the file comprises assigning the storage pool to the file based on the at least one service class.” Ex. 1001, 16:34–36. Petitioner contends, and we agree, that Gelb describes that the storage pool (storage group) is assigned based on service classes (data, management, and storage classes) assigned to the file. Pet. 27–28 (citing Ex. 1005, 4:66–68, 15:32–51; Ex. 1003 ¶¶ 166–167). Patent Owner does not make separate arguments with respect to claim 17. *See generally* PO Resp. We are persuaded by Petitioner’s showing, which we adopt.

Claim 18 depends from claim 16 and recites:

The method of claim 16, wherein the policy set further comprises at least one storage pool rule, wherein assigning the storage pool to the file comprises applying the storage pool rule to the characteristics of the available storage pools to assign the storage pool to the file.

Ex. 1001, 16:37–41. Petitioner contends, and we agree, that Gelb teaches storage pool rules in the storage group ACS routine. Pet. 28 (citing Ex. 1005, 19:40–44). As an example, Petitioner directs attention to Gelb’s description of the storage group ACS rule “WHEN (&STORCLAS = DB*)

SET &STORGRP = ‘DATABASE’” such that when the storage class includes “DB,” the file is assigned to the DATABASE storage group. *Id.* (citing Ex. 1005, 15:32–51). Petitioner further contends, and we agree, that the rules in the storage group ACS routine are part of the policy set which includes service class (data, management, and storage classes) rules, “because they are executed together in a program in the data management system.” *Id.* at 28–29 (citing Ex. 1005, 11:50–57; Ex. 1003 ¶ 168).

Petitioner further contends that Gelb teaches “assigning the storage pool to the file comprises applying the storage pool rule to the characteristics of the available storage pools to assign the storage pool to the file.” *Id.* at 29. Petitioner argues that Gelb teaches an exemplary ACS routine that “applies a storage pool (storage group) rule to the characteristics (size) of a storage pool (the ‘LARGE’ storage group), so that when the file has a maximum size larger than ‘9999999KB,’ the ‘LARGE’ storage group will be assigned to the file.” *Id.* (citing Ex. 1005, 15:32–51; Ex. 1003 ¶¶ 169–170). In Gelb, the source code includes “the term LARGE has to be empirically determined,” which Dr. Zadok testifies means that “whether a file should be stored in the LARGE group depends on the capacity of the LARGE storage group, i.e., whether the storage devices in the LARGE storage group has the capacity to accommodate data of a certain size.” Ex. 1003 ¶ 171. Dr. Zadok explains that a “POSITA would have understood that the ‘empirically determined’ capacity of the LARGE storage group is a ‘characteristic’ of the storage group” and that, “[t]herefore, this rule is applied to a characteristic (capacity) of the available storage pool (the ‘LARGE’ storage group) to assign the LARGE storage group to the file.” *Id.* Petitioner also provides an example from Gelb where the ACS routine has a rule that assigns a storage group “based on VIO maxsize in the VIO

storage group,’ so that for the ‘Temp’ data set type, VIO is assigned when VIO’s size is enough to accommodate the file, and PRIMARY is assigned when the VIO’s size is not enough.” Pet. 29–30 (citing Ex. 1005, 15:32–51; Ex. 1003 ¶ 172). Petitioner contends that a “POSITA would have understood that the ‘VIO maxsize’ (i.e., the maximum size of the VIO storage group) is” characteristic of the available storage pools and that assigning the storage group (VIO or PRIMARY) is based on the characteristics of the VIO storage group. *Id.* at 30 (citing Ex. 1003 ¶¶ 172–173).

Patent Owner argues that Gelb in combination with Tivoli fails to meet “assigning the storage pool to the file comprises applying the storage pool rule to the characteristics of the available storage pools to assign the storage pool to the file.” PO Resp. 45. Patent Owner argues that Gelb’s source code assigns a data set to a storage group not based on a characteristic of the storage group, but on the size of the data set to be stored. *Id.* at 46–50 (citing Ex. 2024 ¶¶ 129–145). We have considered Patent Owner’s arguments and determine that they do not undermine Petitioner’s showing. We agree with Petitioner that both files and storage pools can have a size characteristic and that Gelb considers the file size in relation to the maximum size of the storage pool. Pet. Reply 21 (citing Ex. 1027 ¶¶ 52–55). Patent Owner’s arguments and Dr. White’s testimony are not commensurate in scope with claim 18, which does not preclude considering the characteristics of the file when assigning the storage pool to the file. *See* PO Resp. 45–50; Ex. 2024 ¶¶ 129–145.

Based on the record before us, Petitioner has shown sufficiently that Gelb teaches “applying the storage pool rule to the characteristics of the available storage pools,” because Gelb teaches, for example applying the

ACS routine (storage pool rule) to the characteristics of the storage pool (i.e., the size of the pool, for the LARGE example or the VIO example), resulting in the disputed limitation. Pet. 28–30; Ex. 1003 ¶¶ 171–172. For instance, and with respect to Gelb’s storage group ACS routine (Ex. 1005, 15:30–51) directed to determining whether to assign a file VIO (for small temporary data sets), we give substantial weight to Dr. Zadok’s testimony that the rule “WHEN (&DSTYPE = ‘TEMP’) SET &STORGRP = ‘VIO’, ‘PRIMARY’” is source code that means that if the file’s size is within the “Maxsize” (maximum size) of the VIO storage group, the file will be assigned to the VIO storage group, but if the file’s size exceeds the Maxsize of the VIO storage group, the file will be assigned to the Primary storage group. Ex. 1003 ¶ 172. Thus, the storage pool rule is applied to the characteristic of the available storage pools (the size and capacity of the VIO storage group) to determine whether the file should be assigned to the VIO storage group. *Id.* We agree with Petitioner that VIO MAXSIZE refers to the maximum size of the VIO storage group and not the MAXIMUM size of a particular data set to be stored (LARGE rule) as Patent Owner contends. Pet. Reply 22 (citing PO Resp. 48–49; Ex. 1005, 15:32–51; Ex. 1003 ¶¶ 171–172). We also agree with Petitioner that a POSITA would not conflate the two, but understand them to be two different terms. *Id.*; *see also* Ex. 1005, 10:43–47 (where “LARGE” and “VIO” are described as two of the four types of storage groups). For all of the above reasons, Petitioner has sufficiently shown that Gelb teaches the disputed limitation.

Claim 19 depends from claim 16 and recites:

The method of claim 16, wherein assigning the storage pool to the file comprises selecting the storage pool from a group of storage pools of the open systems environment, the group of

storage pools each comprising at least two different disaster recoverability levels.

Ex. 1001, 16:42–46. Petitioner contends that Gelb combined with Tivoli meets the above limitation. Pet. 30. In particular, Petitioner contends, and we agree, that Gelb teaches a group of storage pools because it describes a group of storage groups (PRIMARY, PARGE, DATABASE, and VIO). *Id.* (citing Ex. 1005, 10:52–11:8). We further agree with Petitioner that Gelb teaches that a storage pool is selected from a group of storage pools because one pool (storage group) is selected from the four. *Id.* (citing Ex. 1005, 10:35–39; Ex. 1003 ¶ 174). Petitioner contends, and we agree, that Gelb teaches that the group of storage pools includes “at least two different disaster recoverability levels,” which a “POSITA would have recognized are related to, among other things, whether there are back-up copies of the data and the data is written to and retrieved from any such backup copy.” *Id.* at 30–31 (citing Ex. 1003 ¶ 175). Petitioner further contends, and we agree, that Gelb describes that storage pools (storage groups) have different backup requirements, and, thus different recoverability levels. *Id.* at 31 (citing Ex. 1005, 10:57–64, 11:2–3; Ex. 1003 ¶ 176). Petitioner asserts, and we agree that Tivoli teaches an “open system environment.” *Id.* at 31–32 (citing Ex. 1006, 22–23, Figure 9; Ex. 1003 ¶¶ 177–182). Patent Owner does not make separate arguments with respect to claim 19. *See generally* PO Resp. We are persuaded by Petitioner’s showing, which we adopt.

Claim 20 depends from claim 15 and recites:

The method of claim 15, wherein controlling handling of the file based on the service class comprises taking action on at least one of the group consisting of input/output speed, random access memory allocation, performance priority, and cache allocation scheme, in a manner in accordance with the service class.

Ex. 1001, 16:47–52. We agree with Petitioner’s showing that Gelb teaches that controlling handling of the file based on the service class comprises taking action on at least the input/output speed and performance priority in a manner according to the requirements in the service class. Pet. 32–33 (citing Ex. 1005, 8:51–54, 8:46–54; Ex. 1003 ¶¶ 183–188). Patent Owner does not make separate arguments with respect to claim 20. *See generally* PO Resp. We are persuaded by Petitioner’s showing, which we adopt.

Claim 21 is similar in scope to dependent claim 25 and recites “[t]he method of claim 15, wherein the service class rule is applied to the one or more file attributes to select the service class.” Ex. 1001, 16:53–55. We agree with Petitioner that Gelb meets this limitation, because a person having ordinary skill in the art would have understood Gelb describes “data, management, and storage service class rules [that] may be applied to file attributes such as the data set name to select a service class (the data, management or storage classes).” Pet. 33–34 (citing Ex. 1005, 12:14–39, 13:1–44, 15:1–26; Ex. 1003 ¶¶ 189–190), 35 (referring to showing for claim 21 in addressing claim 25; Ex. 1003 ¶ 197). Patent Owner does not make separate arguments with respect to claims 21 and 25. *See generally* PO Resp. We are persuaded by Petitioner’s showing, which we adopt.

i. Rationale to Combine

As explained above, Petitioner relies on Gelb for most limitations, but relies on Tivoli for the “plurality of clients, the clients comprising at least two different computing platforms” recited in independent claims 15 and 23 and the “open system environment” limitation of dependent claim 19. *See, e.g.*, Pet. 24–25, 30–32, 34–35. As Petitioner points out, Gelb is a patent assigned to IBM, and “Tivoli describes the Tivoli Storage Manager, which is

an IBM product.” *Id.* at 35. Petitioner contends, and it is not disputed, that both Gelb and Tivoli describe a storage system that uses policies to assign data to different classes and manage the data according to the assigned class. *Id.* at 36–37 (citing Ex. 1005, code (57), 10:1–13; Ex. 1006, 20; Ex. 1003 ¶ 199). Petitioner further contends, and it is not disputed, that “both Gelb and Tivoli describe storage management systems that have an administration component and a client component.” *Id.* at 37 (citing Ex. 1005, 4:57–5:11, 18:10–14; Ex. 1006, 8–12; Ex. 1003 ¶¶ 200–201).

Petitioner contends that “a POSITA would have been motivated to implement the design of Tivoli’s Storage Manager Server and client software in Gelb to create a system in which the system administrator aspect of the storage system and the client/application programmer aspect of the storage system are located on different computers” which would increase flexibility “where the users of the storage system may be located at different computers within a network.” *Id.* at 38–39 (citing Ex. 1005, 1:30–34, 5:55–56, 15:56–57; Ex. 1006, 8; Ex. 1003 ¶ 205). Petitioner further contends that a “POSITA would have further recognized that allowing the client software to support different operating systems would make Gelb’s system even more flexible.” *Id.* at 39 (citing Ex. 1003 ¶ 207). Petitioner also asserts that a “POSITA would have been motivated to implement Tivoli’s open systems environment to improve Gelb’s hierarchical storage manager (HSM).” *Id.* at 40 (citing Ex. 1005, 10:25–26, 16:54–59; Ex. 1006, 22–23; Ex. 1003 ¶¶ 209–210). Petitioner explains that a “POSITA would have had a reasonable expectation of success in adapting Gelb in view of Tivoli’s teachings,” because a “POSITA would have recognized that a user interface (such as the Tivoli client software) can be created to import data from an

application located on a client computer to a storage server.” *Id.* at 40–41 (citing Ex. 1003 ¶¶ 206, 208, 211).

We are not persuaded by Patent Owner’s argument that “*Gelb* lies well outside the field of distributed storage systems” (PO Resp. 40) for the reasons provided above with respect to Patent Owner’s analogous art arguments. As explained above, we find that *Gelb* is relevant to the obviousness determination. Patent Owner also argues that because *Gelb* and *Tivoli* are allegedly directed to complementary teachings with various features in common, “a person of ordinary skill in the art would not have seen the point of combining *Gelb* and *Tivoli* to give *Gelb* features from *Tivoli* that *Gelb* allegedly already possesses.” *Id.* at 41 (quoting Ex. 2024 ¶ 115). Patent Owner’s argument is misplaced because Petitioner relies on *Tivoli* to meet the claim limitation of a “plurality of clients, the clients comprising at least two different computing platforms.” Pet. 23–25; Pet. Reply 17. Moreover, we agree with Petitioner that the Petition provides reasons to combine *Gelb* and *Tivoli* other than that “*Gelb* and *Tivoli* are in the same field and share complementary teachings.” Pet. Reply 17 (citing Pet. 37–41).

Patent Owner argues that Petitioner’s “combination of *Gelb* and *Tivoli* involves a ground-up redesign of *Gelb*’s single-machine centralized mainframe architecture.” PO Resp. 42–45 (citing Ex. 2024 ¶¶ 113–128). We determine that Patent Owner’s arguments do not undermine Petitioner’s reasons for combining *Gelb* and *Tivoli*. In particular, Dr. White opines that there would have been “numerous practical difficulties in redesigning *Gelb*’s mainframe computing system to serve clients of different operating systems in a distributed environment as *Tivoli*” teaches. Ex. 2024 ¶ 122. Dr. White, however, focuses on “issues arising in a distributed system but not

mainframe systems.” *Id.* ¶ 123. Dr. White’s focus is based on a rigid view of combining the components of Gelb’s “mainframe computing system” with Tivoli’s “distributed environment” (*id.* ¶¶ 75–84) without considering what the combined teachings of Gelb and Tivoli would have suggested to a person having ordinary skill in the art. *See In re Keller*, 642 F.2d at 425.

Dr. White further testifies that creating versions of client software to accommodate multiple operating systems would have been extremely difficult, because of the “complexity of attempting to develop software for multiple computing platforms, each of which has different resources, application programming interfaces, data formats and many other distinctions.” Ex. 2024 ¶ 124. Dr. White also opines that Tivoli “does not provide the information that a person of ordinary skill in the art would have needed to navigate these complexities and successfully build a cross-platform client solution that completely redesigns Gelb to be a distributed system.” *Id.* Tivoli, however, teaches software residing on different computing platforms. Ex. 1006, 14 (“Tivoli Storage Manager server and client software is available on many different operating system platforms and can exploit different communication protocols”). Tivoli further describes a storage system that uses policies to assign data to different classes and manage the data according to the assigned class. *Id.* at 20. Thus, at the time of the invention, we find that a person having ordinary skill in the art (Ex. 1003 ¶ 32) would have known how to develop software for multiple computing platforms for a storage system and Dr. White does not explain why effort to write such software constitutes undue experimentation rather than routine experimentation as he suggests. We agree with Petitioner that “[t]o implement the relevant teachings of Gelb in Tivoli’s distributed environment, a POSITA would simply have had to write code for the Tivoli

clients that implemented Gelb’s automatic class selection algorithms and the other algorithms on which Petitioner relies” and that “this would have involved the routine task of writing a version of Gelb’s algorithms for the different computing platforms used in Tivoli” which teaches the same. Pet. Reply 19–20 (citing Ex. 1003 ¶ 207).

Based on the record before us, we determine that it would have been obvious to implement the design of Tivoli’s Storage Manager Server and client software with Gelb to create a system in which the system administrator aspect of the storage system and the client/application programmer aspect of the storage system are located on different computers within a network, thereby increasing flexibility. Pet. 38–39 (citing Ex. 1003 ¶ 205).

For all of the above reasons, having considered Petitioner’s and Patent Owner’s arguments and evidence, we determine that Petitioner has shown by a preponderance of the evidence that claims 15–21 and 23–25 of the ’132 patent would have been obvious over Gelb and Tivoli.

E. Asserted Obviousness of Claim 22 over Gelb, Tivoli, and Callaghan

1. Callaghan

Callaghan describes that the NFS protocol “is a network protocol that makes files stored on a file server accessible to any computer on a network.” Ex. 1007, 7. Callaghan asserts that “[t]he implementation of NFS by PC clients is an interesting case study in the success of NFS as a cross-platform protocol,” where PC clients include those using “DOS-derived operating systems: Windows 95, Windows NT, and OS/2.” *Id.* at 9. Certain naming conventions in DOS, however, “can create problems for DOS clients that access files on a UNIX or Windows server.” *Id.* at 10. Accordingly, the

DOS client uses an algorithm to map UNIX names to DOS equivalents.” *Id.* Also, Callaghan describes that “DOS supports only a small set of file attributes compared with the POSIX set of 13 or so file attributes provided in the NFS *fattr* structure.” *Id.* at 11. So, “[s]ome of the NFS attributes like file *size* and *mtime* have DOS equivalents,” while “[o]thers have no mapping or an indirect mapping.” *Id.* at 11–12.

2. Discussion

Petitioner contends that claim 22 is unpatentable under 35 U.S.C. § 103(a) as obvious over Gelb, Tivoli, and Callaghan. Pet. 41–46. Claim 22 depends from claim 15 and recites “wherein the computing platforms are selected from the group consisting of Windows, AIX, Linux, Solaris, Unix, Mac OS, OS/2, DOS, HP, IRIX, and OS/390, wherein the method further comprises translating the one or more attributes.” Ex. 1001, 16:56–60.

Petitioner asserts, and we agree, that Tivoli teaches that the clients’ computing platforms include at least Windows, AIX, Linux, Solaris, Unix, Mac OS, OS/2, DOS, HP, IRIX, and OS/390. Pet. 41 (citing Ex. 1006, 15–16, Tables 2, 3). Petitioner further contends, and we find, that the Tivoli Storage Server may run on UNIX platforms such as Solaris and AIX. *Id.* (citing Ex. 1006, 14; Ex. 1003 ¶ 212).

Petitioner relies on Callaghan to teach the disputed limitation of “translating the one or more attributes” of the file. In particular, Petitioner contends that Callaghan describes that “PC clients using ‘DOS-derived operating systems’ such as Windows and OS/2 can implement a Network File system (NFS) with a UNIX server.” *Id.* at 42 (citing Ex. 1007, 9). Petitioner, directing us to various descriptions in Callaghan, explains that there are differences in file naming between DOS/Windows and UNIX and

that DOS and UNIX have a different set of file attributes. *Id.* (citing Ex. 1007, 9–12; Ex. 1003 ¶¶ 213–214). Petitioner further contends that Callaghan teaches “that in order for the UNIX server to receive and make use of DOS-derived systems’ file names and attributes, the client translates the file name and attributes to the UNIX-based NFS name via a mapping table” and that Callaghan provides examples of mapping tables for file names and attributes. *Id.* at 42–43 (citing Ex. 1007, 10–12, Tables 14.1, 14.2; Ex. 1003 ¶ 215).

Combining Gelb with Tivoli and Callaghan, Petitioner contends, would have resulted in “a storage system that receives file attributes (such as file names or data set names) from a plurality of clients on multiple computing platforms such as Windows ... and when the storage system server and the client are on different computing platforms (e.g. when the client is DOS-based and the server is UNIX-based), the file attributes are translated using a mapping table.” *Id.* at 43–44 (citing Ex. 1003 ¶ 216–217; Ex. 1005, 4:16–24, 18:56–59).

Petitioner provides reasons for combining Callaghan with Gelb and Tivoli. *Id.* at 44–46. For example, Petitioner asserts that claim 22 “merely requires that the ‘different computing platforms’ be various enumerated operating systems, all of which were common operating systems at the time of the alleged invention” and that “a POSITA would have been motivated to create client applications accommodating these enumerated operating systems.” *Id.* at 44 (citing Ex. 1003 ¶ 218). Petitioner further asserts that a “POSITA would have been further motivated to combine Gelb and Tivoli with Callaghan.” *Id.* Petitioner contends that Callaghan is a book about NFS, which is a distributed file system protocol “widely used at the time of the alleged invention.” *Id.* (citing Ex. 1003 ¶ 219). Petitioner further

contends that the “Tivoli Storage Manager was able to utilize a UNIX NFS system for file sharing over a SAN” and that “a POSITA would have been motivated to look at references related to NFS, such as Callaghan, to improve distributed network storage systems such as Tivoli.” *Id.* at 44–45 (citing Ex. 1014, 14; Ex. 1003 ¶ 220). Petitioner asserts that a “POSITA would have been specifically motivated to implement the translation feature in Callaghan to improve the Gelb/Tivoli combination, so that the storage server and the client computer could understand each other’s file names and file attributes even when they run on different operating systems.” *Id.* at 45. In particular, Petitioner explains that a “POSITA would have understood that Callaghan’s teaching would be beneficial for Tivoli’s storage system, so that a Tivoli Storage Server can communicate with clients on a DOS-derived operating system” that “would have made the Tivoli Storage System more flexible.” *Id.* (citing Ex. 1006, 14; Ex. 1007, 9–11; Ex. 1003 ¶ 221). Petitioner also explains why a “POSITA would have had a reasonable expectation of success implementing Callaghan’s translation feature in the Gelb/Tivoli combination.” *Id.* at 45–46 (citing Ex. 1007, 9–11; Ex. 1003 ¶ 222).

We address above Patent Owner’s arguments regarding claim 15 and need not repeat them here. PO Resp. 50 (arguing that “the deficiencies of [Petitioner’s] challenge to Claim 15 also doom its challenge to Claim 22”). Patent Owner also argues that Petitioner gives no reason why a POSITA would have been motivated to use a UNIX-based NFS server with a DOS-derived client for file sharing over a SAN when other options were available such as using a Windows share (CIFS) to achieve file sharing over a SAN, including a Windows client. *Id.* at 52 (citing Ex. 2024 ¶¶ 148–151, 155; Ex. 1014, 14; Ex. 1003 ¶¶ 219–220; Ex. 2025, 30:21–32:17, 35:17–36:17).

Patent Owner’s arguments are misplaced as an obviousness determination does not turn on whether the proposed combination is the preferred or most desirable combination. *In re Fulton*, 391 F.3d 1195, 1200 (Fed. Cir. 2004); *PAR Pharm., Inc. v. TWI Pharms., Inc.*, 773 F.3d 1186, 1197–98 (Fed. Cir. 2014). And Patent Owner’s argument that Petitioner provides no reason why a POSITA would have looked to Callaghan is unavailing, as Petitioner provides reasons, as stated above. In particular, Petitioner explains why a POSITA would have looked to Callaghan. Pet. 45 (citing Ex. 1006, 14; Ex. 1007, 9–11; Ex. 1003 ¶ 221). We give substantial weight to Dr. Zadok’s testimony that “[a] POSITA would have recognized that Callaghan’s translation feature is beneficial and would improve the cross-platform operability of the Gelb/Tivoli combination” and that “the translation feature would make the Gelb/Tivoli combination more flexible and reliable.” Ex. 1003 ¶ 221. We agree with Petitioner that “[a] POSITA would have selected Callaghan because it provided details on how to implement a scenario expressly spelled out in Tivoli.” Pet. Reply 24–25 (Citing Pet. 43–44; Ex. 1027 ¶¶ 56–60).

Patent Owner also argues that Tivoli is directed to Windows clients and Callaghan fails to “address translating Windows file names to UNIX.” PO Resp. 52–53 (citing Ex. 2024 ¶¶ 156–163). Callaghan, however, is directed to Windows clients and teaches or suggests translating Windows file names to UNIX. Ex. 1007, 9 (“The PC clients referred to in this chapter are assumed to be using DOS-derived operating systems: Windows 95, Windows NT, and OS/2” and further explaining that UNIX and PC systems have “significant differences in file naming and attributes that need to be resolved”), 10 (“A Windows client is case-insensitive and case-preserving. Like a DOS client, it cannot tell the difference between ABC123 and

abc123, but it will preserve the cases in a filename—it will not map lowercase to uppercase” (emphasis omitted)), 40–41 (explaining that operating systems such as Windows that run on clients have unique requirements in their use of NFS protocol), 10–11 (showing exemplary mapping tables for translating file names and other file attributes in Table 14.1 (file name) and Table 14.2 (file attributes)).

We do not give substantial weight to Dr. White’s testimony that Callaghan only teaches translating DOS file names and attributes to UNIX (Ex. 2024 ¶ 158), because he does not take into consideration Callaghan’s teaching that “[t]he PC clients referred to in this chapter are assumed to be using *DOS-derived operating systems: Windows 95, Windows NT, and OS/2.*” Ex. 1007, 9 (emphasis added). We give substantial weight to Dr. Zadok’s testimony that a “POSITA would have recognized that Callaghan’s translation feature is beneficial and would improve the cross-platform operability of the Gelb/Tivoli combination” because Tivoli also teaches that the client computer may run on “*DOS-derived computing platforms such as Windows.*” Ex. 1003 ¶ 221 (emphasis added).

Patent Owner also argues that Tivoli had no need of Callaghan’s translation techniques “by allowing the server to communicate with clients on a DOS-derived operating system, such as Windows” because Tivoli already teaches allowing the servers to communicate with clients. PO Resp. 53–55 (citing Ex. 2024 ¶¶ 164–168; Ex. 2025, 39:17–40:14, 41:8–43:4, 43:10–44:7, 45:7–16). We agree with Petitioner that Patent Owner’s argument is misplaced. Pet. Reply 24. While Tivoli teaches that DOS-derived clients communicate with UNIX-based servers, “Tivoli does not teach the details of how this communication happens or the specific

limitation of “translating the one or more attributes” which “Petitioner relies on Callaghan for this.” *Id.* (citing Pet. 45) (emphasis omitted).

For all of the above reasons, having considered Petitioner’s and Patent Owner’s arguments and evidence, we determine that Petitioner has shown by a preponderance of the evidence that claim 22 of the ’132 patent would have been obvious over Gelb, Tivoli, and Callaghan.

F. Patent Owner’s Motion to Exclude

Patent Owner moves to exclude certain portions of Tivoli (Exhibit 1006) and Exhibits 1010 and 1029 in their entirety. Mot. Exc. 1. Exhibit 1010 is a copy of a webpage styled “How to order IBM Redbooks.” Ex. 1010. Exhibit 1029 is a copy of a webpage styled “Redbooks Online!”. Ex. 1029.

With respect to Tivoli (Ex. 1006), Patent Owner argues that Petitioner “presented *Tivoli*’s statement that it was purportedly ‘created or updated on June 15, 2001’ for the proposition that *Tivoli* was created or updated on June 15, 2001.” Mot. Exc. 2. Patent Owner further argues that Petitioner “presented *Tivoli*’s supposed copyright date for the proposition that *Tivoli* was copyrighted in 2000.” *Id.*

In rendering our Decision, we did not rely on any alleged statements that “[Tivoli] was purportedly ‘created or updated on June 15, 2001’” or “that *Tivoli* was [actually] copyrighted in 2000.” As explained above, we find, and it is not disputed, that Tivoli was published and available November 28, 2001 on an IBM website. Ex. 1011; PO Resp. 36 (arguing only that a published document is not enough to show public accessibility). Accordingly, we dismiss the motion with respect to Tivoli (Exhibit 1006).

With respect to Exhibit 1010, Patent Owner argues that it should be excluded because Petitioner “did not authenticate its contents,” it is “irrelevant for the purpose for which [Petitioner] offered it,” and because it is inadmissible hearsay. Mot. Exc. 3. In rendering our Decision, we did not rely on Exhibit 1010. Accordingly, we dismiss the motion with respect to Exhibit 1010.

Patent Owner argues that Exhibit 1029 should be excluded “as inadmissible hearsay.” *Id.* at 6. In rendering our Decision, we find Exhibit 1029 to further substantiate that Tivoli would have been accessible to a person having ordinary skill in the art at the time of the invention. In other words, our Decision would be the same whether we consider Exhibit 1029. In any event, we address Patent Owner’s contentions as to why we should exclude Exhibit 1029. In particular, Patent Owner argues that Exhibit 1029 “consists of out-of-hearing statements offered via [Petitioner’s] reply for their supposed truth: namely, that the Redbook repository offered keyword searching and that ‘[a] quick keyword search will provide you with a hit list of IBM Redbooks, Redpieces, Redpapers and Residencies.’” *Id.* (second alteration in original).

We agree with Petitioner that it does not rely on Exhibit 1029 for the truth of the matter asserted. Opp. Mot. Exc. 8 (citing *Apple, Inc. v. Virnetx, Inc.*, IPR2017-00337, Paper 31, 50 (PTAB May 20, 2018), quoting *Seabery N. Am. Inc. v. Lincoln Glob. Inc.*, IPR2016-00840, Paper 60, 5–6 (PTAB Oct. 2, 2017)). In particular, we understand Petitioner to have offered Exhibit 1029 for the effect that it would have had on the understanding of a person of ordinary skill in the art, rather than for the truth of the matter asserted. Here, the exhibit shows what one with ordinary skill in the art would have known at the time of the invention about the accessibility of

Redbooks and Redpapers on IBM's website. Pet. Reply 14 (citing to Ex. 1003 ¶ 110 and explaining that "Tivoli was a popular storage management software system on the market before the filing date of the '132 Patent" and that a "POSITA wishing to learn more about Tivoli would have looked to IBM's website" and "would have used the website's keyword search capabilities to locate this Redpaper"). For these reasons, we decline to exclude Exhibit 1029 as impermissible hearsay.

Accordingly, Patent Owner's Motion to Exclude is *dismissed-in-part* and *denied-in-part*.

E. Remaining Ground Challenging Claims 15–21 and 23–25

For the reasons discussed above, Petitioner has shown by a preponderance of the evidence that claims 15–21 and 23–25 are unpatentable as obvious over Gelb and Tivoli. Petitioner has also shown by a preponderance of the evidence that claim 22 is unpatentable as obvious over Gelb, Tivoli, and Callaghan. In addressing these grounds, we have addressed all of the challenged claims. *See* 35 U.S.C. § 318(a) (requiring the Board to "issue a final written decision with respect to the patentability of any patent claim challenged by the petitioner and any new claim added under section 316(d)"); *see also SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1359 (2108) (holding that a petitioner "is entitled to a final written decision addressing all of the claims it has challenged"). Accordingly, we need not and do not decide whether Petitioner has shown by a preponderance of the evidence that claims 15–21 and 23–25 are unpatentable based on the remaining challenge. *Cf. In re Gleave*, 560 F.3d at 1338 (not reaching other grounds of unpatentability after affirming the anticipation ground); *see also Beloit Corp. v. Valmet Oy*, 742 F.2d 1421, 1423 (Fed. Cir. 1984) (holding

that once a dispositive issue is decided, there is no need to decide other issues).

III. CONCLUSION¹⁴

For the foregoing reasons, we determine that Petitioner has shown by a preponderance of the evidence that claims 15–25 of the '132 patent are unpatentable, as summarized in the following table:

Claims	35 U.S.C. §	Reference(s)/ Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
15–21, 23–25	103(a)	Gelb, Tivoli	15–21, 23–25	
22	103(a)	Gelb, Tivoli, Callaghan	22	
15–21, 23–25	102 ¹⁵	Devarakonda		
Overall Outcome			15–25	

¹⁴ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this Decision, we draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. § 42.8(a)(3), (b)(2).

¹⁵ As explained immediately above, because the grounds relying on Gelb and Tivoli and Gelb, Tivoli, and Callaghan are dispositive as to challenged claims 15–25, we need not and do not decide whether Petitioner has shown by a preponderance of the evidence that claims 15–21 and 23–25 also would have been unpatentable based on Devarakonda.

IV. ORDER

Accordingly, it is:

ORDERED that claims 15–25 of the '132 patent have been shown to be unpatentable;

FURTHER ORDERED that Patent Owner's Motion to Exclude (Paper 42) is *dismissed-in-part* and *denied-in-part*; and

FURTHER ORDERED that, because this is a Final Written Decision, parties to the proceeding seeking judicial review of the Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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