

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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NETAPP, INC.,  
Petitioner,

v.

KOM SOFTWARE, INC.,  
Patent Owner.

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Case IPR2019-00594  
Patent No. 6,654,864

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**PETITIONER'S NOTICE OF APPEAL**

Via Hand Delivery  
Director of the United States Patent and Trademark Office  
c/o Office of the General Counsel, 10B20  
Madison Building East  
600 Dulany Street  
Alexandria, VA 22314

Via E2E  
Patent Trial and Appeal Board

Via CM/ECF  
United States Court of Appeals for the Federal Circuit

US PATENT AND  
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2020 OCT 19 PM 3:39

OFFICE OF THE GENERAL COUNSEL

Pursuant to 35 U.S.C. §§ 141(c), 142, and 319 and 37 C.F.R. §§ 90.2(a) and 90.3(a), Petitioner NetApp, Inc. hereby provides notice that it appeals to the United States Court of Appeals for the Federal Circuit from the Final Written Decision of the Patent Trial and Appeal Board entered August 17, 2020, and from all underlying and related orders, decisions, rulings, and opinions regarding U.S. Patent 6,654,864 in *Inter Partes* Review IPR2019-00594.

In accordance with 37 C.F.R. § 90.2(a)(3)(ii), the expected issues on appeal include, but are not limited to, the Patent Trial and Appeal Board's determination in its Final Written Decision that Petitioner did not demonstrate that claims 5, 6, and 9 of the '864 patent are unpatentable, and any other finding or determination supporting or related to that determination, as well as all other issues decided adversely to Petitioner in any orders, decisions, rulings, or opinions.

A copy of the decision being appealed is attached to this Notice.

Pursuant to 35 U.S.C. § 142 and 37 C.F.R. § 90.2(a), this Notice is being filed with the Director of the United States Patent and Trademark Office, and a copy of this Notice is being filed concurrently with the Patent Trial and Appeal Board. In addition, a copy of this Notice and the required docketing fees are being filed with the Clerk's Office for the United States Court of Appeals for the Federal Circuit via CM/ECF.

Case IPR2019-00594  
Patent No. 6,654,864

Dated: October 19, 2020

By: Erika H. Arner/  
Erika H. Arner (Reg. No. 57,540)  
Lead Counsel for Petitioner

**CERTIFICATE OF SERVICE**

Pursuant to 37 C.F.R. § 42.6(e) (and under Fed. R. App. P. 25 and Fed. Cir. R. 25), the undersigned hereby certifies that a copy of the foregoing **PETITIONER'S NOTICE OF APPEAL** was served electronically on October 19, 2020, on counsel of record for the Patent Owner as follows:

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In accordance with 37 C.F.R. §§ 90.2(a)(1) and 104.2(b), the undersigned hereby certifies that, in addition to being filed electronically through the Board's E2E System, the foregoing **PETITIONER'S NOTICE OF APPEAL** was filed

and served by hand delivery on October 19, 2020, with the Director of the United States Patent and Trademark Office, at the following address:

Director of the United States Patent and Trademark Office  
c/o Office of the General Counsel  
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In accordance with 37 C.F.R. § 90.2(a)(2), the undersigned hereby certifies that on October 19, 2020, a true and correct copy of the foregoing **PETITIONER'S NOTICE OF APPEAL** was filed electronically with the Clerk's Office of the United States Court of Appeals for the Federal Circuit via CM/ECF.

Dated: October 19, 2020

By: /Lisa C. Hines/  
Lisa C. Hines  
Litigation Legal Assistant

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GARRETT & DUNNER, LLP

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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NETAPP, INC.,  
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Patent Owner.

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IPR2019-00594  
Patent 6,654,864 B2

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

DOUGAL, *Administrative Patent Judge*.

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

## I. INTRODUCTION

### A. Background

NetApp, Inc. (“Petitioner”)<sup>1</sup> filed a Petition to institute an *inter partes* review of claims 1–3, 5, 6, and 9 (the “challenged claims”) of U.S. Patent No. 6,654,864 B2 (“the ’864 patent”). Paper 3 (“Pet.”). KOM Software, Inc. (“Patent Owner”) filed a Preliminary Response. Paper 9 (“Prelim. Resp.”). Applying the standard set forth in 35 U.S.C. § 314(a), we instituted an *inter partes* review of all challenged claims. Paper 10 (“Dec.”).

Patent Owner filed a Response (Paper 12, “PO Resp.”), Petitioner filed a Reply (Paper 18, “Reply”), and Patent Owner filed a Sur-Reply (Paper 23, “Sur-Reply”). An oral hearing was held on May 27, 2020, and a copy of the transcript was entered into the record. Paper 36 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This Decision is a Final Written Decision under 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73 as to the patentability of the claims on which we instituted trial. Having reviewed the arguments of the parties and the supporting evidence, we determine that Petitioner has shown, by a preponderance of the evidence, that claims 1–3 of the ’864 patent are unpatentable, but has not shown, by a preponderance of the evidence, that claims 5, 6, and 9 are unpatentable.

### B. Related Matters

Petitioner identifies the following pending litigation involving the ’864 patent: (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*

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<sup>1</sup> Hewlett Packard Enterprise Co. settled with Patent Owner and is no longer a part of this proceeding. *See* Paper 31.

*Inc. v. NetApp, Inc.*, Case No. 1-18-cv-00160 (D. Del.). Pet. 50. Petitioner filed another petition for *inter partes* review of the '864 patent, but trial was not instituted on that petition. See IPR2019-00597. Additionally, Petitioner indicates that it filed numerous other *inter partes* review petitions relating to patents owned by Patent Owner. Pet. 50–51.

C. *The '864 Patent*

The '864 patent (Ex. 1001), titled “Method and system for providing restricted access to a storage medium,” relates generally to a method of providing restricted write access on a data storage medium. Ex. 1001, code (54), 1:11–12. The '864 patent discloses that access privileges provided by previous operating systems “fail to adequately provide protection for archival storage devices such as magnetic tape or removable optical media.” *Id.* at 1:28–30. For example, “[w]hen an archive data store is used with a data store device, it is often desirable that it not be written to.” *Id.* at 2:12–13. However, when a data store device is accessed, file systems of previous operating systems may perform updating of file access information even when it is not desired. *Id.* at 2:16–19. To solve this problem, the '864 patent discloses an operating system that includes a “trap layer” or “filter layer” disposed between the application layer and the file system layer. *Id.* at 7:35–37. Figure 3 illustrates a block diagram of an operating system that includes a trap layer and is reproduced below.



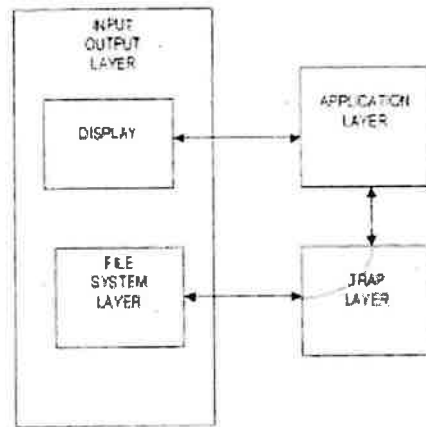


FIG. 3

As shown in Figure 3 above, each file system access request that is transmitted from the application layer to the file system layer is intercepted by the trap layer, where restrictions relating to access privileges are implemented. *Id.* at 7:37–40. Some access requests are blocked and error messages are returned to the application layer. *Id.* at 7:41–42. Some access requests may be modified and passed on to the file system in modified form. *Id.* at 7:42–44.

#### *D. Illustrative Claims*

Of the challenged claims, claims 1, 5, and 9 are independent. Each of dependent claims 2, 3, and 6 depends from respective independent claims 1 and 5. Claim 1 illustrates the claimed subject matter and is reproduced below:

1. A method of restricting access by a computer to a logical storage medium other than a write once medium in communication with the computer, the method comprising the steps of:

providing an indication of a data write access privilege for the entire logical storage medium, the data write access privilege

indicative of a restriction to alteration of a same portion of each file stored on the logical storage medium; and

restricting file access to the logical storage medium in accordance with the indication while allowing access to free space portions of the same logical storage medium.

Ex. 1001, 10:22–33.

*E. Instituted Grounds and Prior Art*

Petitioner contends that the challenged claims would have been unpatentable on the following grounds:<sup>2</sup>

<b>Claim(s) Challenged</b>	<b>35 U.S.C. §<sup>3</sup></b>	<b>References/Basis</b>
1–3, 5, 6, 9	102, 103	Ofek <sup>4</sup>
1, 2, 5	103	Vossen <sup>5</sup>
1, 2, 5	103	Vossen, Willman <sup>6</sup>
2, 3, 5, 6, 9	103	Vossen, Bsaibes <sup>7</sup>
2, 3, 5, 6, 9	103	Vossen, Willman, Bsaibes

*1. Ofek*

Ofek is titled “WORM magnetic storage device” and describes a “method for operating a magnetic disk storage device in read/write and read-only modes.” Ex. 1004, Abstract. In particular, Ofek is directed to “a method for enabling read-write storage media to operate with a write once, read

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<sup>2</sup> Petitioner supports its challenge with a Declaration of Jon B. Weissman, Ph.D. (“Weissman Declaration”) (Ex. 1003).

<sup>3</sup> The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (September 16, 2011) (“AIA”), included revisions to 35 U.S.C. §103 that became effective on March 16, 2013. Because the ’864 patent issued from an application filed before March 16, 2013, we apply the pre-AIA version of the statutory basis for unpatentability.

<sup>4</sup> Ex. 1004, Ofek, U.S. 6,185,661 B1, issued Feb. 6, 2001.

<sup>5</sup> Ex. 1005, Vossen, U.S. 6,026,402, issued Feb. 15, 2000.

<sup>6</sup> Ex. 1006, Willman, U.S. 5,363,487, issued Nov. 8, 1994.

<sup>7</sup> Ex. 1007, Bsaibes, U.S. 5,701,458, issued Dec. 23, 1997.

many times characteristic.” *Id.* at 1:7–9. Figure 1 of Ofek, below, is a block diagram of a data processing system.

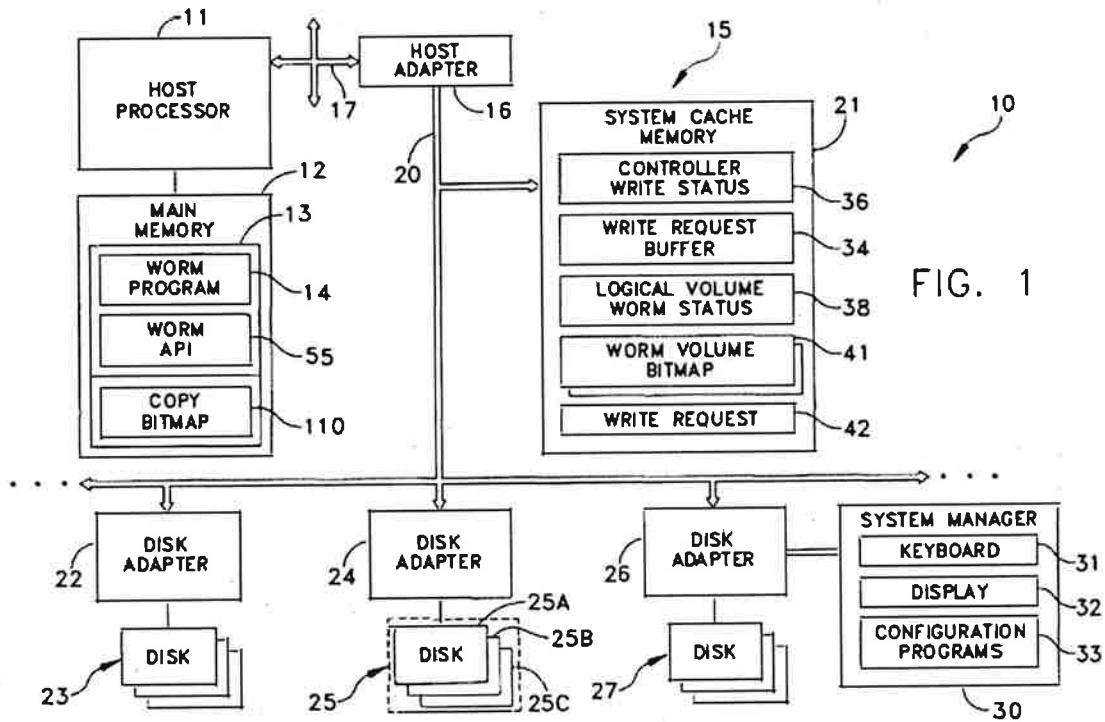


FIG. 1

Ofek Figure 1 illustrates a data processing system 10 that includes a host processor 11, main memory 12, and application program 13, disk subsystem or controller 15, and host adapter 16. *Id.* at 3:45–54. Application program 13 includes a “WORM” (write once, read many) program 14. *Id.* at 3:54–56. Ofek teaches that when the host processor issues a write request, data is transferred to a write request buffer 34 in system cache memory 21. *Id.* at 4:41–42. Ofek further teaches that “[d]uring an initial configuration process, a configuration program 33 in the system manager 30 configures one or more logical volumes to have a capability by which individual tracks can be switched between read/write and read-only operating modes.” *Id.* at 4:53–57. System manager 30 identifies a controller 15 as a WORM controller. *Id.* at 4:57–58. Data processing system 10 addresses logical

volumes and identifies logical volumes that will serve as WORM volumes. *Id.* at 4:62–63. Logical volume buffer 38 identifies each logical volume which has the capability of operating in a WORM mode. *Id.* at 5:2–4.

2. *Vossen*

*Vossen* is titled “Process restriction within file system hierarchies” and describes “a method and apparatus for restricting a process or process hierarchy to a subset of a computer host’s file system(s) in an environment where all file systems are simultaneously available to an application.” Ex. 1005, Abstract. *Vossen* teaches “modify[ing] the usual operation of the host computer’s operating system interface such that any file system access attempts by the affected process are constrained to occur logically within the restriction domain.” *Id.* at 2:27–30. *Vossen* teaches that Windows NT supports external devices via loadable device drivers and that the operating system kernel delivers one of a large set of requests to the driver in a I/O Request Packet (or IRP) when a process requests some service of the device. *Id.* at 4:24–30.

*Vossen* further teaches that it is possible to add layers above file system drivers that *Vossen* calls intermediate drivers. *Id.* at 4:57–58. An intermediate driver is “known as a file system filter driver since its usual task is to filter the requests delivered to the underlying file system driver.” *Id.* at 4:58–61. “A filter driver will typically examine the IRP provided by the kernel and make modifications (according to the function of the specific driver) before passing it along to the actual file system driver.” *Id.* at 4:61–64. *Vossen* further discloses that one example of such a filter drive is a process restriction filter driver, such as that shown below in *Vossen* Figure 6. *Id.* at 4:64–67.

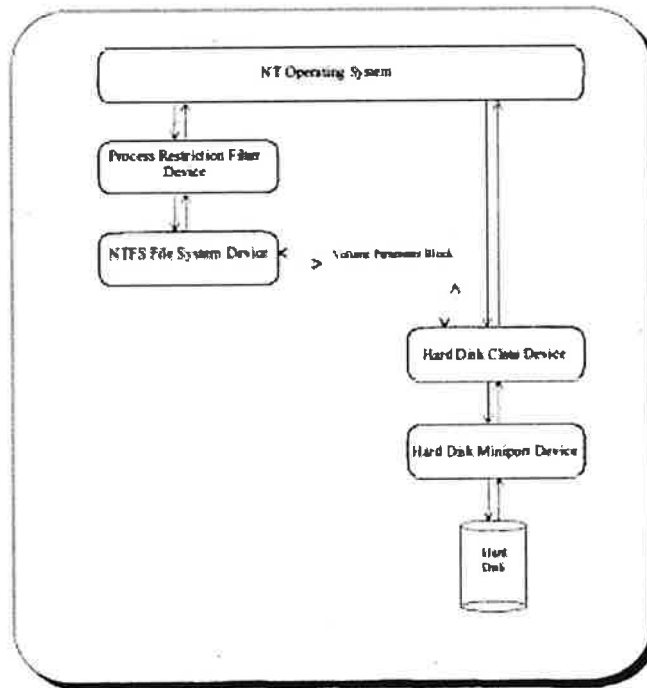


Figure 6

Figure 6 of Vossen, above, depicts an NT system configuration including a process restriction filter driver. *Id.* at 2:59–60. “[T]he process restriction filter operates by examining all IRPs containing path names sent to each file system it restricts.” *Id.* at 9:65–67. “For each IRP received, the filter driver determines if the process that initiated the I/O request should be subject to file system restrictions.” *Id.* at 10:6–8. The process restriction filter modifies restricted IRPs before passing them to the driver that resides below it. *Id.* at 11:1–3.

## II. ANALYSIS

### A. Legal Standards

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. Inc. v. Union Oil Co.*, 814 F.2d 628, 631

(Fed. Cir. 1987). Moreover, “[b]ecause the hallmark of anticipation is prior invention, the prior art reference—in order to anticipate under 35 U.S.C. § 102—must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements ‘arranged as in the claim.’” *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008). Whether a reference anticipates is assessed from the perspective of an ordinarily skilled artisan. *See Dayco Prods., Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 1368 (Fed. Cir. 2003) (“[T]he dispositive question regarding anticipation [i]s whether one skilled in the art would reasonably understand or infer from the [prior art reference’s] teaching’ that every claim element was disclosed in that single reference.”).

In *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1 (1966), the Supreme Court set out a framework for assessing obviousness under 35 U.S.C. § 103 that requires consideration of four factors: (1) the “level of ordinary skill in the pertinent art,” (2) the “scope and content of the prior art,” (3) the “differences between the prior art and the claims at issue,” and (4) “secondary considerations” of non-obviousness such as “commercial success, long-felt but unsolved needs, failure of others, etc.” *Id.* at 17–18. Neither party has presented evidence or argument directed to secondary considerations. The other *Graham* factors are addressed below.

#### *B. Level of Ordinary Skill*

Petitioner contends a person of ordinary skill in the art (a “POSA”) “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. 6 (citing Ex. 1003 ¶ 37). Patent Owner provides a similar definition, stating a POSA “should have a bachelor’s

degree in electrical engineering, computer science, or equivalent with two years or more of experience in computing systems development; a master's degree in electrical engineering, computer science, or equivalent; or comparable computing systems work experience." PO Resp. 9 (citing Declaration of Dr. Jose Luis Melendez ¶ 32, (Ex. 2002) ("Melendez Declaration")); *see* Ex. 2002 ¶ 32 (Dr. Melendez testifying that a POSA may also have a degree in electronics engineering or applied mathematics).

Thus, the parties dispute whether a POSA must have a degree in computer science/engineering or whether a POSA could instead have a degree in electrical engineering as well as whether the POSA's experience must be in data storage management or could encompass experience in the field of computing systems development.

Although the parties articulate different levels of skill for a POSA, neither party explains how its recited level of skill impacts the obviousness analysis such that application of one proposal versus the other would lead to different ultimate outcomes.

Based on the record before us, including the types of problems and solutions described in the '864 patent and the cited prior art, we determine that a person of ordinary skill in the art would have had a bachelor's degree in a technical field such as computer engineering, computer science, electrical engineering, electronics engineering, applied mathematics, or their equivalent, with two years of experience in the field of computing systems development, including fields of data storage management or file storage and manipulation; a master's degree in such a technical field; or comparable computing systems work experience. We further note that our analysis would be the same under either parties' definition.

*C. Claim Construction*

In an *inter partes* review, 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) (2019). Under this standard, claim terms are given their ordinary and customary meaning as would have been understood by a person of ordinary skill in the art at the time of the invention and in the context of the entire patent disclosure. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). If the specification “reveal[s] a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess[,] . . . the inventor’s lexicography governs.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316 (Fed. Cir. 2005) (en banc) (citing *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002)).

Petitioner offers constructions for the terms, “same portion of each file” and “portion of each file” in independent claims 1 and 5, respectively. Pet. 7–8 (emphasis omitted). According to Petitioner, both of these phrases should be interpreted to mean “a portion, including the entirety of each file.” *Id.* at 7. Thus, Petitioner’s position is that a “portion of each file” includes everything from something less than the entire file to the entire file. *See* Reply 1 (“The entirety of each file is one example that satisfies the recitation of a ‘portion of each file’ in claims 1 and 5.”); *id.* at 3 (“Petitioner does not dispute that a ‘portion of each file’ can include a subset of a file’s data.”).

Patent Owner does not provide an express construction for these terms but argues generally that a “portion” must be something less than the entire file. PO Resp. 10–13. Based on our discussion below in § II.D.1.c, we need not resolve this dispute between the parties to resolve the patentability issues before us.



We decline to provide an express construction for any terms in the '864 patent because we determine that no such construction is required for the purposes of this Decision. *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))).

*D. Claims 1–3, 5, 6, 9 — Alleged anticipation or obviousness by Ofek*

Petitioner asserts that Ofek anticipates or renders obvious claims 1–3, 5, 6, and 9. Pet. 8, 15–29. Patent Owner opposes. *See* PO Resp. 17–23. For the reasons set forth below, we determine Petitioner has shown that Ofek teaches or suggests the limitations of claims 1–3. Pet. 8, 15–24; Ex. 1003 ¶¶ 52–68.

In addition, for the reasons set forth below, we determine Petitioner has not shown that Ofek teaches or suggests the limitations of claims 5, 6, and 9.

*1. Claim 1*

Petitioner asserts that Ofek discloses every claim recitation of independent claim 1. Pet. 15–21. For example, the preamble of claim 1 states “[a] method of restricting access by a computer to a logical storage medium other than a write once medium in communication with the computer.” Petitioner asserts that Ofek discloses a logical volume that is part of a magnetic disk storage device having read/write and read only modes. *Id.* at 16–17 (citing Ex. 1004, code (57), 4:9–18, 6:9–12, Fig. 1; Ex. 1003 ¶ 54). Petitioner asserts that this logical volume is consistent with the logical storage medium (other than a write once medium) taught by the '864 patent and as required by the claim. *Id.* (citing Ex. 1001, 10:11–15; Ex. 1003 ¶ 54).

Petitioner further asserts that Ofek discloses, teaches, and suggests the computer-implemented methods of restricting access to the logical storage medium using the process described in the additional elements of the claim, which we address below. *Id.* at 18–21.

a) *Providing an Indication*

Claim 1 also requires “providing an indication of a data write access privilege for the entire logical storage medium, the data write access privilege indicative of a restriction to alteration of a same portion of each file stored on the logical storage medium.”

Petitioner asserts that Ofek discloses such an indication

because it discloses a control program for managing read/write and read-only access to data using a bit map that (1) accounts for each track in each logical volume (i.e., singularly or collectively *the entire logical storage medium*) and (2) allows for an indication of the data write access privilege for each track (i.e., *providing an indication of a data write access privilege for it*).

Pet. 18 (citing Ex. 1003 ¶ 56); *see also id.* (quoting Ex. 1004, 5:5–15) (discussing Ofek’s bitmap which “contain[s] one bit position for each logical track in the volume”).

Petitioner asserts that the indication is indicative of the claimed restriction (“a restriction to alteration of a same portion of each file stored on the logical storage medium”) because Ofek’s “bit map restricts the ability to alter files that are marked as read only” and because “restrict[ing] alteration of data at a track level . . . prevents alteration to any and all particular parts of data for each file stored on the medium, and further restricts access to the same portion of each file, namely the entirety of the file.” *Id.* at 19.

*b) Restricting File Access*

Claim 1 concludes with “restricting file access to the logical storage medium in accordance with the indication while allowing access to free space portions of the same logical storage medium.”

Petitioner asserts that Ofek restricts file access “because it discloses a control program for preventing the ability to write data (i.e., *restricting file access to the logical storage medium*) based on the data’s attributes in a bit map (i.e., *in accordance with the indication*).” Pet. 20 (citing Ex. 1003 ¶ 59); *see also id.* (discussing Ex. 1004, 5:43–51).

Petitioner asserts that Ofek allows access to free space portions for two reasons. *Id.* at 20–21. First, Petitioner cites Ofek’s teaching of “allowing standard write operations to occur for tracks in read/write mode.” *Id.* at 20 (citing Ex. 1004, 5:47–48). Second, Petitioner cites Ofek’s teaching that, upon writing to the storage medium, the written data is immediately transferred to a read-only state by making any track that is written to read only. *Id.* at 20–21 (citing Ex. 1004, 8:26–39). Petitioner argues that a POSA “would have understood that a transfer from read/write state to a read-only state ‘upon a *first* write operation’ would require that the data be written to previously unwritten storage space on the logical storage medium” as required by claim 1. *Id.* at 21 (citing Ex. 1003 ¶ 61).

*c) Analysis*

Patent Owner argues that, although Ofek’s bit map indicates data write access privileges for each logical track, it does not provide “an indication of a data write access privilege to files stored in the entire logical storage medium” as claimed. PO Resp. 18. In other words, Patent Owner argues that the claim requires an indication of a single data write access privilege that applies to every file in the storage medium, not just a way to

identify all of the data write access privileges for each logical track.

However, as discussed below, Ofek's bit map provides such an indication.

Patent Owner further argues that Ofek teaches away from applying a single data write access privilege that applies to every file in the storage medium because it initially sets each track to a read/write mode. *Id.* at 18–19 (citing Ex. 1004, 5:15–18). We do not agree that this teaching in Ofek amounts to a teaching away.

“A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994). However, what Patent Owner describes is the initial state for any storage media that is not merely a write once read many times (i.e. a CD-ROM) medium. This does not prevent or teach away from providing access protections on the storage medium, or from providing access protections that apply across the board on the storage medium.

This is evidenced by the fact that Ofek explicitly teaches a mode where “upon a *first* write operation” the initial read/write state is changed to a read-only state. Ex. 1004, 8:33–35 (emphasis added); *see also* Pet 20–21 (citing Ex. 1004, 8:26–39). Ofek teaches that this mode can be applied to the entire storage medium. Ex. 1004, 8:26–39. Thus, the data write access privileges are applied to any data or file stored on any track across the entire logical storage medium.

Ofek acknowledges that changing to this read-only state can be an inefficient use of space on the storage medium, resulting in partially-filled tracks, but states that it has the advantage of preventing deletion of data, such as files, saved to those same tracks. *Id.* at 8:33–39. Under this mode, all

tracks containing data, such as files, would be marked as read-only in Ofek's bit map thereby providing "an indication of a data write access privilege to files stored in the entire logical storage medium" as required under either of Patent Owner's or Petitioner's reading of the claim.

Patent Owner also attacks Ofek's inefficient use of storage as not "allowing access to free space portions of the same logical storage medium" as required by claim 1. PO Resp. 22–23. Patent Owner implies that the claim requires access be provided to *all* free space portions. *Id.* at 23 ("Ofek . . . fails to take advantage of free space portions of a track set to a 'read-only' setting"). However the claim refers in an open ended manner to "free space portions of the same logical storage medium." The claim on its face does not require access to *all* free space portions. *See* Reply 18–19. Patent Owner does not identify any language in the claim that would require such a narrow construction. *See generally* PO Resp. 22–23. As discussed above, Ofek teaches providing access to free space portions of the storage medium which can be written to and then the tracks which have been modified can be converted to read-only. Pet. 21; Ex. 1003 ¶ 61. Thus, we agree with Petitioner that Ofek teaches restricting file access while also allowing access to free space portions on the logical storage medium.

Patent Owner further argues that Ofek does not teach "a restriction to alteration of a same portion of each file" as required by claim 1. PO Resp. 19–20. Patent Owner argues that Ofek's focus on tracks does not implicate what happens to a file or how a file relates to a track. *Id.* The Decision on Institution stated that

a person of skill in the art would understand that restricting alteration of a track is not the same as restricting alteration of a file. For example, a *file* may comprise the entirety of one or more *tracks* or portions of one or more *tracks*. Conversely, a *track* may

encompass the entirety of one or more *files* or portions of one or more *files*.

Dec. 14. Thus, we agree with Patent Owner that where Petitioner merely relies on Ofek's teaching of "allowing standard write operations to occur for tracks in read/write mode," (Pet. 20), this is insufficient to show "a restriction to alteration of a same portion of each file." "[N]ot making tracks completely read-only until the entire track is filled" does not restrict alteration of a same portion of each file on the storage medium, nor does it show how files are treated on the storage medium. PO Resp. 20; Sur-Reply 15-16.

At the same time, as discussed above, Petitioner also relies on Ofek's teaching whereupon writing to the storage medium the written data is immediately transferred to a read-only state. Pet. 20-21 (citing Ex. 1004, 8:26-39). In this mode all files would be treated identically, independent of how they are written to a track, because any track that contains a file or a portion of a file would be converted to read-only.

Further, by restricting access (read-only) to data or a file that has been written to the storage medium, "a restriction to alteration of a same portion of each file" is applied as required by claim 1. Patent Owner's argument that a whole file is not the same as a portion of the file (*see* PO Resp. 10-13) misses the mark because claim 1 recites restricting "a same portion of each file," but it does not require that the remainder of the file remain unrestricted. Thus, Ofek's disclosures of restricting access to entire tracks and the files stored on those tracks describes "a restriction to alteration of a same portion of each file" because the whole file encompasses every portion of that file.

*d) Conclusion*

In conclusion, we are persuaded by Petitioner's contentions and the underlying evidence cited in support regarding the limitations of claim 1 individually and as a whole. We determine that Petitioner establishes by a preponderance of the evidence that the subject matter of claim 1 is anticipated by or obvious over Ofek. Pet. 15–21; Ex. 1003 ¶¶ 52–61.

*2. Claims 2 and 3*

Petitioner contends that Ofek discloses, teaches, or suggest all of the limitations of claims 2 and 3 which depend from claim 1. Pet. 21–24; Ex. 1003 ¶¶ 62–68. Patent Owner does not separately argue the patentability of these dependent claims over Ofek. *See generally* PO Resp.

We have reviewed Petitioner's arguments and supporting evidence regarding these claims and determine that Petitioner has shown by a preponderance of the evidence that claims 2 and 3 are anticipated by or obvious over Ofek.

*3. Claims 5, 6, and 9*

Petitioner asserts that Ofek discloses every claim recitation of claims 5, 6, and 9. Pet. 24–28. Claims 5 and 9 are independent, and claim 6 depends from claim 5. Claims 5 and 9 include limitations similar to claim 1 and Petitioner's analysis of these claims is similar to the analysis of claim 1. *Compare* Pet. 24–26 and 26–28, *with id.* at 16–21. However, there are some differences between the claims. For example, where claim 1 states:

the data write access privilege indicative of a restriction to alteration of a same portion of each file stored on the logical storage medium;

claims 5 and 9 define the data write access privilege as, respectively:

indicating a disabled operation relating to alteration of a portion of each file stored within the logical storage medium, the indication other than a read only indication;

and

indicating a disabled operation relating to alteration of data within the logical storage medium, the indication other than a read only indication, the disabled operations supported by the storage medium.

Thus, unlike claim 1, claims 5 and 9 also require “an indication of a data write access privilege . . . indicating a disabled operation . . . other than a read only indication.”

Petitioner contends Ofek teaches these limitations of claims 5 and 9 by disclosing that “invalid read/write requests (i.e., *other than a read only indication*)” are prevented from accessing the local storage medium and that “an appropriate error message” is generated. *See* Pet. 25, 27–28 (citing Ex. 1004, 7:20–24; Ex. 1003 ¶¶ 70, 75).

We are not persuaded by Petitioner’s arguments that the cited portion of Ofek teaches “an indication of a data write access privilege . . . indicating a disabled operation . . . other than a read only indication” as required by claims 5 and 9.

The cited portion of Ofek states:

If the WORM program 14 decodes a read/write request in step 86, control passes to step 87 to test syntax. If any error exists, control passes to step 90 whereupon the WORM program 14 generates an appropriate message for the system administrator and terminates the program.

Ex. 1004, 7:20–24. Thus, the cited portion of Ofek relates to testing for syntax errors and generating a message if there was such a syntax error. Petitioner has not persuasively explained how Ofek’s disclosure of testing for a syntax error teaches “an indication of a data write access privilege . . .



indicating a disabled operation . . . other than a read only indication” as required by claims 5 and 9. Dr. Weissman does not provide any further explanation as to how Ofek’s testing for a syntax error teaches the claim limitations. *See* Ex. 1003 ¶¶ 70, 75.

To prevail on its challenge 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). This burden never shifts to Patent Owner. *See Dynamic Drinkware, LLC. v. Nat’l Graphics, Inc.*, 800 F.3d 13.75, 1378 (Fed. Cir. 2015). For the reasons stated above, Petitioner has not met its burden of showing by a preponderance of the evidence that Ofek teaches or suggests:

indicating a disabled operation relating to alteration of a portion of each file stored within the logical storage medium, the indication other than a read only indication;

as required by claim 5, or

indicating a disabled operation relating to alteration of data within the logical storage medium, the indication other than a read only indication, the disabled operations supported by the storage medium;

as required by claim 9. Further, Petitioner has not established that Ofek teaches or suggests all of the limitations of claim 6 at least because of its dependency from claim 5.

*E. Claims 1, 2, 5 — Alleged obviousness over Vossen, or Vossen and Willman*

Petitioner asserts that Vossen alone or in combination with Willman renders obvious claims 1, 2, and 5. Pet. 8, 29–40. Patent Owner opposes. *See* PO Resp. 24–39. For the reasons set forth below, we determine Petitioner has not demonstrated that claims 1, 2, and 5 are unpatentable over Vossen alone or in combination with Willman.

Independent claim 1 requires, *inter alia*:

restricting file access to the logical storage medium in accordance with the indication while allowing access to free space portions of the same logical storage medium.

Claim 5 similarly requires, *inter alia*:

restricting file access to each file within the logical storage medium in accordance with the same indication while allowing access to free space portions of the same logical storage medium.

Petitioner argues that Vossen teaches “restricting a process or process hierarchy to a subset of a computer host’s file system(s).” Pet. 32 (quoting Ex. 1005, 2:3–6). Petitioner further argues that Vossen teaches “assigning process restrictions to file systems” and that the *restricted* file systems represent “the ‘entire logical storage medium.’” *Id.* at 34. Petitioner then turns to Vossen’s “additional, unrestricted file systems” that are “outside of the restriction hierarchy” to teach “allowing access to free space portions.” *Id.* at 35.

However, both claims 1 and 5 require “allowing access to free space portions of the *same* logical storage medium.” Contrary to this requirement, Petitioner identifies the free space portions in Vossen as being additional file systems “outside of the restriction hierarchy” where the *restricted* file systems represent “the ‘entire logical storage medium.’” Pet. 34, 35; *see also* PO Resp. 34. Thus, the Petition does not address the “same” storage medium as required by the claims.

For this reason, Petitioner has not established that Vossen teaches or suggests all of the limitations of claims 1 and 5. Further, Petitioner has not established that Vossen teaches or suggests all of the limitations of claim 2 at least because of its dependency from claim 1.

The Petition's combination of Vossen and Willman relies on this same deficient position. Pet. 35. Thus, Petitioner has not established that the combination of Vossen and Willman teaches all of the limitations of claims 1, 2, and 5.

*F. Claims 2, 3, 5, 6, and 9 — Alleged obviousness over Vossen and Bsaibes, or Vossen, Willman, and Bsaibes*

Petitioner asserts that Vossen and Bsaibes, or Vossen, Willman, and Bsaibes renders obvious claims 2, 3, 5, 6, and 9. Pet. 8, 40–50. Patent Owner opposes for the same reasons as previously discussed with respect to Vossen. *See* PO Resp. 24–39.

The Petition's combinations of Vossen and Bsaibes, and Vossen, Willman, and Bsaibes rely on the same deficient position discussed with respect to claims 1 and 5. *See, e.g.*, Pet. 46 (“As discussed above, *Vossen* discloses element 5[C].”). Thus, Petitioner has not established that either of the combinations of Vossen and Bsaibes, or Vossen, Willman, and Bsaibes teaches all of the limitations of claims 2, 3, 5, 6, and 9.

*G. Constitutionality of Inter Partes Review Proceedings*

Patent Owner asserts that *inter partes* review proceedings are “unconstitutional under the Takings Clause . . . and Due Process Clause . . . of the United States Constitution, as applied retroactively to this patent which issued before” *inter partes* review proceedings became law. PO Resp. 39.

Petitioner correctly notes that:

Recent Federal Circuit cases foreclose this argument. Applying *inter partes* review to pre-AIA patents is not a constitutional taking. *See Celgene Corp. v. Peter*, 931 F.3d 1342, 1358-63 (Fed. Cir. 2019); *see also Genentech, Inc. v. Hospira, Inc.*, No. 18-1933, slip op. at 15-16 (Fed. Cir. Jan. 10, 2020). Nor does it upset due process. *See OSI Pharm., LLC v. Apotex, Inc.*, 939 F.3d

1375, 1385-86 (Fed. Cir. 2019); *Arthrex, Inc. v. Smith & Nephew, Inc.*, 935 F.3d 1319, 1331-32 (Fed. Cir. 2019). Petitions to upend these rulings have uniformly failed. *See, e.g., Enzo Life Scis., Inc. v. Becton, Dickinson & Co.*, No. 18-1232 (Fed. Cir. Dec. 4, 2019) (order denying panel rehearing and rehearing en banc). Unless the Supreme Court reverses these cases, they remain controlling law.

Reply 22.

We decline to consider Patent Owner's arguments as the Federal Circuit has determined that *inter partes* review proceedings are not unconstitutional under the Takings Clause or Due Process Clause. *Celgene*, 931 F.3d at 1362; *Arthrex*, 935 F.3d at 1332.

### III. CONCLUSION<sup>8</sup>

For the reasons discussed above, we determine Petitioner has proven, by a preponderance of the evidence, that some of the challenged claims are unpatentable, as summarized in the following table:

<b>Claims</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Claims Shown Unpatentable</b>	<b>Claims Not shown Unpatentable</b>
1-3, 5, 6, 9	102, 103	Ofek	1-3	5, 6, 9
1, 2, 5	103	Vossen		1, 2, 5
1, 2, 5	103	Vossen, Willman		1, 2, 5
2, 3, 5, 6, 9	103	Vossen, Bsaibes		2, 3, 5, 6, 9
2, 3, 5, 6, 9	103	Vossen, Willman, Bsaibes		2, 3, 5, 6, 9
<b>Overall Outcome</b>			1-3	5, 6, 9

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<sup>8</sup> 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*

#### IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 1–3 of the '864 patent have been shown to be unpatentable; and

FURTHERED 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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*Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding. See 84 Fed. Reg. 16,654 (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).*

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