

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FUJIFILM CORPORATION
Petitioner-Appellee

v.

SONY CORPORATION
Patent Owner-Appellant

Inter Partes Review IPR2016-01183
Patent 6,674,596

NOTICE OF APPEAL
TO THE UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

BY SONY CORPORATION

Please take notice that under 35 U.S.C. §§ 141 and 142 and 28 U.S.C. § 1295(a)(4)(A) Patent Owner, Sony Corporation (“Sony”), appeals to the United States Court of Appeals for the Federal Circuit for the instant matter, *inter partes* review IPR2016-01183, *Fujifilm Corporation v. Sony Corporation*. Sony appeals the Final Written Decision of the Patent Trial and Appeal Board (“Board”), entered November 15, 2017 (attached).

Sony appeals all grounds of unpatentability for each claim. Specifically, Sony appeals the PTAB’s findings that claims 14-19 would be unpatentable as anticipated and obvious over the Platte reference, including the following issues: (1) whether the Board correctly construed the claim terms “read-only area in said memory”, “use-recognition information”, “management information”, and “identification information”, (2) whether the Board correctly applied the claim terms under either its constructions or the correct constructions, including whether the Board’s findings of fact concerning the Platte and Göken references were supported by substantial evidence and met applicable law; (3) whether the Platte reference meets the anticipation standard; (4) whether the Board correctly found claims 14-19 obvious over Platte; and (5) whether the Board correctly found claims 16 and 19 obvious over Platte in view of Göken.

Pursuant to 37 C.F.R. § 90.3, this appeal is timely, having been duly filed within 63 days after the date of Final Written Decision.

Inter partes review IPR2016-01183
Notice of Appeal of January 12, 2018

Date: January 12, 2018
January 11,
2018

Respectfully Submitted,

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CERTIFICATE OF SERVICE

I, Matthew A. Smith, certify that the documents referenced below:

**NOTICE OF APPEAL TO THE UNITED STATES COURT OF APPEALS FOR
THE FEDERAL CIRCUIT BY SONY CORPORATION**

together with attachments were caused to be served upon counsel of record and filed in the United States Patent and Trademark Office and the Court of Appeals for the Federal Circuit in this matter on January 12, 2018 by causing them to be delivered by hand delivery; via electronic mail; via electronically filing the document with the USPTO's E2E system; as follows:

United States Patent & Trademark Office (**via hand delivery**)
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United States Court of Appeals for the Federal Circuit (**via hand delivery**)
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FUJIFILM CORPORATION,
Petitioner,

v.

SONY CORPORATION,
Patent Owner.

Case IPR2016-01183
Patent 6,674,596 B1

Before JEFFREY S. SMITH, MICHAEL J. FITZPATRICK, and
PATRICK M. BOUCHER, *Administrative Patent Judges*.

BOUCHER, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

In response to a Petition (Paper 1, “Pet.”) filed by Fujifilm Corporation (“Petitioner”), we instituted an *inter partes* review of claims 14–19 of U.S. Patent No. 6,674,596 B1 (“the ’596 patent”). Paper 7

(“Dec.”), 26. During the trial, Sony Corporation (“Patent Owner”) timely filed a Response (Paper 12, “PO Resp.”), to which Petitioner timely filed a Reply (Paper 19, “Reply”). An oral hearing was held on August 23, 2017, and a copy of the transcript was entered into the record. Paper 26 (“Tr.”).

We have jurisdiction under 35 U.S.C. § 6. This Decision is a Final Written Decision under 35 U.S.C. § 318(a) as to the patentability of the claims on which we instituted trial. Based on the record before us, Petitioner has shown, by a preponderance of the evidence, that claims 14–19 are unpatentable.

I. BACKGROUND

A. *The ’596 Patent*

The ’596 patent “relates generally to tape drive units intended for maintaining data written on a magnetic tape and to recording media for use therewith.” Ex. 1001, col. 1, ll. 8–10. Petitioner’s declarant, William Messner, Ph.D., explains that “[m]agnetic tape has been used to store electronic data since at least the 1940s,” and that “[b]y the early 1960s, magnetic tape had replaced punch cards as the principal storage medium for large files.” Ex. 1008 ¶ 70 (citing Ex. 1009, 666). Magnetic tape does not prevent stored data from being erased, and it can therefore be used as rewritable memory. *Id.* ¶ 77. Magnetic tape can also effectively be used as read-only memory by including programming instructions or other information that identify portions of the magnetic tape as such and that prevent data from being erased or overwritten. *Id.* ¶ 78 (citing Ex. 1011, col. 7, ll. 3–6). Dr. Messner testifies that storing operational information (such as identification of portions of the magnetic tape designated as read-

only) on the tape itself leads to latency issues because “it can take a relatively long time to physically move the relevant portions of the magnetic tape containing the operational information past the read/write head.” *Id.*

¶ 82.

Figure 3A of the '596 patent is reproduced below.

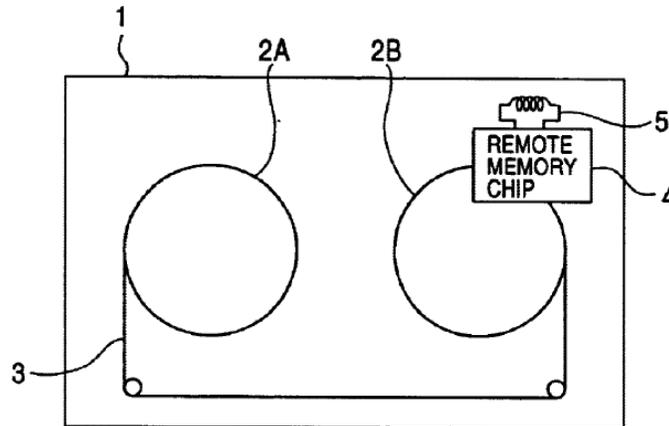


Figure 3A illustrates the internal structure of tape cassette 1 with magnetic tape 3 provided on reels 2A and 2B. Ex. 1001, col. 4, ll. 11–14. Tape cassette 1 includes remote memory chip 4, which includes a nonvolatile memory and control circuit, and which can transmit data by radio communication with a remote interface using antenna 5. *Id.* at col. 4, ll. 15–20. In an alternative embodiment illustrated in Figure 3B of the '596 patent (not reproduced here), a contact memory is used instead of remote memory chip 4. *See id.* at Fig. 3B, col. 4, ll. 48–55. The nonvolatile memory stores use-recognition information, such as specifying which portions of the tape are read-only, and a tape drive controls operation of the tape cassette based on the use-recognition information. *Id.* at col. 20, ll. 36–39.

The '596 patent provides an example in which the memory stores a write-once read-many (“WORM”) flag as use-recognition information. *Id.* at col. 17, ll. 20–22. According to Dr. Messner, the value of the flag may

identify the tape cassette as a general-use cassette, a read-only cassette, or a WORM cassette, with corresponding restrictions on write operations. Ex. 1008 ¶¶ 90, 91; *see* Ex. 1001, col. 17, ll. 20–49. In some instances, use-recognition information can be stored in a read-only area of the memory so that “the use for the recording medium can be treated so as not to be changed by changing the content of the use-recognition information.” Ex. 1001, col. 17, ll. 13–18, col. 21, ll. 3–7. The ’596 patent also discloses writing a cartridge serial number in both the memory and on the magnetic tape so that, if they do not match, operations of the tape drive can be restricted. *Id.* at col. 17, ll. 62–67.

B. Illustrative Claim

Independent claim 14 is illustrative of the claims at issue:

14. A recording medium comprising:
 - a tape cassette including a magnetic tape; and
 - a memory attached to said tape cassette, said memory being provided for storing management information for managing writing/reading to/from said magnetic tape, wherein said memory further stores use-recognition information designating a use for said tape cassette, and wherein the use-recognition information is stored in a read-only area in said memory.

C. Instituted Grounds of Unpatentability

Petitioner relies on the following references. Pet. 7–9.

| | | | |
|----------|-----------------|---------------|-------------------|
| Platte | WO 93/08568 | Apr. 29, 1993 | 1016 ¹ |
| Solhjell | US 7,123,444 B1 | Oct. 17, 2006 | 1005 |
| Göken | US 5,708,545 | Jan. 13, 1998 | 1006 |

We instituted trial on the following bases. Dec. 26.

| Reference(s) | Basis(es) | Claims Challenged |
|---------------------|-----------------------|-------------------|
| Platte | §§ 102(a), (b) | 14–19 |
| Platte | § 103(a) | 14–19 |
| Platte and Göken | § 103(a) ² | 16 and 19 |
| Solhjell | § 103(a) | 14–16 |
| Solhjell and Platte | § 103(a) | 17–19 |

D. Real Parties in Interest and Related Proceedings

Petitioner identifies itself and Fujifilm Recording Media U.S.A., Inc. as real parties in interest. Pet. 1. Patent Owner identifies only itself as a real party in interest. Paper 5. Petitioner identifies *Sony Corp. v. Fujifilm Holdings Corp.*, No. 1:16-cv-05988 (S.D.N.Y.) as involving the '596 patent. Paper 14.

¹ An English translation of Platte, which is in German, was filed by Petitioner as Exhibit 1003. We refer elsewhere herein to the English translation as “Platte.” Petitioner’s initial filing of the English translation was accompanied by a defective certification executed by the CEO of the translation company, and we provided Petitioner an opportunity to correct the defect. Dec. 11–12 (citing 37 C.F.R. §§ 42.5(b), 1.68). Petitioner filed a declaration by Ricky Middleton, who prepared the translation, within the specified time period. Ex. 1017. Mr. Middleton’s declaration comports with 37 C.F.R. § 42.63(b), and thereby corrects the defect. *Id.* Patent Owner does not dispute the accuracy of the translation. *See* Tr. 25:16–25.

² The identification of “§ 102” on page 4 of the Petition with respect to this ground appears to be a typographical error. *See* Pet. 27–29.

II. ANALYSIS

A. *Claim Construction*

The Board interprets claims of an unexpired patent using the broadest reasonable construction in light of the specification of the patent in which they appear. *See* 37 C.F.R. § 42.100(b); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (upholding the use of the broadest reasonable interpretation standard).

1. “*read-only area in said memory*”

Independent claims 14 and 17 both recite that “the use-recognition information is stored in [a] read-only area in said memory.” In the Institution Decision, we applied a preliminary construction of “read-only area in said memory” as “encompassing memory areas that may be written to once but not more than once.” Dec. 6. That is, we applied a construction in which WORM memory may fall within the scope of a “read-only area in said memory.”

Patent Owner disagrees and contends that “the term ‘read-only area of said memory’ should be construed to mean ‘an area of said memory that cannot be written to by users who are using the tape to record or read data.’” PO Resp. 15 (citing Ex. 2001 ¶ 44). In advancing this construction, Patent Owner devotes a considerable portion of its Response to arguing that “the relevant question for this construction is *when* the memory becomes ‘read-only.’” *Id.* at 8. Supported by testimony of its declarant, James A. Bain, Ph.D., Patent Owner acknowledges several facts regarding the understanding of a person of ordinary skill in the art: (1) read-only memory allows users to read the memory; (2) for read operations to be useful, the memory must have

meaningful information in it; (3) the values in such a memory must therefore be written at least once, and possibly several times; and (4) at some point, the memory becomes “read-only” because it is programmed or physically designed to be so. *Id.* (citing Ex. 2001 ¶ 33). These facts appear to be undisputed.

Although Patent Owner contends that its construction “would exclude WORM memory,” *id.* at 15, it is not apparent which of the facts Patent Owner presents is inconsistent with a construction that encompasses WORM memory. In particular, after an initial writing to WORM memory by a user, all four of the above-identified criteria are clearly met with respect to values stored in the memory.

We agree with Petitioner that Patent Owner’s emphasis on *when* memory becomes “read-only” is ill-placed because “[t]he challenged claims do not recite any elements or raise any questions regarding *when* the claimed area of said memory must become read-only.” Reply 6. What matters when evaluating whether the claim limitation is met is whether use-recognition information is stored in a read-only area in the memory, irrespective of *when* that area became read-only. We thus disagree with Patent Owner’s assertion that “a ‘read-only portion of said memory’ needs to be read-only *when the tape is ready to receive user data,*” PO Resp. 13, because it focuses on irrelevant past history of the status of the memory.

A construction that encompasses WORM memory—or, indeed, any memory that may be written to some number of times before it becomes “read-only”—is also consistent with the Specification of the ’596 patent. For example, both parties address the following disclosure:

A type of recording media is known in which data can be written only once in a particular recording area. Since the recording media of this type are used as additionally writable or read-only recording media, they are called, for example, write only [*sic*: once] read many or WORM.

Ex. 1001, col. 1, ll. 13–17. We agree with Petitioner’s straightforward reading of this passage as disclosing that WORM memory is a form of memory that provides a “read-only” area once it has been written to. *See* Pet. 12. We find no inconsistency in this reading with Patent Owner’s position that “read-only” memory and WORM memory are distinct. PO Resp. 11–13. Petitioner does not take the position that there is an equivalence between “read-only memory” (or “ROM”) and WORM memory. *See* Tr. 9:9–14 (“We never argued that they [‘WORM’ and ‘ROM’] are necessarily the same thing. First of all, ROM is not even in the claim term[;] it’s a read-only area of memory which is not the same as ROM, nor is something that must be the same thing.”).

The parties also address the disclosure of Figure 21 of the ’596 patent, which is reproduced below.

FIG. 21

| USE NUMBER | USE | RESTRICTION |
|------------|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 0 | GENERAL | NONE |
| 1 | DATA DISTRIBUTION, FIRMWARE UPDATING, ETC. | INVALID COMMAND : FORMAT, MODE SELECT PAGE 11h, ERASE, WRITE, WRITE FM, DELETE, APPEND, ETC. |
| 2 | WORM | ONLY ADDITIONAL WRITING OR READING CAN BE PERFORMED. INVALID COMMAND : FORMAT, MODE SELECT PAGE 11h, ERASE, DELETE, APPEND, ETC. |
| OTHER | RESERVE | TRANSFER TO UNLOADING-AWAITING CONDITION |


 EL11

Figure 21 is a table that illustrates three separate kinds of storage in accordance with the value of a “use number”—“0” defines a tape cassette whose read and write “operations are not restricted”; “1” defines a tape cassette that “is recognized as a read-only tape cassette”; and “2” defines a tape cassette “when it is for the purpose of WORM operation.” Ex. 1001, col. 17, ll. 20–51. Patent Owner thus contends that “the specification clearly distinguishes between read-only media and WORM media.” PO Resp. 11. But, again, even recognizing a distinction between media that can never be written to and those that can be written to once is not inconsistent with WORM memory being a form of memory that provides a read-only area once it has been written to. As Petitioner observes, the drawing “confirms that WORM can be used as a form of ROM.” Reply 5. The drawing itself indicates that, for a WORM tape, “ONLY ADDITIONAL WRITING OR READING CAN BE PERFORMED,” and the written description elaborates that, for additional writing, data may be added to unwritten portions after “the last writing position.” Ex. 1001, col. 17, ll. 41–45. But “operations that require the updating of already written data, such as rewriting and erasing, are not allowed.” *Id.*

Patent Owner further contends that its proposed construction is consistent with the prosecution history, during which the applicant asserted that “an important feature of this invention is the provision of the so-called use recognition information in a read-only area of the memory in the cassette, so that such information **cannot be altered by the user.**” PO Resp. 14 (quoting Ex. 2005, 6) (emphasis by Patent Owner). Patent Owner’s conclusion that “[t]he applicants thus made clear that whether memory is read-only should be viewed from the perspective of what the user

can do” is also consistent with an area of WORM memory that has been written to. *Id.* at 15.

Based on these considerations, we confirm but clarify our preliminary construction as follows. A “read-only area in said memory” is a memory area that cannot be written to, and it encompasses an area of WORM memory that has previously been written to.

2. “*use-recognition information*”

In the Institution Decision, we applied a preliminary construction of “use-recognition information” as “information that defines an ability to read from and to write to the tape cassette.”³ Dec. 7–8. Patent Owner indicates that it agrees with the construction. PO Resp. 15–16. Petitioner does not expressly indicate agreement, but contends that Patent Owner distorts the construction in its application to the prior art by requiring that the information *exclusively* define *all abilities to read from and write to* the tape cassette. Reply 10–14.

We address application to the prior art below, but note our disagreement with Petitioner that the preliminary construction is too narrow because it is inconsistent with Figure 21 of the ’596 patent, reproduced

³ Independent claim 14 explicitly recites that “use-recognition information designat[es] a use for said tape cassette.” Claim 17 does not include this recitation, but both independent claims 14 and 17 recite “wherein the use-recognition information is stored in a read-only area in said memory.” At the oral hearing, the parties confirmed their understanding that the scope of “use-recognition information” is the same in both claims, notwithstanding the omission from claim 17 of explicit language identifying such information as “designating a use for said tape cassette.” Tr. 5:17–6:6, 37:14–38:7.

above. *See id.* at 14. Petitioner contends that “Figure 21 defines write-protections—for example invalidating ‘WRITE,’ ‘ERASE,’ and other operations for Use Number 1—but it does not define reading abilities for Use Numbers 0 or 1.” *Id.* But the drawing must be understood in the context of the written description, which explains that “[t]he tape steamer drive 10 *restricts writing and reading operations* based on the use numbers.” Ex. 1001, col. 17, ll. 24–25 (emphasis added). In this context, the disclosure that use number 0 “indicates that . . . operations are not restricted” is properly understood to mean that both reading and writing are permitted. *Id.* at col. 17, ll. 25–28. Similarly, the disclosure that use number 1 causes the cassette to be “recognized as a read-only tape cassette” is properly understood to mean that reading is permitted and that writing is prohibited. *Id.* at col. 17, ll. 36–37.

Accordingly, we see no reason to alter our preliminary construction. The limitation “use-recognition information” means “information that defines an ability to read from and write to the tape cassette.”

3. “*management information*”

Each of independent claims 14 and 17 recites “management information for managing writing/reading to/from said magnetic tape.” In the Institution Decision, Dec. 7, we noted the following disclosure from the ’596 patent:

The remote memory chip 4 stores manufacture information and serial number information of each tape cassette, the tape width and length, the tape material, information relevant to a record of using recorded data in each partition, user information, and the like, which are described below. The various types of information stored in the remote memory chip 4 are used for

management of writing/reading to/from the magnetic tape 3. Accordingly, *these types of information are collectively called management information.*

Ex. 1001, col. 4, ll. 21–30 (emphasis added). Neither party disputes our preliminary construction of “management information” on the basis of this disclosure as encompassing at least “manufacture information, serial number information, tape dimension information, tape material information, information relevant to a record of using recorded data in each partition, user information, and the like.” *See* Dec. 7. We accordingly adopt this construction for this Final Written Decision.

4. *“identification information”*

Independent claim 17 recites “identification information . . . store[d] in said memory and . . . stored in said magnetic tape.” In the Institution Decision, we construed “identification information” as “information that identifies a tape cassette.” Dec. 8. Patent Owner explicitly asserts that it “believes this construction is correct,” PO Resp. 16, and Petitioner does not dispute it. Accordingly, we adopt this construction for this Final Written Decision.

5. *“interface means for transmitting data of the management information”*

Dependent claims 16 and 19 both recite that the recording medium comprises “interface means for transmitting data of the management information.” Neither party disputes our preliminary determination that the phrase should be construed in accordance with 35 U.S.C. § 112 ¶ 6. Dec. 8–9 (citing *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1348 (Fed. Cir.

2015) (rebuttable presumption that § 112 ¶ 6, applies when the word “means” is used)). The record developed during the trial otherwise provides no reason for us to reach a different determination now, and we construe the phrase as a means-plus-function limitation. The self-evident function is “transmitting data of the management information,” with “management information” construed as set forth above.

Petitioner observes that the ’596 patent discloses a remote memory chip (as illustrated in Figure 3A) or a contact memory (as illustrated in Figure 3B) for storing management information. Pet. 13 (citing Ex. 1001, col. 4, ll. 56–58). For those embodiments that use a remote memory chip, an antenna is used for radio communications over which management information is transmitted. Ex. 1001, col. 4, ll. 15–20. For those embodiments that use a contact memory, a data-input terminal is used for transmission of management information. *Id.* at col. 4, ll. 48–55. Accordingly, the construction we apply encompasses structures for performing the function of an antenna or a data-input terminal, and equivalents thereof.⁴

B. Legal Principles

Petitioner makes both anticipation and obviousness challenges. A claim is unpatentable as anticipated under 35 U.S.C. § 102 if a single prior-

⁴ Dr. Messner asserts, without further explanation, that “[a] person having ordinary skill in the art would have recognized that this ‘data-input terminal’ is an electrical contact.” Ex. 1008 ¶ 110. This assertion provides insufficient reasoning to support a construction so broad as to include all equivalents to an electrical contact within the scope of the recited “interface means.”

art reference expressly or inherently describes each limitation set forth in the claim. *See Perricone v. Medicis Pharm. Corp.*, 432 F.3d 1368, 1375 (Fed. Cir. 2005); *Verdegaal Bros., Inc. v. Union Oil Co. of Cal.*, 814 F.2d 628, 631 (Fed. Cir. 1987).

A claim is unpatentable for obviousness under 35 U.S.C. § 103 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 skill in the art; and (4) objective evidence of non-obviousness, i.e., secondary considerations.⁵ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

Additionally, the obviousness inquiry typically requires an analysis of “whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR*, 550 U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (requiring “articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”)); *see In re Warsaw Orthopedic, Inc.*, 832 F.3d 1327, 1333 (Fed. Cir. 2016) (citing *DyStar Textilfarben GmbH & Co. Deutschland KG v. C. H. Patrick Co.*, 464 F.3d 1356, 1360 (Fed. Cir. 2006)).

⁵ The parties do not address secondary considerations, which, accordingly, do not form part of our analysis.

To prevail on its challenges, 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). “In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify “with particularity . . . the evidence that supports the grounds for the challenge to each claim”)). The burden of persuasion never shifts to Patent Owner. *See Dynamic Drinkware, LLC. v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (citing *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1326–27 (Fed. Cir. 2008) (discussing the burden of proof in *inter partes* review)). Furthermore, Petitioner does not satisfy its burden of proving obviousness by employing “mere conclusory statements.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016).

C. *Level of Skill in the Art*

Supported by testimony of its declarant, Dr. Messner, Petitioner contends that “[a] person of ordinary skill in the art would have earned a bachelor’s degree in Mechanical Engineering, Electrical Engineering, or a closely related field (such as Computer Engineering), and would have two to three years of experience in the field of magnetic tape systems.” Pet. 11–12 (citing Ex. 1008 ¶ 67). Patent Owner’s declarant, Dr. Bain, agrees that this is “a reasonable statement” of the level of ordinary skill for the ’596 patent. Ex. 2001 ¶ 24. Accordingly, we adopt Petitioner’s statement of the level of ordinary skill in the art for purposes of this Final Written Decision.

D. Platte

Platte relates to “an electronic storage arrangement for a magnetic tape cassette and a suitable recording and/or playback device.” Ex. 1003, 1. Figure 4 of Platte is reproduced below.

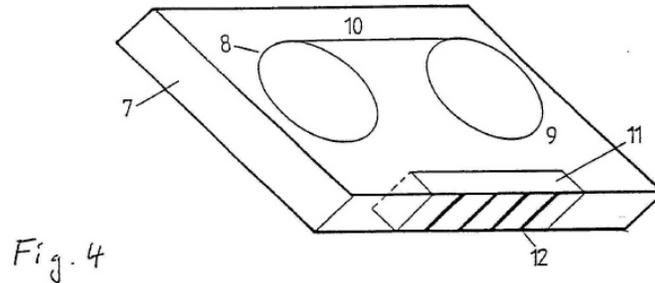


Figure 4 illustrates a “magnetic tape cassette with an included storage arrangement.” *Id.* at 3. Within housing 7, magnetic tape 10 is wound on two reels 8 and 9. *Id.* at 7. Storage arrangement 11 can be connected with or coupled to a “writing and/or reading device” that “serves as an interface . . . for the transmission of signals from the storage arrangement to the magnetic tape device or vice versa.” *Id.*

Figures 1–3 of Platte illustrate data stored by the storage arrangement in different embodiments that correspond to different uses of the cassette. *Id.* at 2–3. Figure 3 of Platte is reproduced below.

| | |
|------------|--------------------------------------------------|
| x3f | Fixed data |
| xff | Usage, here: prerecorded tape |
| x02 x34 | Serial number, 1. Byte Serial number, 2. Byte |
| 02 | Usage authorization, here: Playback allowed |
| 01 | Start minutes |
| 00 | seconds |
| 04 | End minutes |
| 10 | seconds |
| 00 | Additional data |
| 00 | Additional data |
| 04 | Start minutes |
| 10 | seconds |
| 10 | End minutes |
| 00 | seconds |
| 00 | Additional data |
| 00 | Additional data |
| | |

Fig. 3

Figure 3 illustrates memory content for “a cassette intended for rental or sale,” and Figures 1 and 2 (not reproduced here) respectively illustrate the memory content for “a blank tape” and for “a cassette used by a private user for the first time.” *Id.*

The first byte, such as the hexadecimal representation x3f in Figure 3, “contains information about the cassette itself, the cassette type, the included magnetic tape length, or the type of the magnetic tape,” and “[t]his information is unalterable.” *Id.* at 3. “Information about the use of the cassette is stored in the second byte,” with a value of 00 identifying “a blank tape.” *Id.* “[T]his identification simultaneously allows for a one-time

change of the entry,” and values of 01, 02, 03, etc., identify first-time use of a cassette by a private user in different devices, such as a camcorder, videorecorder, or audio recorder.⁶ *Id.* The xff value shown in Figure 3 identifies the cassette as “intended for rental or sale,” in which case additional bytes that contain a serial number (i.e., x02 and x34) “can be used to clearly identify a cassette recorded with a specific program.” *Id.* at 4. In addition, information may be included in such instances about “the type of playback authorization,” such as the value 02, which indicates “Playback allowed.” *Id.*

Examples of the types of authorizations for a prerecorded cassette include limiting use of the cassette for only playback to prevent “unwanted deleting.” *Id.* at 5. In addition, playback itself may be prohibited for cassettes “on the shelf of a video library,” with playback authorization “performed at the cash register.” *Id.* In some instances, more specific playback restrictions may be imposed, such as authorizing only low-resolution video playback when both high- and low-resolution versions are available, prohibiting surround-sound audio playback when both stereo and surround sound are available, or limiting the number of allowed playbacks. *Id.* at 6.

⁶ The text of Platte identifies the values of the second byte without the hexadecimal base marker x, i.e., as 00, 01, etc., but the drawings include the hexadecimal marker in identifying those values as x00, x01, etc. This difference is immaterial.

1. Anticipation of Independent Claims 14 and 17 by Platte

Petitioner challenges claims 14–19 as anticipated by Platte. Pet. 14–22. In addressing the limitations of independent claims 14 and 17, Petitioner identifies structure illustrated in Figure 4 of Platte to argue that Platte discloses the “tape cassette,” “magnetic tape,” and “memory” recited in the claims. *Id.* at 14–15, 20–21. We agree with these identifications, which are not disputed by Patent Owner.

a. “management information”

For the “management information” recited in both independent claims 14 and 17 in the limitation “said memory being provided for storing management information for managing writing/reading to/from said magnetic tape,” Petitioner identifies Platte’s disclosure of storing information about the cassette itself and the length of the magnetic tape. *Id.* at 15 (citing Ex. 1003, 3), 21. We agree with this identification, which is consistent with our construction of “management information,” and which is also not disputed by Patent Owner.

b. “use-recognition information”

For the “use-recognition information” recited in independent claims 14 and 17, Petitioner points to the second byte (i.e., 00 for a blank tape, 01 for a camcorder cassette used for the first time, 02 for a video-recorder cassette used for the first time, 03 for an audio-recorder cassette used for the first time, etc., and xff for a prerecorded cassette). *Id.* at 16 (citing Ex. 1003, 3, 4). According to Petitioner, “[t]hese numbers correspond with use

restrictions,” and the entry xff, in particular, “indicates that the cassette is a read-only cassette.” *Id.* at 16–17 (citing Ex. 1008 ¶ 138).

We agree with Petitioner that these are examples of “use-recognition information,” in accordance with our construction of such information as “information that defines an ability to read from and write to the tape cassette.” Platte’s disclosure for a prerecorded cassette is of particular relevance because the xff value for the second byte defines the cassette as one that can be read from (i.e., played) but not written to. Ex. 1003, 4–6.

Patent Owner emphasizes our use of the word “defines” in our construction of “use-recognition information” to argue that “Platte’s ‘second byte’ does not define the ability to read from and write to the tape cassette [because] the system also needs other information from Platte’s memory.” PO Resp. 20. That is, Patent Owner takes the position that additional bytes provided by Platte, such as those described above for providing further information about playback authorization, “contribute[] to the definition of the ability to read from and write to the tape cassette, and indeed [are] a core part of the definition.” *Id.* at 21 (citing Ex. 2001 ¶ 57).

Patent Owner supports its position with testimony by Dr. Bain, but glosses its declarant’s assertion in an important respect. Dr. Bain testifies that, without the information provided by the additional bytes, “the ‘ability to read from and write to the tape cassette’ is not *completely* defined.” Ex. 2001 ¶ 57 (emphasis added). In its Response, Patent Owner omits the word “completely,” asserting that, without the information provided by the additional bytes, “the ability to read and write data is not defined.” PO Resp. 21–22 (citing Ex. 2001 ¶ 57).

We agree with Petitioner that such an exclusivity requirement, in which the use-recognition information exclusively defines all read and write abilities, preventing any other information from playing any role, is not required by our construction. *See* Reply 10–13. We further agree with Petitioner that such an exclusivity requirement would not be consistent with the Specification of the '596 patent, in light of which we have construed the limitation. *Id.*; *see In re NTP, Inc.*, 654 F.3d 1279, 1288 (Fed. Cir. 2011) (“While the Board must give the terms their broadest reasonable construction, the construction cannot be divorced from the specification and the record evidence.”).

Like Platte, the '596 patent describes a global setting for controlling read and write access, with additional information defining read and write permissions for individual portions of the tape. *See* Ex. 1001, Fig. 21, col. 12, ll. 21–22, col. 15, ll. 44–46, col. 16, ll. 35–42 (defining, for each tape partition, “flags representing writing permission/prohibition and reading permission/prohibition in the partition”). This is illustrated in Figure 19 of the '596 patent, which is reproduced below with an annotation in red added by Petitioner.

FIG. 19

| | | |
|------------------------------------|---------------------------------|--------|
| PREVIOUS GROUPS WRITTEN | 4 BYTES | |
| TOTAL GROUPS WRITTEN | 4 BYTES | |
| RESERVED | 1 BYTE | |
| PREVIOUS GROUPS READ | 3 BYTES | |
| TOTAL GROUPS READ | 4 BYTES | |
| RESERVED | 1 BYTE | |
| TOTAL REWRITTEN FRAMES | 3 BYTES | |
| RESERVED | 1 BYTE | |
| TOTAL 3RD ECC COUNT | 3 BYTES | |
| ACCESS COUNT | 4 BYTES | |
| UPDATE REPLACE COUNT | 4 BYTES | |
| PREVIOUS REWRITTEN FRAMES | 2 BYTES | |
| PREVIOUS 3RD ECC COUNT | 2 BYTES | |
| RESERVED | 1 BYTE | |
| LOAD COUNT | 3 BYTES | |
| RESERVED | 1 BYTE | |
| VALID MAXIMUM ABSOLUTE FRAME COUNT | 3 BYTES | |
| (PARTITION ATTRIBUTE FLAGS) | BIT 1 PREVENT WRITE | 1 BYTE |
| | BIT 2 PREVENT READ | |
| | BIT 3 PREVENT WRITE RETRY | |
| | BIT 4 PREVENT READ RETRY | |
| | BIT 5 RESERVED | |
| | BIT 6 RESERVED | |
| | BIT 7 RESERVED | |
| | BIT 8 PARTITION OPEN CLOSE FLAG | |
| MAXIMUM ABSOLUTE FRAME COUNT | 3 BYTES | |

48 BYTES

Figure 19 illustrates a data structure for partition information, which Petitioner has annotated to highlight certain bits that define “partition attribute flags.” Ex. 1001, col. 15, ll. 44–50; Reply 12. We agree with Petitioner that the “PREVENT WRITE” and “PREVENT READ” settings “cannot be part of the ‘use-recognition information’ because they are stored in rewritable memory,” contrary to the requirement of both independent claims that “the use-recognition information is stored in a read-only area in said memory.” Reply 12–13 (citing Ex. 1001, col. 15, ll. 32–36 (explaining Fig. 19 depicts a “partition information cell”), Fig. 12 (showing partition information cells stored in “FL4” region), col. 16, ll. 55–56 (“FL4 as read write memory”), Fig. 20A).

Patent Owner also contends that “[t]he relevant data are also stored in rewritable memory (*i.e.*, memory that can be written to by a user more than once),” and that this is “confirmed” by Petitioner’s declarant, Dr. Messner. PO Resp. 22 (citing Ex. 1003, 5; Ex. 1008 ¶¶ 147–48; Ex. 2001 ¶ 58). This is relevant to the requirement of both independent claims 14 and 17 that “the use-recognition information is stored in [a] read-only area in said memory.” Ex. 1001, col. 22, ll. 51–52, col. 23, ll. 1–2. The contention is unpersuasive because Patent Owner’s reference to the “relevant data”—as well as the cited portions of both Dr. Messner’s and Dr. Bain’s testimony—includes Platte’s additional bytes that Petitioner does not rely upon for its showing. With respect to the second byte that Petitioner *does* rely upon, Platte is clear that such use-recognition information “can be changed one time when using the cassette for the first time, after that, this information is also unalterable.” Ex. 1003, 3. As such, consistent with our adopted construction of a “read-only area in said memory,” we agree with Petitioner that “the area of memory in which the information on the use of the cassette is stored is a ‘read-only area’ because the user can write to that area of memory only once (*i.e.*, it is a WORM memory).” Pet. 17 (citing Ex. 1008 ¶ 42).⁷

⁷ In addressing Patent Owner’s arguments for the Platte anticipation challenges, Petitioner’s Reply also addresses an argument by Patent Owner that “‘write-protect’ information is by definition only information [that] defines an ability to write to the tape, not information that defines an ability to ‘read from and write to the tape cassette.’” Reply 14; PO Resp. 35 (citing Ex. 1002 [*sic*: 2001] ¶ 76). We do not address that argument here because Patent Owner’s argument is made in the context of challenges over Solhjell, which we address below.

c. “identification information”

Independent claim 17 includes a limitation that “identification information of said tape cassette is store[d] in said memory and is stored in said magnetic tape.” Ex. 1001, col. 22, ll. 65–67. In describing “[a]nother locking possibility,” Platte discloses:

For example, a playback will only take place, if a specific part of the sub-code matches a specific entry in the memory. It is naturally advantageous, if each part of the sub-code matches a specific entry in the memory. It is naturally advantageous, if each cassette is numbered; this number is listed in the memory on the one hand, and is also logged in the sub-code during each recording. The cassette housing (=memory) and the recorded tape therefore belong together.

Ex. 1003, 8. Petitioner relies on this disclosure to contend that Platte teaches the limitation, and supports its position with testimony by Dr. Messner. Pet. 21 (citing Ex. 1008 ¶¶ 159–60). We find this disclosure consistent with our construction of “identification information,” and we agree with Petitioner that it meets the limitation of claim 17.

Patent Owner responds that “[t]he subcode of a tape—according to Fujifilm’s own expert—did not store signals in this manner, and the description of Platte is faulty for that reason,” and reproduces a portion of Dr. Messner’s cross-examination testimony. PO Resp. 22–23. At the oral hearing, Patent Owner elaborated on this argument, contending that Dr. Messner “testified that he didn’t know what the subcode was” and that “[i]t was vaguely described and he wasn’t sure it was [relevant] to the case.” Tr. 20:5–11. Patent Owner reasons that the disclosure identified by Petitioner is ambiguous, and that, if even the Petitioner’s own declarant “doesn’t know how it’s going to be used the reference can’t anticipate.” *Id.*

Although we agree that Platte’s description could be more clear, we find that Dr. Messner possessed sufficient understanding to accord weight to his opinion. Dr. Messner explained his understanding that “[t]he subcode is a way of recording two signals at the same time . . . so if you don’t match the subcode . . . you’ll just get snow on your television or some sort of distortion.” Ex. 2002, 46:16–20. Patent Owner does not cite any testimony of its own declarant, Dr. Bain, that contradicts this understanding.

Patent Owner additionally contends that “the ‘cassette number’ is not ‘identification information’” and that “[t]he serial number . . . does not identify a cassette—it identifies a *particular recording* on a cassette.” PO Resp. 23. Patent Owner reasons that the bit length of Platte’s serial number is insufficient “to distinguish a particular cassette, but probably would be sufficient to distinguish different recordings in a video rental library in the relevant timeframe.” *Id.* at 24. This argument is not persuasive because it distorts Platte’s teaching. That is, rather than identify a “*particular recording* on a cassette,” Platte explicitly discloses that the “serial number . . . can be used to clearly identify *a cassette recorded with a specific program.*” Ex. 1003, 4 (emphasis added).

The distinction between identification of a particular recording on a cassette and identification of a cassette recorded with a specific program is nuanced but meaningful because Platte teaches that the serial number identifies the cassette rather than that it identifies the program. The fact that multiple cassettes might thereby be identified with the same serial number does not diminish the fact that Platte teaches its serial number to be “information that identifies a tape cassette” as we have construed the term “identification information.”

d. Summary

For the foregoing reasons, we conclude that Petitioner demonstrates, by a preponderance of the evidence, that independent claims 14 and 17 are anticipated by Platte.

2. Anticipation of Dependent Claims 15 and 18 by Platte

Claims 15 and 18 depend respectively from claims 14 and 17, and add the further limitation that “said memory comprises a read-only area and a rewritable area.” Ex. 1001, col. 22, ll. 53–55, col. 23, ll. 3–5. Petitioner observes that “Platte discloses that the ‘use-recognition information’ is stored in a read-only area that cannot be altered by the user” and that “Platte further discloses that other information in that memory can be overwritten, deleted, or altered.” Pet. 18 (citing Ex. 1008 ¶¶ 146, 147), 22. For the latter, Petitioner points to various disclosures of Platte, including its disclosure of a bit that can be set or released by the user to as part of a “general recording lock,” as well as disclosure of entries in the memory device that can selectively block or release the playback of particular recordings. *Id.* at 18–19 (citing Ex. 1003, 5, 7; Ex. 1008 ¶¶ 147, 148), 22. Patent Owner does not dispute these identifications.

We agree with Petitioner’s reasoning with respect to these limitations. Accordingly, we conclude that Petitioner demonstrates, by a preponderance of the evidence, that Platte anticipates claims 15 and 18.

3. Anticipation of Dependent Claims 16 and 19 by Platte

Claims 16 and 19 depend respectively from claims 14 and 17, each reciting that “said memory comprises interface means for transmitting data of the management information.” Ex. 1001, col. 22, ll. 57–59, col. 24, ll. 1–3. Petitioner provides sufficient reasoning that the function of “transmitting data of the management information” is performed by Platte because “Platte discloses ‘transmission of signals from the storage arrangement [the memory device] to the magnetic tape device [*e.g.*, the tape player/recorded] or vice versa.” Pet. 19 (quoting Ex. 1003, 7) (alterations by Petitioner), 22.

In addition, Petitioner adequately supports its contention that “a person having ordinary skill in the art would understand that Platte inherently discloses a structure for transmitting management information from the memory device to the magnetic tape player/recorder.” *Id.* at 19 (citing Ex. 1008 ¶ 151). Petitioner supports its reasoning with testimony by Dr. Messner, and observes that “Platte discloses that the information transmitted from the memory device to the magnetic tape device is used to ‘control[] an operating mode lock as previously described.’” *Id.* (citing Ex. 1003, 7); Ex. 1008 ¶ 151. Both Petitioner and Dr. Messner assert that a person skilled in the art would also recognize that any structure for performing the function would be an electrical contact, or an antenna, or an equivalent thereof. Pet. 19–20; Ex. 1008 ¶ 152. Patent Owner does not dispute these identifications.

We agree with Petitioner’s reasoning with respect to these limitations. Accordingly, we conclude that Petitioner demonstrates, by a preponderance of the evidence, that Platte anticipates claims 16 and 19.

4. *Obviousness of Claims 14–19 Over Platte*

In addition to its anticipation challenge of claims 14–19 over Platte, Petitioner challenges those claims as unpatentable under 35 U.S.C. § 103(a) over Platte. Pet. 22–27. Petitioner contends that a conclusion of obviousness is supported because, “to the extent that the various use cases of Platte are deemed to be separate embodiments, it would have been obvious to a person having ordinary skill in the art to combine their teachings.” Pet. 24, 26. Patent Owner asserts that this contention is “not relevant,” and concedes that “Platte appears to be directed to a cassette that can be flexibly used in different commercial scenarios, and thus it makes sense to consider the disclosure [of] Figs. 1-4 as different facets of the same cassette (*i.e.*, as a single embodiment).” PO Resp. 25.

In light of the parties’ apparent agreement on this point, and because we conclude that Petitioner has shown that all limitations of claims 14–19 are disclosed by Platte, we also conclude that Petitioner has shown, by a preponderance of the evidence, that they would have been obvious over Platte. *See In re McDaniel*, 293 F.3d 1379, 1385 (Fed. Cir. 2002) (“It is well

settled that anticipation is the epitome of obviousness.” (internal quotes omitted)).⁸

5. Obviousness of Claims 16 and 19 Over Platte and Göken

Petitioner additionally challenges claims 16 and 19, which recite the “interface means,” as unpatentable under 35 U.S.C. § 103(a) over Platte and Göken. Pet. 27–29. In its anticipation challenge of claims 16 and 19, Petitioner argues that Platte inherently discloses the “interface means.” In the instant challenge, Petitioner relies on Göken to meet that limitation.

Göken discloses separate embodiments in which electrical contacts are used with a memory in cassette or as an electromagnetic contact, such as “an antenna, in particular a microstrip antenna, for a transmission interface.” Ex. 1006, col. 4, ll. 39–44, col. 5, ll. 21–25.

Petitioner contends that it would have been obvious to combine the electrical contacts or antenna interface of Göken with the tape cassette of Platte because “such combination would utilize known components for

⁸ We do not reach Petitioner’s additional argument that, to the extent Platte does not disclose “use-recognition information” in a “read-only area of said memory,” as recited in independent claims 14 and 17, “this limitation would have been no more than common sense and obvious in light of the knowledge of a person having ordinary skill in the art.” Pet. 23 (citing Ex. 1008 ¶ 172), 26–27. Petitioner presents reasoning to account for the hypothetical possibility that Platte be read as disclosing storage of “use-recognition information” in a rewritable area of memory. *Id.* at 23–24. Patent Owner presents arguments based on its contention—which we reject—that additional bytes beyond Platte’s second memory byte must be considered as part of the “use-recognition information.” PO Resp. 25–34. Because neither of these positions is commensurate with our finding that Platte’s second memory byte is “use-recognition information” stored in a read-only area of memory, we do not address them further.

transmitting data to and from a memory-in-cassette (‘MIC’) to provide the necessary interface,” and because their use “would achieve the desirable and predictable result of allowing communications between Platte’s memory device and the external magnetic tape player/recorder in the manner taught in Goken.” Pet. 28. Petitioner supports this reasoning, which we find persuasive, with testimony by Dr. Messner. Ex. 1008 ¶¶ 199–201. Patent Owner does not address Petitioner’s reasoning in its Response.

We conclude that Petitioner demonstrates, by a preponderance of the evidence, that claims 16 and 19 are unpatentable under 35 U.S.C. § 103(a) over Platte and Göken.

E. Solhjell

Solhjell describes “a tape cassette of the type containing a memory with data stored therein identifying characteristics of the cassette” in the specific context of “a multi-cassette loader or library system, with the system communicating with the tape cassette to read and write information into and from the cassette memory.” Ex. 1005, col. 1, ll. 10–15. This context is relevant to Solhjell’s teachings, and presented as background art against which Solhjell’s tape cassette is described.

Figure 2 of Solhjell is reproduced below.

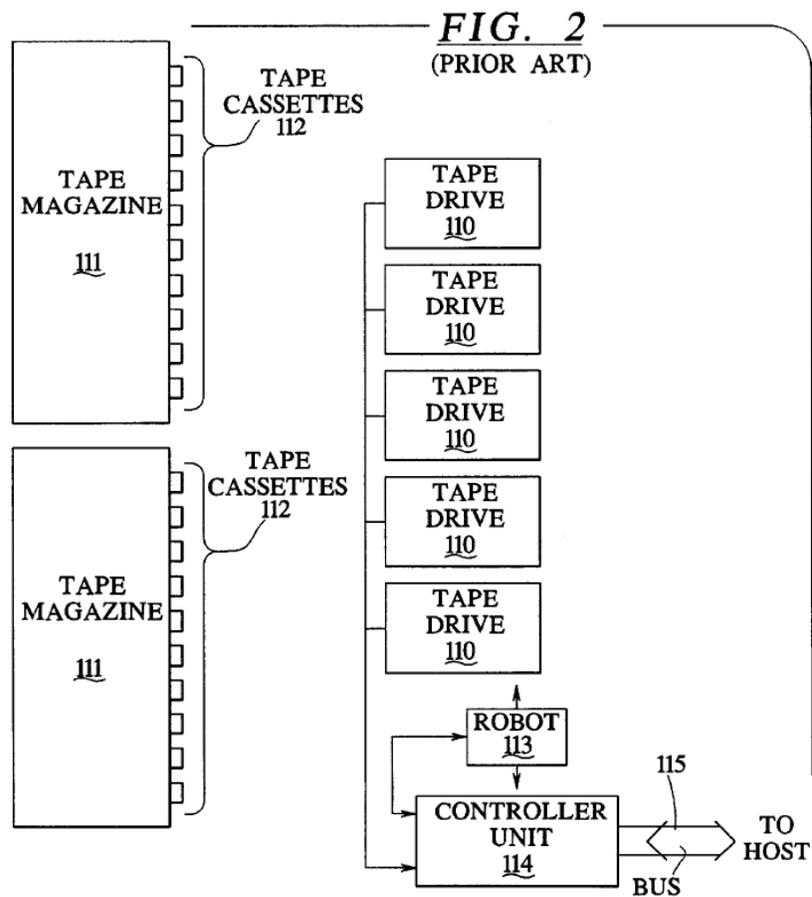


Figure 2 “is a block diagram showing the basic components of a conventional robotic cassette library system.” *Id.* at col. 6, ll. 32–34. As illustrated in the drawing, the library system includes multiple tape magazines 111, each of which stores multiple cassettes 112. *Id.* at col. 2, ll. 59–62. Robot cassette handler 113 is controlled by electronic controller unit 114, which may respond to commands issued from a host over bus 115, from drives 110, or from robot cassette handler 113. *Id.* at col. 2, ll. 62–65. Such a library structure allows automated operations to be performed on cassettes 112, including having robot cassette handler 113 pick up any one of the cassettes and insert it into one of the tape drives, and to remove a cassette from a tape drive and return it to one of the tape magazines. *See id.*

at col. 2, ll. 7–14, col. 3, ll. 4–5 (referring to similarity of operation with loader described in Figure 1).

To improve efficiency operating such a library system to locate specific information on a tape cassette, Solhjell equips tape cassettes with nonvolatile memory and optical transmission capabilities that enable data to be read from or written to the memory. *Id.* at col. 5, ll. 19–22. Figure 4 of Solhjell is reproduced below.

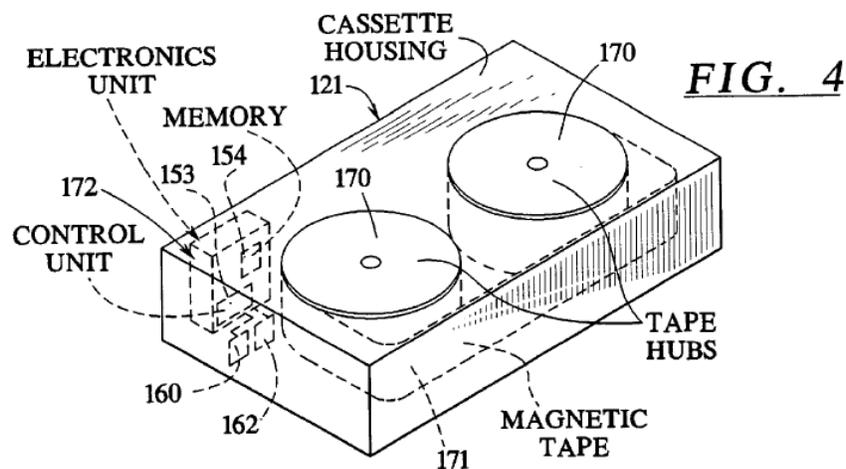


Figure 4 illustrates the basic components of a cassette, including housing 121 that contains rotatable hubs 170 on which magnetic tape 171 is wound. *Id.* at col. 7, ll. 6–8. Housing 121 also contains electronics unit 172, which is connected to optical sensor 160 and optical transmitter 161. *Id.* at col. 7, ll. 13–16. Electronics unit 172 contains electronic control unit 153, which controls operation of nonvolatile memory chip 154. *Id.* at col. 7, ll. 22–24. Electronic control unit 153 also contains a cassette information memory that includes “a digital unique address or number for each cassette,” and perhaps also “unique cassette information, such as date of manufacture, manufacturer’s name, cassette type, tape (media) type and tape length.” *Id.* at col. 7, ll. 39–44.

In addition, Solhjell describes the nonvolatile memory chip 154 as including a control section and a data-information section, with the control section containing “as a minimum,” certain data bytes. *Id.* at col. 11, ll. 54–57, 61–64. One of these data bytes is described as follows:

Information about the write protect status of the cassette. A host may transmit information that a cassette shall be write protected (even if the cassette has a mechanical write protect switch which is not in a write protect mode). This will enhance the flexibility and control especially in library systems with little physical user presence.

Id. at col. 12, ll. 9–15.

Petitioner challenges claims 14–16 as unpatentable under 35 U.S.C. § 103(a) over Solhjell, and challenges claims 17–19 as unpatentable under 35 U.S.C. § 103(a) over Solhjell and Platte. Pet. 45–55. In making these challenges, Petitioner maps the “tape cassette,” “magnetic tape,” and “memory” recited in independent claims 14 and 17 to the structure illustrated in Figure 5 of Solhjell reproduced above. *Id.* at 46–47, 52. In addition, Petitioner identifies the information stored on the cassette information memory as “management information.” *Id.* at 47–48, 52. We agree with these identifications, which are not disputed by Patent Owner.

The dispositive issue is whether Petitioner demonstrates, by a preponderance of the evidence, that the limitation of independent claims 14 and 17 requiring that “the use-recognition information is stored in a read-only area in said memory” would have been obvious over Solhjell. Petitioner’s declarant, Dr. Messner, testifies that “[t]his element is not

explicitly disclosed by Solhjell.” Ex. 1008 ¶ 298.⁹ Patent Owner’s declarant, Dr. Bain, shares the same opinion. Ex. 2001 ¶ 74 (“I believe that Solhjell does not disclose . . . ‘use-recognition information’ that is stored in a read-only portion of the memory.”). Based on our independent reading of Solhjell, we agree with the parties’ declarants that the limitation is not expressly disclosed by Solhjell.

Notwithstanding the lack of express disclosure, Petitioner addresses the limitation by identifying information stored on the nonvolatile memory chip “about the write protect status of the cassette” as “use-recognition information,” and contending that “[i]t would have been obvious to a person skilled in the art to store information about the write protect status of the cassette in a read-only area of the memory.” Pet. 48 (citing Ex. 1005, col. 12, ll. 9–15; Ex. 1008 ¶ 297). Petitioner specifically contends that storing the “use-recognition information” in a read-only area of memory “would have been an obvious matter of design choice,” “would be obvious to try,” and that a person skilled in the art would have been motivated to do so “in order to prevent a user from circumventing the entire write protect scheme by altering the write protect status information.” *Id.* at 49 (citing Ex. 1008 ¶¶ 299–301). We are not persuaded by these rationales, which are presented in cursory fashion in the Petition.

⁹ Dr. Messner makes this assertion in the context of addressing claim 14. When addressing claim 17, Dr. Messner inconsistently testifies that the limitation “is also taught by Solhjell,” referring to his testimony regarding claim 14. Ex. 1008 ¶ 324 (citing Ex. 1008 ¶¶ 298–301). When cross-examined, Dr. Messner appeared to confirm his opinion that the limitation is not taught by Solhjell. Ex. 2002, 30:21–31:1 (“Yeah, I’m not seeing it saying – referring to it specifically as read-only memory.”).

First, in arguing its “design choice” and “obvious to try” rationales, Petitioner contends that a person skilled in the art “would have understood that the information about the write protect status of the cassette would necessarily have to be stored in either a read-only area or a rewritable area of the memory.” *Id.* at 48–49 (citing Ex. 1008 ¶ 299). However, we are persuaded by the testimony of Patent Owner’s declarant, Dr. Bain, that characterizing the potential design options as a simple choice between two possibilities oversimplifies because “the situation in the relevant timeframe was [not] as simple as Fujifilm presents it.” Ex. 2001 ¶ 64.¹⁰

Dr. Bain explains that the design options include specific combinations of read and write access that “could include WORM memory, the ability to write for a fixed number of times, the ability to write at certain times of day, the ability to write with a password, the ability to write only certain values, the ability to write on a delay, etc.” *Id.* In addition, “the person of ordinary skill would need to choose which locations to limit,” a procedure that is complicated in Solhjell by its description of multiple surrounding data bytes stored within the nonvolatile memory’s control section. *Id.* ¶¶ 65, 77. We agree with Patent Owner that Petitioner “did not take these complexities into account in its petition.” PO Resp. 37.

Second, Petitioner’s hypothesis that a skilled artisan would have been motivated to use a read-only area of memory to prevent users from circumventing the write protect scheme amounts to improper hindsight

¹⁰ Some relevant testimony regarding Petitioner’s “design choice” argument was made by Dr. Bain in connection with the Platte challenges rather than the Solhjell challenges, but Dr. Bain explicitly refers to that testimony when addressing the Solhjell challenges. Ex. 2001 ¶ 79.

rationalization. *See Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1570 (Fed. Cir. 1996) (“The invention must be viewed not after the blueprint has been drawn by the inventor, but as it would have been perceived in the state of the art that existed at the time the invention was made.”). Petitioner’s brief assertion takes insufficient account of Solhjell’s context, which is addressed more completely by Patent Owner and Dr. Bain. In particular, in the context of the robotically operated library described by Solhjell, we agree with Patent Owner that the passage the Petition relies on¹¹ makes clear that “the write-protect memory location is intended as an electronic write-protect switch that a tape drive—as opposed to a human user—could enact.” PO Resp. 38 (citing Ex. 2001 ¶ 78). As Dr. Bain testifies, the reference in that passage to “library systems with little physical user presence” “comes from the fact that the library has a robotic loading system that is likely enclosed to allow the robot loader to work freely and not injure any humans nearby.” Ex. 2001 ¶ 77 (citation omitted). An electronic version of the write-protect switch allows the user to write-protect a tape without physically handling it. *Id.*

¹¹ Petitioner’s Reply alternatively identifies “[s]pecial pass word protection” described at column 12, lines 5–8, of Solhjell as corresponding to “use-recognition information.” Reply 24. We do not consider this identification because it is not made in the Petition, and Patent Owner has had insufficient opportunity to address it. *Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369 (Fed. Cir. 2016) (“It is of the utmost importance that petitioners in the IPR proceedings adhere to the requirement that the initial petition identify ‘with particularity’ the ‘evidence that supports the grounds for the challenge to each claim’ [as required by 35 U.S.C. § 312(a)(3)].”).

As Dr. Bain further testifies, the modification that Petitioner proposes “would have reduced the very ‘flexibility and control’ that Solhjell teaches will arise from storing information about the write protect status.” *Id.* ¶ 78. That is, “it would have prevented users from write-protecting cassettes when valuable recordings had been made.” *Id.* In weighing these considerations, we are mindful that different motivations might drive designers of tape cassettes according to the environments in which such cassettes are to be used. Petitioner provides insufficient reasoning to support its contention that it would have been obvious to make its proposed modification in the specific environment contemplated by Solhjell.

Petitioner makes no separate argument when addressing claim 17 that its additional application of Platte corrects the deficiencies in its obviousness arguments regarding Solhjell. *See* Pet. 52–54.

For these reasons, we conclude that Petitioner does not demonstrate, by a preponderance of the evidence, that independent claim 14 would have been obvious over Solhjell, or that independent claim 17 would have been obvious over Solhjell and Platte. Because claims 15, 16, 18, and 19 depend from one of these independent claims, we similarly conclude that Petitioner does not demonstrate, by a preponderance of the evidence that those claims would have been obvious over Solhjell alone or in view of Platte.

III. CONCLUSION

We conclude that Petitioner demonstrates, by a preponderance of the evidence, that claims 14–19 are anticipated by Platte; claims 14–19 are unpatentable under 35 U.S.C. § 103(a) over Platte; and claims 16 and 19 are unpatentable under 35 U.S.C. § 103(a) over Platte and Göken. We also

conclude that Petitioner does not demonstrate, by a preponderance of the evidence, that claims 14–16 are unpatentable under 35 U.S.C. § 103(a) over Solhjell; nor that claims 17–19 are unpatentable under 35 U.S.C. § 103(a) over Solhjell and Platte.

IV. ORDER

It is

ORDERED that, based on a preponderance of the evidence, claims 14–19 of U.S. Patent No. 6,674,596 are held to be unpatentable; and

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

IPR2016-01183
Patent 6,674,596 B1

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