

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SECURUS TECHNOLOGIES, INC.,
Petitioner,

v.

JOHN D. PROFANCHIK, SR.,
Patent Owner.

Case IPR2016-00268
Patent 8,315,367 B2

Before KEVIN F. TURNER, BARBARA A. BENOIT, and
GEORGIANNA W. BRADEN, *Administrative Patent Judges*.

BRADEN, *Administrative Patent Judge*.

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

I. INTRODUCTION

We have jurisdiction to hear this *inter partes* review under 35 U.S.C. § 6(c), and this Final Written Decision is issued pursuant to 35 U.S.C. § 318(a) and 37 C.F.R. § 42.73. For the reasons that follow, we determine that Petitioner has shown by a preponderance of the evidence that claims 1–20 of U.S. Patent No. 8,315,367 B2 (Ex. 1001, “the ’367 patent”) are unpatentable.

A. Procedural History

Securus Technologies, Inc. (“Petitioner”) filed a Petition (Paper 1, “Pet.”) to institute an *inter partes* review of claims 1–20 of the ’367 patent. On the cover of its Petition for *inter partes* review, Petitioner indicated that Global Tel*Link Corporation was the patent owner. Global Tel*Link Corporation, however, informed the Board that John D. Profanchik, Sr. is the patent owner and real party-in-interest. Paper 4, 2; Paper 5, 1. John D. Profanchik, Sr. (“Patent Owner”) timely filed a Preliminary Response (Paper 5, “Prelim. Resp.”). In its Preliminary Response, Patent Owner pointed out citation errors in the Petition. Petitioner then filed a Corrected Petition. Paper 7.¹ Based on Petitioner’s filing of a Corrected Petition after the filing of Patent Owner’s Preliminary Response, Patent Owner filed a pleading responsive to the Corrected Petition. Papers 9 (Board’s Order authorizing Patent Owner’s responsive pleading), 10 (Patent Owner’s Responsive Pleading).

Pursuant to 35 U.S.C. § 314(a), we instituted an *inter partes* review of (1) claims 1–7, 9–17, 19, and 20 as unpatentable under 35 U.S.C. § 102(e) in

¹ All citations in this Decision are to the Corrected Petition, Paper 7.

view of Polozola²; (2) claim 3 and 13 unpatentable under 35 U.S.C. § 103(a) in view of Polozola and Csabai³; (3) claim 4, 8, 14, and 18 unpatentable under 35 U.S.C. § 103(a) in view of Polozola and Hansen⁴; (4) claims 1–3, 5–7, 9–13, 15–17, 19, and 20 under 35 U.S.C. § 103(a) as unpatentable over Reinhold⁵, Csabai, and Polozola; and (5) claims 4, 8, 14, and 18 under 35 U.S.C. § 103(a) as unpatentable over Reinhold, Csabai, Polozola, and Hansen. See Paper 11 (“Dec. to Inst.”), 40.⁶

After institution of trial, Patent Owner indicated that it would not file a Patent Owner’s Response or otherwise continue participating in this proceeding. See Paper 14 (Conduct of Proceeding Order). Under the particular circumstances of this case, the Board, however, has considered Patent Owner’s arguments from its Preliminary Response during the deliberations and decision-making for this Final Written Decision. Oral argument was not requested by either party.

B. Related Proceedings

The parties inform us that no other related matters would affect or be affected by this proceeding. Pet. 59; see Paper 4 (Patent Owner’s Mandatory Notices), 2–3.

² US Patent No. 8,031,052 B2 (filed Nov. 22, 2006) (“Polozola,” Ex. 1005).

³ WO 2006/097775 A1 (filed July 21, 2005) (“Csabai,” Ex. 1007).

⁴ US Pub. No. 2006/0180647 A1 (filed Feb. 11, 2005) (“Hansen,” Ex. 1008).

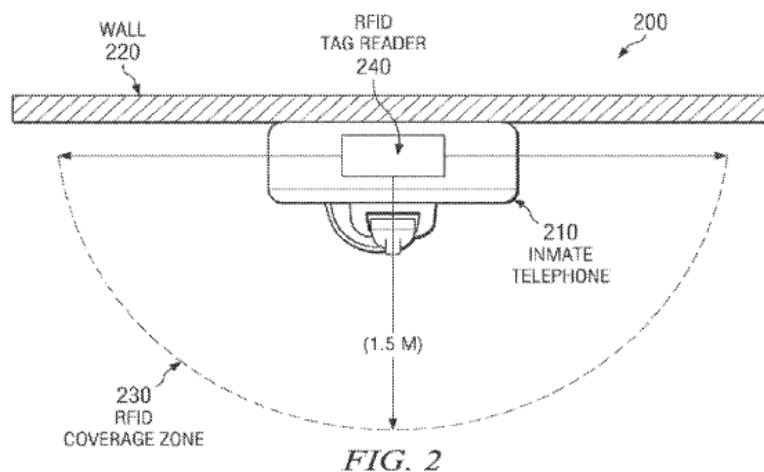
⁵ US Patent No. 7,494,061 B2 (filed June 30, 2006) (“Reinhold,” Ex. 1006).

⁶ The Leahy-Smith America Invents Act (“AIA”) included revisions to 35 U.S.C. § 100 et seq. effective on March 16, 2013. The ’367 patent issued from an application filed before March 16, 2013, therefore, we apply the pre-AIA versions of the statutory bases for unpatentability.

C. The '367 Patent

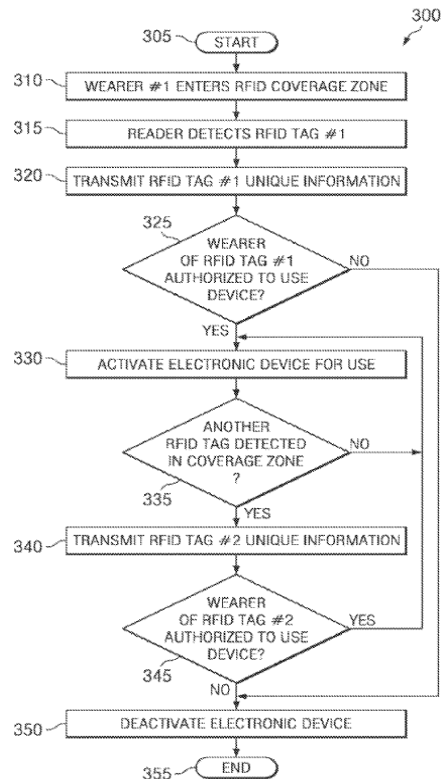
The '367 patent discloses “systems and methods for preventing unauthorized persons from using an electronic device within a facility.” Ex. 1001, Abst. The '367 patent teaches a radio frequency identification (RFID) system that identifies prison inmates within an RFID coverage zone during use of the telephone. The system determines whether the phone call can continue to proceed based on the proximity of one or more inmates to the telephone. *Id.* at 1:49–53, 2:16–20.

One embodiment of the '367 patent provides an RFID access system that includes RFID tags having unique identification information associated with wearers of the RFID tags. *Id.* at 2:39–41. The RFID tag “having unique identification information associated with a wearer of the RFID tag,” which may be contained in “a non-removable item worn by the wearer, such as a bracelet.” *Id.* at 2:40–43. RFID tags may be constructed such that they cannot be removed and are tamperproof. *Id.* at 5:26–28. The RFID system includes a reader having an RFID coverage zone for detecting RFID tags within the zone. *Id.* at 2:43–45. One embodiment of an RFID tag reader and RFID coverage zone is illustrated in Figure 2, reproduced below.



As shown above in Figure 2 of the '367 patent, system 200 includes inmate telephone 210, RFID coverage zone 230, and RFID tag reader 240. *Id.* at 5:36–38, Fig. 2. In this specific embodiment, RFID coverage zone 230 is generated around telephone 210 by RFID reader 240, which is integrated within telephone 210. *Id.* at 5:37–39.

Another embodiment of the '367 patent provides a call management system that connects the reader and determines whether wearers in the coverage zone are authorized to use the electronic device (*e.g.*, a telephone) based on a detected RFID tag's unique identification information. *Id.* at 2:45–50, 7:19–21, claim 1, Fig. 3. An example of a process by which an RFID-based access management system may be used to ensure only authorized persons use an electronic device in a facility is shown in Figure 3, reproduced below.



As shown above in Figure 3 of the '367 patent at step 350, the call management system deactivates the electronic device if it determines an unauthorized wearer is detected in the coverage zone. *Id.* at 2:50–52, 3:22–26, 7:25–28, Fig. 3.

D. Illustrative Claims

As noted above, an *inter partes* review was instituted as to claims 1–20 of the '367 patent, of which claims 1 and 11 are the only independent claims. Claims 1 and 11 are illustrative of the challenged claims and are reproduced below (with paragraphing):

1. An access management system for preventing unauthorized persons from using an electronic communication device in a custodial facility, the system comprising:
 - a RFID tag configurable to have unique identification information that can be associated with a wearer of the RFID tag, wherein the RFID tag is configured to be comprised in a non-removable item worn by the wearer;
 - a reader configurable to be associated with the electronic communication device, the reader configurable to have a RFID coverage zone for detecting RFID tags within the coverage zone; and
 - a call management system configurable to be connected to the reader and configurable to determine whether a wearer is authorized to use the electronic communication device based at least in part on an RFID tag's detected unique identification information;wherein the reader is configured to detect when the RFID tag is within the coverage zone, the call management system activating the electronic communication device if it determines the wearer is authorized to use the electronic communication device.

Ex. 1001, 9:33–52.

11. A method of preventing unauthorized persons from using an electronic communication device in a custodial facility, the method comprising:

providing a RFID tag configurable to have unique identification information that can be associated with a wearer of the RFID tag, wherein the RFID tag is configurable to be comprised in a non-removable item worn by the wearer;

creating an RFID coverage zone around the electronic communication device;

detecting when the RFID tag is within the coverage zone;

determining whether the wearer of the RFID tag is authorized to use the electronic communication device based at least in part on the detected unique identification information; and

activating the electronic communication device for use by the wearer of the RFID tag if it is determined that the wearer of the RFID tag is authorized to use the electronic communication device while the detected RFID tag is in the coverage zone.

Id. at 10:16–35.

II. DISCUSSION

A. Claim Construction

In an *inter partes* review, claim terms in an unexpired patent are interpreted according to their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *see Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016) (“We conclude that the regulation represents a reasonable exercise of the rulemaking authority that Congress delegated to the Patent Office.”). Under that standard, and absent any special definitions, we give claim terms their ordinary and customary meaning, as would be understood by one of ordinary skill in the art at the time of the invention. *In re Translogic Tech., Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007).

Petitioner proposes construction for the claim term “non-removable item” recited in certain claims. Pet. 7–20. Patent Owner originally disputed Petitioner’s proposed construction for “non-removable item.” Prelim. Resp. 12. Patent Owner also proposed a construction for the term “RFID coverage zone” in its Preliminary Response. *Id.* at 13.

In the Decision to Institute, we determined that the broadest reasonable construction of “non-removable item” is “an item that cannot be removed by unauthorized persons without it ceasing to function properly,” while “RFID coverage zone” encompasses “an area in which a radio frequency identification can be detected.” *See* Dec. to Inst. 9–10. As discussed previously, Patent Owner chose not to file a Patent Owner’s Response, which precluded Petitioner from filing a Reply. *See* Paper 14 (Conduct of Proceeding Order). Thus, neither party has challenged our construction of these claim terms. Having considered whether the constructions set forth in the Decision to Institute should be changed, we see no reason to alter the constructions of these claim terms as set forth in the Decision to Institute, and we incorporate our previous analysis for purposes of this Decision. *See* Dec. to Inst. 9–10. Therefore, for the reasons set forth in the Decision to Institute, we interpret “non-removable item” as “an item that cannot be removed by unauthorized persons without it ceasing to function properly,” and “RFID coverage zone” as encompassing “an area in which a radio frequency identification can be detected.” *See id.*

After analyzing the claims and supporting specification of the ’367 patent, we determine that we need not provide express constructions for any other claim terms.

B. Principles of Law

A claim is unpatentable under 35 U.S.C. § 102 if a prior art reference discloses every limitation of the claimed invention, either explicitly or inherently. *Glaxo Inc. v. Novopharm Ltd.*, 52 F.3d 1043, 1047 (Fed. Cir. 1995). If the prior art reference does not expressly set forth a particular element of the claim, that reference still may anticipate if that element is inherent in its disclosure. *In re Robertson*, 169 F.3d 743,745 (Fed. Cir. 1999).

A claim is unpatentable under 35 U.S.C. § 103(a) if “the differences between the subject matter sought to be patented 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 nonobviousness, i.e., secondary considerations. *See Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966).

“A determination of whether a patent claim is invalid as obvious under § 103 requires consideration of all four *Graham* factors, and it is error to reach a conclusion of obviousness until all those factors are considered.” *Apple Inc. v. Samsung Elecs. Co., Ltd.*, 839 F.3d 1034, 1048 (Fed. Cir. 2016) (en banc) (citations omitted). “This requirement is in recognition of the fact that each of the *Graham* factors helps inform the ultimate obviousness determination.” *Id.*

“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”)). This burden never shifts to Patent Owner. See *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015) (discussing the burden of proof in *inter partes* review). Furthermore, Petitioner cannot 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).

Thus, to prevail in an *inter partes* review, Petitioner must explain how the proposed combinations of prior art would have rendered the challenged claims unpatentable. At this final stage, we determine whether a preponderance of the evidence of record shows that the challenged claims would have been obvious over the proposed combinations of prior art.

We analyze the instituted grounds of unpatentability in accordance with the above-stated principles.

C. Level of Ordinary Skill in the Art

In determining whether an invention would have been obvious at the time it was made, we consider the level of ordinary skill in the pertinent art at the time of the invention. *Graham*, 383 U.S. at 17. “The importance of resolving the level of ordinary skill in the art lies in the necessity of maintaining objectivity in the obviousness inquiry.” *Ryko Mfg. Co. v. Nu-Star, Inc.*, 950 F.2d 714, 718 (Fed. Cir. 1991).

Petitioner's Declarant, Dr. Caloyannides, opines that a person of ordinary skill in the art relevant to the '367 patent "would have held a bachelor's or master's degree in electrical engineering and had at least three years of experience working with access control systems, or the equivalent thereof." Ex. 1003 ¶ 37. Although Patent Owner makes no argument regarding who would qualify as a person of ordinary skill in the art relevant to the '367 patent, the burden remains on Petitioner to make its case. See *Dynamic Drinkware*, 800 F.3d at 1378.

Based on our review of the '367 patent, the types of problems and solutions described in the '367 patent and cited prior art, and the testimony of Petitioner's Declarant, we adopt and apply Petitioner's definition of a person of ordinary skill in the art at the time of the claimed invention. We note that the applied prior art reflects generally the appropriate level of skill at the time of the claimed invention. See *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001).

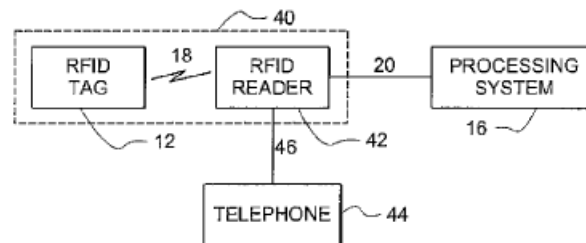
D. Alleged Anticipation of Claims 1–7, 9–17, 19, and 20 by Polozola

Petitioner contends claims 1–7, 9–17, 19, and 20 of the '367 patent are unpatentable under 35 U.S.C. § 102(e) as anticipated by Polozola. Pet. 9–26. Patent Owner disputes Petitioner's contentions in its Preliminary Response. Prelim. Resp. 14–23. Although Patent Owner chose not to participate in the proceeding and makes no arguments regarding these claims following our Decision to Institute, the burden remains on Petitioner to demonstrate unpatentability. See *Dynamic Drinkware*, 800 F.3d at 1378. For reasons that follow, we determine Petitioner has demonstrated by a preponderance of evidence the unpatentability of these claims.

1. Overview of Polozola

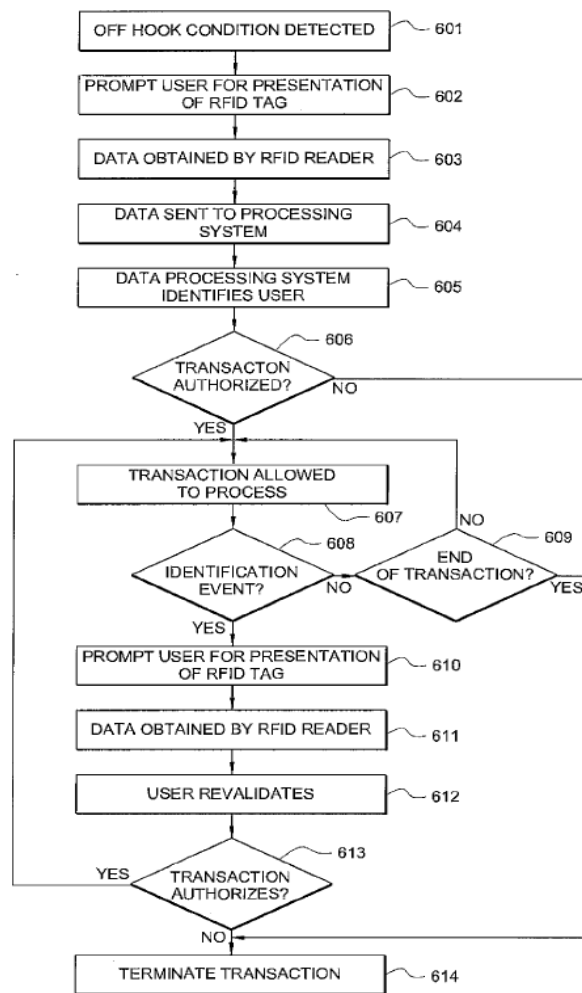
Polozola discloses systems and methods for “providing radio frequency identification (RFID) of individuals, as may be implemented with respect to a controlled environment facility, using RFID transducer technology deployed in association with a user terminal, such as telephone or multimedia kiosk.” Ex. 1005, Abst. RFID tags “identify residents of a controlled environment facility and control one or more transactions associated with the residents and/or actions of the residents using a RFID system in which a user presents a RFID transponder in proximity to a RFID transducer for identification.” *Id.*

One embodiment in Polozola of an RFID system adapted to control calls or other transactions (e.g., commissary purchases) within a controlled environment facility is illustrated in Figure 4, reproduced below.



As shown in Figure 4, a user with RFID tag 12 approaches RFID tag reader 42 and is prompted to present RFID tag 12, which transmits the user’s identification via communication link 18 to RFID tag reader 42. *Id.* at 8:27–32, 9:61–62.

A processing system for identifying the user based on the RFID tag’s information is illustrated in Figure 6, reproduced below.



As shown in Figure 6, the processing system at step 606 “determines if the user is authorized to conduct the desired transaction, such as to place a call to a phone number input by the user.” *Id.* at 11:36–39, Fig. 6. If the “user is authorized to place the call, for example, [the] processing system[] connects the call,” and the transaction is allowed to proceed. *Id.* at 11:59–61, Fig. 6 step 607. If the user is not authorized, the call is not connected, the transaction may be terminated, and an investigator may be notified of the attempt to make an unauthorized call. *Id.* at 11:61–67, Fig. 6 step 614.

Another embodiment in Polozola discloses using RFID tags to determine whether an inmate is authorized to use other electronic devices,

“such as computers, personal digital assistants (PDAs), cellular telephones, and/or the like,” and whether the inmate can pass through a door or gate. *Id.* at 4:34–36, 8:50–55.

2. Analysis

a. Independent Claims 1 and 11

Claim 1 specifically recites “a reader . . . configurable to have a[n] RFID coverage zone for detecting RFID tags within the coverage zone,” while claim 11 recites “creating an RFID coverage zone around the electronic communication device.” Ex. 1001, 9:33–52, 10:16–35.

Petitioner contends Polozola discloses each of the elements recited in claims 1 and 11 (Pet. 11–20), and specifically contends that Polozola discloses “an RFID coverage zone” as required by the challenged claims. *Id.* at 15–18. According to Petitioner, Polozola discloses that RFID reader 42 includes RFID interrogator 26, which “contains an antenna and is operable to communicate with RFID tag 12 (FIG. 1) via communication link 18 (FIG. 1)” when the RFID tag is within the “proximity of RFID reader 42.” *Id.* at 15 (citing Ex. 1005, 7:19–23, 9:61–62, Fig. 6 step 602; Ex. 1003 ¶¶ 73, 74). Petitioner explains that “RFID tag 12 responds with data stored therein, sending the data back over communication link 18 to RFID interrogator 26,” such as an “identification number.” *Id.* (citing Ex. 1005, 10:53–56, Fig. 6 step 603; Ex. 1003 ¶ 74). Petitioner, thus, concludes that Polozola discloses a “reader is configured to detect when the RFID tag is within the coverage zone,” as recited in claim 1, at least because the tag is close enough to send information to the reader. *Id.* (citing Ex. 1003 ¶ 74). For claim 11, Petitioner argues that communication link 18 creates an RFID coverage zone around the telephone connected to the tag reader, because

communication between the tag and the reader only occurs when the RFID tag is within the “proximity of RFID reader 42.” *Id.* at 18 (citing Ex. 1005, 9:61–62; Fig. 6, step 602; Ex. 1003 ¶ 115).

Patent Owner contests Petitioner’s position in its Preliminary Response, contending Polozola fails to disclose the required “RFID coverage zone” for several reasons. Prelim. Resp. 14–23. First, Patent Owner contends that communication link 18 in Polozola is a point-to-point connection while the claimed coverage zone covers a predetermined zone around RFID tag reader 42. *Id.* at 15 (citing Ex. 1001, Fig. 2; Ex. 1005, Fig. 4). Patent Owner argues that, a point-to-point connection is not a coverage zone, and communication link 18 does not “detect[] RFID tags within the coverage zone,” as required by claim 1. *Id.* at 15–16. Patent Owner further argues that a communication link does not necessarily imply detection of a device within a “coverage zone,” because one can easily communicate wirelessly with a device outside of a defined “coverage zone,” particularly if the link is a point-to-point connection. *Id.* at 16.

Second, Patent Owner contends Petitioner fails to demonstrate how bringing RFID tag 12 “in proximity of RFID reader 42” to communicate with RFID reader 42 relates to the claimed “RFID coverage zone.” *Id.* at 17–18. According to Patent Owner, Petitioner never argues that the claimed “RFID coverage zone” corresponds to Polozola’s “proximity of RFID reader 42” and that statements made by Petitioner’s Declarant cannot be relied upon to support the Petition due to a prohibition of incorporation by reference. *Id.* at 18 (citing 37 C.F.R. § 42.6(a)(3), which states “[a]rguments must not be incorporated by reference from one document into another document”). Patent Owner further contends that (1) communication within

“proximity” of a device does not necessarily mean the device has a coverage zone (*id.* at 19); (2) although RFID tag 12 communicates with RFID reader 42 in the proximity of reader 42, that does not necessarily mean reader 42 has a coverage zone for detecting tag 12, because there need not be a coverage zone at all, or tag 12 could be configured to have a “coverage zone” rather than reader 42 having one (*id.* at 19–20); and (3) Polozola does not spell out an “RFID coverage zone” anywhere or specifically use anything like it or even contemplate the use of an “RFID coverage zone” (*id.* at 22).

Lastly, Patent Owner contends that there are significant differences between the RFID coverage zone in the ’367 patent and communication link 18 in Polozola. Specifically, Patent Owner argues (1) the RFID coverage zone in the ’367 patent can detect multiple RFID tags (including first and second RFID tags) within the zone (*id.* at 16 (citing Ex. 1001, 2:59–3:5, 6:5–10 (“another RFID tag enters within the coverage zone 230”))), whereas communication link 18 in Polozola only works for one tag 12 and different tags require different point-to-point links for communication with the reader;⁷ (2) Polozola’s communication link 18 has a dynamic length depending on the distance between RFID tag 12 and RFID reader 42, which may change even during active communication as the tag moves about, whereas the claimed coverage zone has a predetermined size (*e.g.*, 1.5 m or 30 feet) (*id.* at 16–17 (citing Ex. 1001, 5:50–56)); (3) the existence of Polozola’s communication link 18 necessarily requires active communication between RFID tag 12 and RFID reader 42, whereas the

⁷ Patent Owner does not provide a citation to support its characterization of Polozola.

claimed coverage zone is “predetermined” by a reader alone, meaning that the coverage zone does not require communication between the reader and any RFID tag (i.e., the coverage zone exists even if there is no RFID tag near the reader) (*id.* at 16–17 (citing Ex. 1001, 4:28–29, 5:50–53)); and (4) Polozola’s communication link 18 cannot achieve certain security features of the claimed coverage zone, whereas by using the coverage zone in the ’367 patent, “system 200 may be implemented so that only one inmate is allowed in proximity of the telephone 210” (*id.* at 16–17 (citing Ex. 1001, 5:44–62)).

Patent Owner concludes that challenges to claims 1 and 11 should be rejected because Polozola fails to disclose specifically or inherently an “RFID coverage zone,” and Petitioner has failed to show that Polozola’s communication link 18 creates an “RFID coverage zone.” *Id.* at 23.

Even taking into account Patent Owner’s arguments in its Preliminary Response and recognizing the burden remains on Petitioner to demonstrate unpatentability, we agree with Petitioner’s position that Polozola discloses “an RFID coverage zone.” *See* Pet. 22. Specifically, we find that one of ordinary skill in the art would have understood that Polozola’s communication link 18 creates an “RFID coverage zone” as required by claims 1 and 11. We credit the testimony of Dr. Caloyannides that communication between RFID tag 12 only occurs when tag 12 is within the “proximity of RFID reader 42,” thus, we find that one of ordinary skill in the art would have understood “proximity of [the] RFID reader 42” as being the coverage zone of RFID reader 42. *See* Ex. 1003 ¶ 74 (citing Ex. 1005, 9:61–62, Fig. 6, step 603).

b. Dependent Claims 2–7, 9, 10, 12–17, 19, and 20

Claims 2–7, 9, and 10 depend from claim 1, while claims 12–17, 19, and 20 depend from claim 11. Ex. 1001, 9:54–10:15, 10:36–10:64.

Petitioner contends that Polozola, as summarized above, discloses each limitation of the challenged dependent claims. Pet. 20–26. Patent Owner does not provide contentions regarding additional limitations recited in the dependent claims. See Prelim. Resp. 23; Paper 14. The burden, however, remains on Petitioner to demonstrate unpatentability. See *Dynamic Drinkware*, 800 F.3d at 1378.

As discussed below, we have reviewed the Petition and the supporting evidence, and find that Polozola discloses each limitation of the challenged dependent claims.

(1) Dependent Claims 2, 12

Claims 2 and 12 recite “wherein the custodial facility is a prison, jail, detention facility or correctional facility, and wherein the wearer is an inmate[] in the prison, jail, detention facility or correctional facility.” Ex. 1001, 9:53–56, 10:36–39. We find that Polozola teaches the custodial facility portion recited in the claims by teaching that its systems and methods “provide a reliable and low-cost alternative for identifying residents and controlling actions associated with a controlled environment facility, such as a prison facility (e.g. jail, stockade, prison, penitentiary, etcetera)” See Ex. 1005, 3:54–59. We also find that Polozola discloses that the RFID tags can “identify[] residents” of a prison, which includes “inmate[s]” of “prison facilities” where “a prison facility may tag an inmate” to identify the inmate. See *id.* at 1:36–39, 2:1–4, 4:50–53.

(2) Dependent Claims 3, 13

Claim 3 recites “wherein the unique identification information is permanently associated with the corresponding wearer at the time the wearer arrives at the custodial facility,” and claim 13 recites the substantively similar “permanently associating the unique identification information with the corresponding wearer at the time the wearer arrives at the custodial facility.” Ex. 1001, 9:57–60, 10:40–43. We find Polozola teaches these features by disclosing that the “RFID tags are preferably provided in a configuration readily associated with an individual, whether permanently or temporarily.” Ex. 1005, 2:63–66. We also find that Polozola teaches that the facilities “‘tag’ each resident of the controlled environment facility to be identified by securely associating a RFID tag to each resident, such as using a bracelet or other substantially permanently associated or attached item.” Ex. 1005, 4:9–12. We credit the testimony provided by Dr. Caloyannides, and find that one of ordinary skill in the art would understand “tag[ging]” residents with “permanently-associated” RFID bracelets describes tagging the inmate when it arrives at the facility so that the inmate’s actions can be tracked and controlled, as described in the background of Polozola. *See id.* at 1:36–2:30; Ex. 1003 ¶¶ 83, 131.

(3) Dependent Claims 4, 14

Claims 4 and 14 both recite “wherein the unique identification information associated with the RFID tag is reprogrammable depending on a wearer of the RFID tag.” Ex. 1001, 9:61–63, 10:44–46. We find Polozola teaches this feature by teaching that “RFID tags are preferably provided in a configuration readily associable with an individual, whether permanently or temporarily.” Ex. 1005, 2:63–66. We also find that Polozola teaches that

facilities can “tag a visitor” with an RFID tag “so that a visitation call may be subject to monitoring and/or control by a processing system in association therewith.” *See id.* at 4:50–53. Additionally, we find that the tag’s identification information can include “an individual’s identification number, identification code, name, picture, social security number, date of birth, age, nationality, race, height, weight, eye color, hair color, and/or any other information that may be used for identification purposes.” *Id.* at 2:57–62. We credit the testimony provided by Dr. Caloyannides, and find that because information such as names, pictures, social security numbers, date of birth, etc., are unique to an individual, associating RFID tags with visitors is implemented by reprogrammable tags that are reprogrammed with new identification data for each visitor. *See Ex. 1003 ¶¶ 87, 136.*

(4) Dependent Claims 5, 15

Claim 5 recites that “the call management system is further configured to issue a notification when an RFID tag associated with an unauthorized wearer is detected in the coverage zone,” and claim 15 recites the substantively similar “issuing a notification when an RFID tag associated with an unauthorized wearer is detected in the coverage zone.” *Ex. 1001, 9:64–10:2, 10:47–49.* We find that Polozola teaches these features. As explained above for claims 1 and 11, Polozola’s call processing system determines whether a user is authorized to use an electronic communication device based on the information from the RFID tag in the coverage zone. When a wearer is not authorized to perform the requested function, Polozola teaches in an alternative embodiment that an “investigator or other personnel may be notified of such [unauthorized] calls, perhaps in realtime” *See Ex. 1005, 11:63–12:2.* Thus, we find that if the processing system detects

“an unauthorized call” based on the received data in the coverage zone, the system issues the notification to an investigator. *Id.* at 11:63–12:2, Fig. 6 at steps 605, 606.

(5) Dependent Claims 6, 16

Claims 6 and 16 both recite “wherein the electronic communication device is an audiovisual device.” Ex. 1001, 10:3–4, 10:50–51. We credit Dr. Caloyannides’ testimony that computers, multimedia kiosks, and personal digital assistants would have been understood by one of ordinary skill in the art to describe audiovisual devices (Ex. 1003 ¶ 95). Accordingly, we find Polozola teaches this feature by teaching that its methods are “deployed in association with a user terminal, such as telephone or multimedia kiosk,” or other “user terminals, such as computers, personal digital assistants (PDAs), cellular telephones, and/or the like” Ex. 1005, Abstract, 8:50–58.

(6) Dependent Claims 7, 17

Claims 7 and 17 both recite “wherein the electronic communication device comprises an access point, wherein the access point is configured to restrict access to a specified location to only an expressly authorized wearer.” Ex. 1001, 10:5–8, 10:52–55. We find Polozola teaches this feature by disclosing that the “processing system of embodiments may monitor and/or control communications via a communications device, entering or exiting an area via a door or gate, etcetera.” Ex. 1005, 4:34–37. As described in Figure 6, permissions are granted based on authorizations corresponding to the detected RFID tags. *Id.* at Fig. 6 at steps 603, 604, 605, 606, 607. We credit Dr. Caloyannides’ testimony that a “door or gate restricts access to a specific location (area) only to the wearer of an

authorized RFID tag.” Ex. 1003 ¶¶99. We find, therefore, that Polozola’s doors and gates are access points, and that Polozola teaches access points that control access through a door or gate restricts access to a specific location (area) only to the wearer of authorized RFID tags.

(7) Dependent Claims 9, 19

Claims 9 and 19 recite “wherein the non-removable item comprises break or tamper detection circuitry.” Ex. 1001, 10:11–12, 10:59–61. We find Polozola teaches this feature by disclosing an “[a]ntenna 84 [that] wraps around RFID wristband 80 such that if RFID wristband 80 is severed to remove RFID wristband 80 from the resident’s wrist, antenna 84 is also severed.” Ex. 1005, 15:58–60. Polozola further discloses that “[a]ntenna 84 would no longer be operable to communicate the data if severed, rendering permanent RFID wristband inoperable for identification purposes.” *Id.* at 15:60–63. We credit the testimony provided by Dr. Caloyannides, and find that this antenna design constitutes “break or tamper detection circuitry” because, if the wristband is broken, the break is detected by the failure of the wristband to identify the wearer. *See* Ex. 1003 ¶¶ 103, 156.

(8) Dependent Claims 10, 20

Claims 10 and 20 recite “wherein the RFID tag in the non-removable item ceases to function if the tamper detection circuitry is triggered.” Ex. 1001, 10:13–15, 10:62–64. We find Polozola teaches the feature of claims 10 and 20 by disclosing that “[a]ntenna 84 would no longer be operable to communicate the data if severed, rendering permanent RFID wristband inoperable for identification purposes.” Ex. 1005, 15:58–63. We credit the testimony provided by Dr. Caloyannides (Ex. 1003 ¶¶ 107, 161), and find that this ceasing to function (i.e., the inability to use the RFID tag

for identification) is similar to the '367 patent's own teaching that "tamper detection circuitry 450 may cause the RFID tag 430 within the bracelet 400 to no longer respond to any query from any RFID reader." See Ex. 1001, 8:59–61. Because Polozola discloses the same type of functionality for implementing an RFID ceasing to function as disclosed and claimed in the '367 patent, we find that it teaches every element of claims 10 and 20.

c. Summary

We have considered the entirety of the evidence, including the arguments presented by Patent Owner in its Preliminary Response. For the foregoing reasons, and weighing the evidence as a whole, we conclude Petitioner has proven by a preponderance of the evidence that Polozola discloses all elements of challenged claims 1–7, 9–17, 19, and 20 of the '367 patent arranged as in the claims. We determine the record supports Petitioner's contentions as summarized above and adopt the supported contentions as our own. We, therefore, conclude that claims 1–7, 9–17, 19, and 20 are anticipated by Polozola, and thus, are unpatentable under 35 U.S.C. § 102(e).

E. Alleged Obviousness of Claims 3 and 13 in View of Polozola and Csabai

Dependent claims 3 and 13 require that the unique identification information from independent claims 1 and 11 be permanently associated with the corresponding wearer at the time the wearer arrives at the custodial facility. See Ex. 1001, 9:57–60, 10:40–43. Petitioner contends claims 3 and 13 of the '367 patent are unpatentable under 35 U.S.C. § 103 in view of Polozola and Csabai. Pet. 26–30. Patent Owner disputes Petitioner's contentions in its Preliminary Response. Prelim. Resp. 23–24. Although

Patent Owner makes no arguments regarding these claims following our Decision to Institute, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378. For reasons that follow, we determine Petitioner has demonstrated by a preponderance of evidence the unpatentability of these claims.

1. *Overview of Polozola*

See Section II.D.1.

2. *Overview of Csabai*

Csabai describes a “supervisory communication system serving callers with restricted freedom, connected to a local telephone exchange and to a local computer network that comprises a data base storing relevant data concerning each possible caller.” Ex. 1007, 1:3–5. The system includes “a personal identification means for identifying any caller” and “call units (11) are activated by the caller when identifying himself.” *Id.* at 2:12–13, 23–24. Csabai teaches using bar codes to identify prisoners and that “instead of bar codes any appropriate carrier can be used (magnetic stripe, 3D code or an RFID tag).” *Id.* at 6:18–19.

Csabai further teaches that “[p]risoners are identified by their name and by the personal identification data, which is generally a coded number under which they are registered,” and that “[e]ach prisoner has a specific record, which includes what restrictions are applied to them.” *Id.* at 1:15–17. When a prisoner attempts to use a supervised device, such as a telephone, a communication server accesses a database containing the prisoner’s calling restrictions and determines, for example, “whether the number dialed is among the stored numbers permitted for the [prisoner].” *Id.* at 6:28–7:1; 8:3–12.

3. Analysis

Petitioner contends Polozola teaches that unique identification information is associated with “with an individual, whether permanently or temporarily,” while Csabai teaches that “[p]risoners are identified by their name and by the personal identification data, which is generally a coded number under which they are registered.” Pet. 28 (citing Ex. 1005, 2:63–66; Ex. 1007, 1:15–17; Ex. 1003 ¶¶ 166, 172). According to Petitioner and its Declarant, one of ordinary skill in the art would have understood that registration of a prisoner takes place when the prisoner arrives at the custodial facility. *Id.* (citing Ex. 1003 ¶¶ 167, 173). Petitioner also argues that one of ordinary skill in the art would have found it obvious to modify the system of Polozola and its permanent association of identification information with associating the identification information at the time of registration when the wearer arrives at the custodial facility, as taught by Csabai. *Id.* at 28–29 (citing Ex. 1003 ¶¶ 168–169, 174–175).

Petitioner contends that it would have been obvious to a person of ordinary skill in the art to combine the teachings of Polozola and Csabai, because such a combination merely would have used a known technique to improve similar devices and methods in the same way. Pet. 11–12. According to Petitioner, Polozola and Csabai would have been combined because both references relate to access control restrictions for prisoners in controlled facilities. *Id.* at 29 (citing Ex. 1005, Abst.; Ex. 1007, 1:3–5; Ex. 1003 ¶ 174). Petitioner argues that a person of ordinary skill in the art would have been motivated to combine Polozola and Csabai to associate a prisoner’s unique identification when the prisoner arrives at the prison to ensure that the restrictions are properly applied during the prisoner’s entire

time at the prison (*see* Ex. 1003 ¶¶ 168, 174), and that such modification would have been well within the grasp of a person of ordinary skill in the art without the need for undue experimentation (*see* Ex. 1003 ¶¶ 169, 175). Pet. 29–30.

Patent Owner contests Petitioner’s position, contending that claims 3 and 13 are patentable for the same reasons claims 1 and 11 are patentable and that Csabai fails to remedy the flaws that Patent Owner finds in Polozola. Prelim. Resp. 23–24.

Even taking into account Patent Owner’s arguments in its Preliminary Response and recognizing the burden remains on Petitioner to demonstrate unpatentability, we agree with Petitioner that Polozola and Csabai teach that the unique identification information from independent claims 1 and 11 would be associated permanently with the corresponding wearer at the time the wearer arrives at the custodial facility as required by dependent claims 3 and 13. *See* Pet. 26–29. We credit the testimony of Petitioner’s Declarant, Dr. Caloyannides, stating that one of ordinary skill in the art would understand that registration of a prisoner takes place when the prisoner arrives at the custodial facility. *See* Ex. 1003 ¶¶ 167, 173. We further credit the testimony of Dr. Caloyannides that one of ordinary skill in the art would have had reason to combine the cited references in order to modify the system of Polozola and its permanent association of identification information with associating the identification information at the time of registration when the wearer arrives at the custodial facility, as taught by Csabai. *See* Ex. 1003 ¶¶ 168–169, 174–175. Therefore, we find that one of ordinary skill in the art would have understood that the teachings in Polozola

in light of Csabai would have at least suggested the disputed claim limitation.

We have considered the entirety of the evidence, including the arguments presented in Patent Owner's Preliminary Response. For the foregoing reasons, and weighing the evidence as a whole, we find Petitioner has proven by a preponderance of the evidence that the combination of Polozola and Csabai teaches or suggests all elements of challenged dependent claims 3 and 13 of the '367 patent. We determine the record supports Petitioner's contentions as summarized above and adopt the supported contentions as our own. We further find that understanding Polozola and Csabai's teachings as they apply to the challenged claims would have been within the level of ordinary skill in the art, as evidenced by the prior art of record and that a person of ordinary skill in the art would have reason to combine the teachings of Polozola and Csabai. We, therefore, conclude that claims 3 and 13 would have been obvious at the time of the invention, and thus, are unpatentable under 35 U.S.C. § 103.

F. Alleged Obviousness of Claims 4, 8, 14, and 18 in View of Polozola and Hansen

Dependent claims 4 and 14 require that the unique identification information associated with the RFID tag from independent claims 1 and 11 be reprogrammable depending on a wearer of the RFID tag. *See* Ex. 1001, 9:61–63, 10:44–46. Claims 8 and 18 require that the non-removable item of claims 1 and 11 comprise a semi-rigid, hardened plastic material. *See id.* at 10:9–10, 10:56–58. Petitioner contends claims 4, 8, 14, and 18 of the '367 patent are unpatentable under 35 U.S.C. § 103 in view of Polozola and Hansen. Pet. 30–35. Patent Owner disputes Petitioner's contentions in its

Preliminary Response. Prelim. Resp. 24. Although Patent Owner makes no arguments regarding these claims following our Decision to Institute, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378. For reasons that follow, we determine Petitioner has demonstrated by a preponderance of evidence the unpatentability of these claims.

1. Overview of Polozola

See Section II.D.1.

2. Overview of Hansen

Hansen describes “applications of RFID technology,” including “using RFID in conjunction with prisoner identification and handling.” Ex. 1008 ¶ 98. In one embodiment, Hansen teaches that “[e]ach prisoner in [a] penitentiary is provided with an RFID tag or label,” such as “in the form of an unremovable wrist or ankle band.” *Id.* ¶ 139. “Locks may unlock when a particular approved prisoner approaches, or may remain locked for unapproved prisoners.” *Id.* The RFID tag “may be re-writable, so that information about the prisoner, his activities, whereabouts, and so on may be updated in real time.” *Id.* In another embodiment, Hansen teaches that for “nonremovable RFID bracelets, the structure of a bracelet may simply be a polymer outer layer with an RFID tag or label on the interior.” *Id.* ¶ 360.

3. Analysis

For claims 4 and 14, Petitioner contends Polozola teaches that prison facilities may “tag a visitor so that a visitation call may be subject to monitoring and/or control by a processing system in association therewith,” while Hansen teaches that the RFID tags may include electronically erasable programmable read-only memory (EEPROMs) that “can be erased and

reprogrammed individually . . . [and] offer more flexibility because the end user can write an ID number to the tag at the time the tag is going to be used.” Pet. 31–32 (citing Ex. 1005, 4:50–53; Ex. 1008 ¶ 38; Ex. 1003 ¶¶ 180, 181, 193, 194). Petitioner argues that one of ordinary skill in the art would have found it obvious to combine the rewritable RFID tags of Hansen with the wristbands of Polozola to keep accurate records of each visitor and reduce costs because the same RFID tag can be used for different visitors each time the tag is used. *Id.* at 32 (citing Ex. 1005, 5:50–53; Ex. 1008 ¶ 38; Ex. 1003 ¶¶ 182, 195, 203).

For claims 8 and 18, Petitioner contends Polozola and Hansen collectively teach systems and methods “wherein the non-removable item comprises a semi-rigid, hardened plastic material.” *Id.* at 32. Petitioner notes that Hansen teaches that for “nonremovable RFID bracelets, the structure of a bracelet may simply be a polymer outer layer with an RFID tag or label on the interior,” and that the bracelet should be “difficult to remove without cutting with sharp scissors or a knife.” Ex. 1008 ¶ 360–361. Based on the combined disclosures in Polozola and Hansen, Dr. Caloyannides testifies that one of ordinary skill in the art would have understood that a nonremovable polymer bracelet would encompass semi-rigid, hardened plastic materials. Ex. 1003 ¶¶ 186, 200.

Petitioner contends that it would have been obvious to a person of ordinary skill in the art to combine the RFID bracelets (or wristbands) of Polozola with the reprogrammable RFID tags in Hansen’s bracelets (or wristbands), in order to realize a cost savings for not having to purchase separate one-time use tags. *Id.* at 33–34; Ex. 1003 ¶ 203. Petitioner further contends that one of ordinary skill in the art would have been motivated to

use Hansen's disclosed RFID bracelet material in Polozola's bracelets, because both are permanent, nonremovable, and are used in correctional facilities. Pet. 34.

Patent Owner contests Petitioner's position, contending that claims 4, 8, 14, and 18 are patentable for the same reasons claims 1 and 11 are patentable and that Hansen fails to remedy the flaws that Patent Owner finds in Polozola. Prelim. Resp. 24.

Even taking into account Patent Owner's arguments in its Preliminary Response and recognizing the burden remains on Petitioner to demonstrate unpatentability, we agree with Petitioner that Polozola and Hansen teach that the unique identification information associated with the RFID tag from claims 1 and 11 can be reprogrammable depending on a wearer of the RFID tag and that the non-removable item of claims 1 and 11 comprises a semi-rigid, hardened plastic material as required in dependent claims 4, 8, 14, and 18. *See* Pet. 30–35. Because Dr. Caloyannides' testimony is based on reasoning and citations to prior art, we credit the testimony of Dr. Caloyannides that one of ordinary skill in the art would have understood that tags must be reprogrammed with new information for each new visitor or new inmate associated with the tag, and, therefore, one of ordinary skill in the art would have understood that associating RFID tags with visitors could be implemented by reprogrammable tags, which are reprogrammed with new identification data for each visitor. *See* Ex. 1003 ¶ 203. We further credit the testimony of Dr. Caloyannides that one of ordinary skill in the art would have been motivated to combine Polozola and Hansen in order to obtain reusable and reprogrammable RFID tags in bracelet or wristband form. *See* Ex. 1003 ¶¶ 203, 204. Therefore, we find that one of ordinary

skill in the art would have understood that the teachings in Polozola in light of Hansen at least suggests the disputed claim limitations.

We have considered the entirety of the evidence, including the arguments presented in Patent Owner's Preliminary Response. For the foregoing reasons, and weighing the evidence as a whole, we conclude Petitioner has proven by a preponderance of the evidence that the combination of Polozola and Hansen teaches or suggests all elements of challenged claims 4, 8, 14, and 18 of the '367 patent. We determine the record supports Petitioner's contentions as summarized above and adopt the supported contentions as our own. We further find that understanding Polozola's and Hansen's teachings as they apply to the challenged claims would have been within the level of ordinary skill in the art, as evidenced by the prior art of record and that a person of ordinary skill in the art would have had reason to combine the teachings of Polozola and Hansen. We, therefore, conclude that claims 4, 8, 14, and 18 would have been obvious at the time of the invention, and thus, are unpatentable under 35 U.S.C. § 103.

G. Alleged Obviousness of Claims 1–3, 5–7, 9–13, 15–17, 19, and 20 in View of Reinhold, Polozola, and Csabai

Petitioner contends claims 1–3, 5–7, 9–13, 15–17, 19, and 20 of the '367 patent are unpatentable under 35 U.S.C. § 103 in view of Reinhold, Polozola, and Csabai. Pet. 34–54. Patent Owner disputes Petitioner's contentions in its Preliminary Response. Prelim. Resp. 24–34. Although Patent Owner makes no arguments regarding these claims following our Decision to Institute, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378. For reasons

that follow, we determine Petitioner has demonstrated by a preponderance of evidence the unpatentability of these claims.

1. *Overview of Polozola*

See Section II.D.1.

2. *Overview of Csabai.*

See Section II.E.2.

3. *Overview of Reinhold*

Reinhold describes “[s]ystems and methods for identity verification using continuous biometric monitoring.” Ex. 1006, Title. Certain embodiments include “methods for verifying the identity of a person operating a device.” *Id.* at Abst. Reinhold can be applied “for use in the monitoring of telephone calls between residents and non-residents of controlled-environment facilities,” including “correctional facilities (e.g., municipal jails, county jails, state prisons, federal prisons . . .).” *Id.* at 2:47–53, *see also id.* at 5:33–35 (“system 100 is particularly well suited for use in the monitoring of inmates’ phone calls made to or from a prison”).

One embodiment in Reinhold is illustrated in Figure 5, reproduced below.

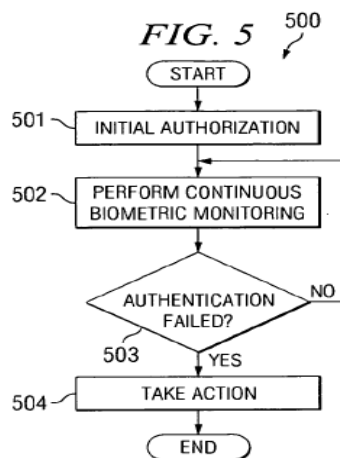


Figure 5, shown above, shows a method for authorizing a person to operate a device, where initial authorization step 501 can be accomplished by reading an inmate's RFID tag. *Id.* at 8:10–15. Reinhold specifically discloses that “an inmate's Radio Frequency Identification (RFID) tag or bracelet is detected by an RFID reader (not shown) connected to [continuous biometric monitoring] CBM module 103 for granting initial access to inmate phone 201,” and that “CBM module 103 . . . may verify the inmate's identity” and “may take action[s] as specified by CBM application 105 depending upon whether identity verification is successful.” *Id.* at 6:17–18, 6:31–33, 6:42–46. After initial authorization, the system begins “continuously monitoring a biometric trait of a device operator, and using the monitored biometric trait of the device operator to verify, during operation of the device, whether the device operator is the authorized person.” *Id.* at Abst.

4. Analysis

a. Independent Claims 1 and 11

(1) “RFID coverage zone”

Petitioner contends Reinhold, Polozola, and Csabai, as summarized above, teach or suggest an “RFID coverage zone,” as required by challenged claims 1 and 11. Pet. 38–39. According to Petitioner, Reinhold discloses a reader connected to a telephone that scans a user's RFID device for authentication via the CBM, because Reinhold discloses (1) that an inmate's RFID tag is “detected by an RFID reader (not shown) connected to CBM module 103 for granting initial access to inmate phone 201” (Ex. 1006 at 6:42–46), and (2) “having an RFID device scanned by an RFID reader” that is “associated with a device,” such as a telephone (*id.* at Abst., 8:15, FIG. 2). Pet. 39 (citing Ex. 1003 ¶¶ 215, 216). Petitioner argues that one of ordinary

skill in the art would understand that communication between the RFID tag and RFID reader only occurs when the RFID tag is within a coverage zone of an RFID reader. *Id.* at 40 (citing Ex. 1003 ¶ 216).

Patent Owner contests Petitioner’s position for several reasons. *See* Prelim. Resp. 25–27. Patent Owner specifically contends that in Reinhold, detecting or scanning an RFID tag by an RFID reader does not mean that the reader has an RFID coverage zone of predetermined size as disclosed and claimed in the ’367 patent, because equipping a reader with such a coverage zone is just one of several viable options to allow detection or scanning of a tag. *Id.* at 25. Patent Owner argues that the ability for a first RFID device to detect or scan a second RFID device does not necessarily mean that the first RFID device has an RFID zone of RFID coverage with a predetermined size. Patent Owner cites to references disclosing an RFID tag having capability to detect RFID readers, or vice versa (*see* Ex. 2001, 35:1–4; Ex. 2002 ¶¶ 2, 171) to support its assertion that one of ordinary skill in the art would not conclude that an RFID tag necessarily has a zone of RFID coverage with a predetermined size for detecting readers simply because the tag has “detection” capability. Prelim. Resp. 26.

Patent Owner further argues that Petitioner’s challenge states that Reinhold “discloses” an “RFID coverage zone,” but Reinhold does not “spell out ‘coverage zone’ anywhere, and neither does it allow a person of skill in the art to immediately envisage the claimed arrangement or combination.” *Id.* Patent Owner, thus, concludes that Petitioner’s argument is at best an inherency argument, which should be rejected because the fact that an RFID reader detects an RFID tag does not mean that the reader must

have an RFID coverage zone as that term is disclosed and claimed in the '367 patent.

Even taking into account Patent Owner's arguments in its Preliminary Response and recognizing the burden remains on Petitioner to demonstrate unpatentability, we agree with Petitioner that Reinhold, Polozola, and Csabai teach or suggest the required "RFID coverage zone." See Pet. 39–40. We agree because we find that Reinhold specifically discloses "having an RFID device scanned by an RFID reader," thereby indicating that it is the reader that scans the device and, therefore, it is the reader that has the coverage zone. Ex. 1006, Abst., 8:15, Fig. 2. Therefore, we find that one of ordinary skill in the art would have understood that the disclosure in Reinhold teaches the disputed claim limitation.

(2) "*unique identification information*"

Petitioner contends the combination of Reinhold, Polozola, and Csabai teaches or at least suggests "unique identification information," as recited in challenged claims 1 and 11. Pet. 37–38. Petitioner argues that Reinhold discloses a process that requires an initial authentication step, which includes "acquiring an RFID information associated with the resident." Pet. 37–38 (citing Ex. 1006, claim 5). According to Petitioner, one of ordinary skill in the art would have understood this to mean that the RFID tag has identification information that can be associated with the wearer, as claimed. *Id.* at 38 (citing Ex. 1003 ¶ 212.)

Petitioner further contends that "because *Reinhold* does not dwell on the details of this portion of its access controls, one would have had a motivation to look to *Csabai*'s teachings for additional implementation details." *Id.* at 54 (citing Ex. 1003 ¶ 337). Petitioner argues that the

disclosure in Csabai supports its reading of Reinhold, and additionally, Csabai discloses “a RFID tag configurable to have unique identification information that can be associated with a wearer of the RFID tag.” *Id.* at 38. Petitioner argues that Csabai teaches that, in a controlled access environment, “[e]ach prisoner has a unique personal code, and the use of the system requires that the user has an access card 15 bearing a bar code with coded data required for his/her personal identification.” *Id.* (citing Ex. 1007, 5:8–10). Petitioner then notes that “[w]hile this language focuses on a bar code, *Csabai* states that ‘an RFID card can be used instead of a bar code.’” *Id.* (citing Ex. 1007, 6:16–19). According to Petitioner, the RFID information in Csabai can be “generated from the personal identification information of the caller” and used to access a stored database entry of restrictions for that caller. *Id.* (citing Ex. 1007, 3:1–4, 6:19). Petitioner also relies on the testimony of its Declarant, Dr. Caloyannides, to support its position. Dr. Caloyannides testifies that one of ordinary skill in the art would have been motivated to combine the unique personal code of Csabai with the call management system of Reinhold to directly link each database entry with the wearer of the RFID tag. Ex. 1003 ¶ 213.

Patent Owner disputes Petitioner’s position and contends Reinhold, Polozola, and Csabai fail to teach or suggest “unique identification information,” as recited in challenged claims 1 and 11. Prelim. Resp. 29–31. Patent Owner argues that claims 1 and 11 of the ’367 patent require “unique” identification information and Reinhold does not teach or suggest that use of an identifier that is “unique” to a resident. *Id.* at 29. According to Patent Owner, there are numerous examples of information that are

associated with a resident, such as age, gender, race, state, city, height, weight, cell unit number, but none of them is unique to the resident. *Id.*

Patent Owner also challenges Petitioner's rationale for why a person of ordinary skill in the art would combine Reinhold and Csabai. *Id.* at 30. Patent Owner argues that neither Petitioner nor its Declarant explains why "directly link[ing] each database entry with the wearer of the RFID tag" would be a benefit. *Id.* According to Patent Owner, the alleged benefit would not have been obvious to one of ordinary skill in the art because neither Reinhold nor Csabai mentions "database entry." Patent Owner, thus, concludes that (1) the Petitioner relies on hindsight, (2) there is no motivation to combine the references and (3) "directly link[ing] each database entry with the wearer of the RFID tag" is not a legitimate benefit that one of ordinary skill would be motivated or need to pursue. *Id.* at 30–31.

Even taking into account Patent Owner's arguments in its Preliminary Response and recognizing the burden remains on Petitioner to demonstrate unpatentability, we agree with Petitioner that the combined teachings of Reinhold, Polozola, and Csabai in the combination proposed by Petitioner at least suggests the use of a "unique identification information," as recited in challenged claims 1 and 11. We agree because we find that Reinhold specifically discloses identify verification by detecting biometric traits, such as a fingerprint, thumbprint, or hand geometry, voice or sound, a retina, iris, or face (Ex. 1006, 4:35–38), which are unique to an individual.

Accordingly, we find the combination of Reinhold, Polozola, and Csabai teaches or at least suggests "a RFID tag configurable to have unique identification information," and authorizing use of an electronic

communication device based at least in part on detected unique identification information as required in challenged claims 1 and 11.

(3) “*call management system*”

Petitioner contends the combination of Reinhold, Polozola, and Csabai teaches or at least suggests a “call management system,” as recited in challenged claim 1 and its dependent claim 5. Pet. 40–42. Petitioner argues that Reinhold teaches a CBM module that acts as a call management system, which controls access to the inmate phone based on the information detected by the RFID tag reader. *Id.* at 40 (citing Ex. 1003 ¶ 218). Petitioner further argues that Csabai’s server acts as a call management system using RFID unique identification information to access privilege restrictions associated with an inmate to determine whether the inmate is authorized to call a dialed number. *Id.* at 41 (citing Ex. 1003 ¶ 219). According to Petitioner, although this type of functionality is present in Reinhold, it would have been obvious to incorporate this Csabai functionality into Reinhold’s access management system.

Patent Owner disputes Petitioner’s position and contends Reinhold, Polozola, and Csabai fail to teach or suggest a “call management system,” as recited in challenged claims 1 and 5. Prelim. Resp. 31–34. Patent Owner specifically argues that Reinhold does not teach a call management system that determines whether a wearer is authorized to use a telephone based on an RFID tag’s detected unique identification information. *Id.* at 31. According to Patent Owner, claims 1 and 5 require the determination to be based on “unique identification information,” and there are numerous examples of information associated with a resident, but not unique to the resident, such as age, gender, race, state, city, height, weight, and cell unit

number. *Id.* at 32. Patent Owner alleges that Csabai suffers from the same deficiency as Reinhold. *Id.* at 32–33.

Even taking into account Patent Owner’s arguments in its Preliminary Response and recognizing the burden remains on Petitioner to demonstrate unpatentability, we agree with Petitioner that the combined teachings of Reinhold, Polozola, and Csabai at least suggests the use of a “call management system,” as recited in challenged claims 1 and 5. We agree because we find that Reinhold specifically discloses a CBM module that controls access to inmate phones and allows access to individuals based on the information detected by an RFID tag reader. Ex. 1006, 6:42–46, 8:10–20, claims 1, 5. We also find that Reinhold discloses identify verification by detecting biometric traits, such as a fingerprint, thumbprint, or hand geometry, voice or sound, a retina, iris, or face (*id.* at 4:35–38), which are unique to an individual.

Accordingly, we find that the combination of Reinhold, Polozola, and Csabai teaches or at least suggests “call management system” as required in challenged independent claim 1 and dependent claim 5.

*(4) Rationale to Combine the Teachings of Reinhold,
Polozola, and Csabai*

Petitioner contends that it would have been obvious to a person of ordinary skill in the art to combine the teachings of Reinhold, Polozola, and Csabai, because each disclosure relates to access control restrictions on prisoners in controlled facilities. Pet. 52 (citing Ex. 1003 ¶ 333). According to Petitioner, Reinhold, Polozola, and Csabai would have been combined because the references address the same narrow field and they do so in compatible ways. *Id.* at 53 (citing Ex. 1003 ¶ 336). Petitioner specifically argues that a person of ordinary skill in the art would have combined the

references, because Csabai teaches access control rules and a related database that would have been readily incorporated into Reinhold by one of ordinary skill in the art. Reinhold already teaches an authorization scheme that applies some form of access control. *Id.* at 54 (citing Ex. 1006, 6:42–46; Ex. 1003 ¶ 337). But, Petitioner argues, because Reinhold does not dwell on the details of this portion of its access controls, one would have had a motivation to look to Csabai’s teachings for additional implementation details. *Id.* (citing Ex. 1003 ¶ 337).

Patent Owner disputes Petitioner’s position and contends one of ordinary skill in the art would not have combined Reinhold and Csabai, because such a combination would likely lead to an incompatible or inoperable system. Prelim. Resp. 34. According to Patent Owner, it is unclear from the Petition whether Csabai’s server 40 should replace Reinhold’s CBM 103, or be connected to Reinhold’s CBM 103, or which parts of server 40 should replace which parts of CBM 103, and if so, how those parts would work in a compatible fashion. *Id.* Patent Owner further argues that it is unclear whether Reinhold’s biometric array 101 should remain, and if so, how it should connect to Csabai’s server 40. *Id.* Additionally, Patent Owner contends Petitioner fails to support its allegations that one of ordinary skill in the art would have been motivated to combine Csabai with Reinhold “to directly link each database entry with the wearer of the RFID tag.” Paper 10, 2.

We have considered Patent Owner’s arguments that the Petition fails to provide a proper reason to combine the teaching of Reinhold and Csabai for claims 1 and 11. Contrary to Patent Owner’s position, we find that Petitioner provides sufficient rationale to combine the teachings of Reinhold,

Polozola, and Csabai. We specifically credit the testimony of Dr. Caloyannides that Reinhold generally teaches an authorization scheme, providing only a high level description of the access control rules for authorizing use of a device, whereas Csabai provides details for a database operation and serves to access a database, and that one of ordinary skill in the art would have been motivated to include a database operation and server (such as that taught by Csabai) to implement a system of access control (such as that taught by Reinhold). *See* Ex. 1003 ¶ 337. Therefore, we find that one of ordinary skill in the art would have had reason to combine the teachings of Reinhold, Polozola, and Csabai.

b. Dependent Claims 2, 3, 5–7, 9, 10, 12, 13, 15–17, 19, and 20

Petitioner contends that Reinhold, Polozola, and Csabai, as summarized above, teach or suggest aspects of each dependent claim. Pet. 46–52. Patent Owner does not dispute Petitioner’s position. *See generally* Paper 14. Although Patent Owner makes no argument regarding these claims, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378.

We have reviewed all evidence of record and find Petitioner has identified all recited limitations in the challenged dependent claims in the cited prior art and provides sufficient reasoning for the proposed combination of Reinhold, Polozola, and Csabai to reach the methods recited in dependent claims 2, 3, 5–7, 9, 10, 12, 13, 15–17, 19, and 20. *See* Ex. 1005, 4:34–37, 15:58–63, Fig. 6; Ex. 1006, 2:47–54, 5:5–17, 7:27–29, 7:47–57; Ex. 1007, 1:15–17; Pet. 46–52; Ex. 1003 ¶¶ 228–326. We, therefore,

determine the record supports Petitioner's contentions as summarized above and adopt the supported contentions as our own.

c. Summary

We have considered the entirety of the evidence, including the arguments presented in Patent Owner's Preliminary Response. For the foregoing reasons, and weighing the evidence as a whole, we find Petitioner has proven by a preponderance of the evidence that the combination of Reinhold, Polozola, and Csabai teaches or suggests all elements of challenged claims 1–3, 5–7, 9–13, 15–17, 19, and 20 of the '367 patent. We determine the record supports Petitioner's contentions as summarized above and adopt the supported contentions as our own. We further find that understanding Reinhold, Polozola, and Csabai's teachings as they apply to the challenged claims would have been within the level of ordinary skill in the art, as evidenced by the prior art of record. We, therefore, conclude that claims 1–3, 5–7, 9–13, 15–17, 19, and 20 would have been obvious at the time of the invention, and thus, are unpatentable under 35 U.S.C. § 103.

H. Alleged Obviousness of Claims 4, 8, 14, and 18 in View of Reinhold, Csabai, Polozola, and Hansen

Dependent claims 4 and 14 require that the unique identification information associated with the RFID tag from independent claims 1 and 11 be reprogrammable depending on a wearer of the RFID tag. *See* Ex. 1001, 9:61–63, 10:44–46. Dependent claims 8 and 18 require that the non-removable item of claims 1 and 11 comprise a semi-rigid, hardened plastic material. *See id.* at 10:9–10, 10:56–58.

Petitioner contends claims 4, 8, 14, and 18 of the '367 patent are unpatentable under 35 U.S.C. § 103 in view of Reinhold, Csabai, Polozola,

and Hansen. Pet. 54–58. Patent Owner disputes Petitioner’s contentions in its Preliminary Response. Prelim. Resp. 35. Although Patent Owner makes no arguments regarding these claims following our Decision to Institute, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378. For reasons that follow, we determine Petitioner has demonstrated by a preponderance of evidence the unpatentability of these claims.

1. Overview of Reinhold

See Section II.G.3.

2. Overview of Csabai

See Section II.E.2.

3. Overview of Polozola

See Section II.D.1.

4. Overview of Hansen

See Section II.F.2

5. Analysis

For claims 4 and 14, Petitioner contends Reinhold, Csabai, Polozola, and Hansen collectively teach systems and methods “wherein the unique identification information associated with the RFID tag is reprogrammable depending on a wearer of the RFID tag.” Pet. 54–55 (citing Ex. 1008 ¶ 38; Ex. 1003 ¶¶ 343–348, 355–361.)). Petitioner argues that one of ordinary skill in the art would have found it obvious to combine the rewritable RFID tags of Hansen with the wristbands of the Reinhold, Csabai, and Polozola combination to reprogram an RFID tag during visitations by friends, family, vendors, or other infrequent visitors to the facility to reduce costs because

the same RFID tag can be used for different visitors each time the tag is used. *Id.* at 55 (citing Ex. 1008 ¶ 38; Ex. 1003 ¶¶ 348, 361).

For claims 8 and 18, Petitioner contends Reinhold, Csabai, Polozola, and Hansen collectively teach systems and methods “wherein the non-removable item comprises a semi-rigid, hardened plastic material.” *Id.* at 55–56. Petitioner notes that Hansen teaches that for “nonremovable RFID bracelets, the structure of a bracelet may simply be a polymer outer layer with an RFID tag or label on the interior,” and that the bracelet should be “difficult to remove without cutting with sharp scissors or a knife.” Ex. 1008 ¶ 360–361. Based on the combined disclosures in Polozola and Hansen, Dr. Caloyannides testified that one of ordinary skill in the art would have understood that a nonremovable polymer bracelet would encompass semi-rigid, hardened plastic materials. Ex. 1003 ¶¶ 352, 366.

Petitioner contends that it would have been obvious to a person of ordinary skill in the art to combine the RFID bracelets (or wristbands) of Reinhold and Polozola with the reprogrammable RFID tags in Hansen’s bracelets (or wristbands), in order to realize a cost savings for not having to purchase separate one-time use tags. Pet. 56–57; Ex. 1003 ¶ 370. Petitioner further contends that one of ordinary skill in the art would have been motivated to use Hansen’s disclosed RFID bracelet material in Reinhold’s and Polozola’s bracelets, because both are permanent, nonremovable, and are used in correctional facilities. Pet. 57–58.

Patent Owner contests Petitioner’s position, contending that claims 4, 8, 14, and 18 are patentable for the same reasons claims 1 and 11 are patentable and that Hansen fails to remedy the flaws that Patent Owner finds in Reinhold, Polozola, and Csabai. Prelim. Resp. 35.

Even taking into account Patent Owner's arguments in its Preliminary Response and recognizing the burden remains on Petitioner to demonstrate unpatentability, we agree with Petitioner that Reinhold, Csabai, Polozola, and Hansen teach that the unique identification information associated with the RFID tag from claims 1 and 11 be reprogrammable depending on a wearer of the RFID tag and that the non-removable item of claims 8 and 18 comprises a semi-rigid, hardened plastic material. *See* Pet. 30–35. We credit and agree with the testimony of Dr. Caloyannides that one of ordinary skill in the art would have understood that tags must be reprogrammed with new information for each new visitor or new inmate associated with the tag, and, therefore, one of skill the art would have understood that associating RFID tags with visitors could be implemented by reprogrammable tags, which are reprogrammed with new identification data for each visitor, as required by claims 4 and 14. *See* Ex. 1003 ¶ 370. We further credit the testimony of Dr. Caloyannides that one of ordinary skill in the art would have been motivated to combine Reinhold, Polozola, and Hansen in order to keep accurate records of each visitor by linking the RFID tag to the specific visitor during the visit, and to reduce costs by using the same reprogrammable RFID tag for different visitors. *See* Ex. 1003 ¶¶ 370, 371. Therefore, given the evidence of record, we find that one of ordinary skill in the art would have understood that the teachings in Reinhold, Csabai, and Polozola in light of Hansen would have at least suggested the disputed claim limitations.

Accordingly, we hold that Petitioner has shown by a preponderance of the evidence that claims 4, 8, 14, and 18 are unpatentable under 35 U.S.C.

§ 103(a) as having been obvious over the combined teachings of Reinhold, Csabai, Polozola, and Hansen.

III. CONCLUSION

For the foregoing reasons, upon consideration of the entirety of the record including Patent Owner's Preliminary Response, we determine Petitioner has shown by a preponderance of the evidence that (1) claims 1–7, 9–17, 19, and 20 are anticipated by Polozola, (2) claims 3 and 13 of the '367 patent would have been obvious in view of the combined teachings of Polozola and Csabai; (3) claims 4, 8, 14, and 18 of the '367 patent would have been obvious in view of the combined teachings of Polozola and Hansen; (4) claims 1–3, 5–7, 9–13, 15–17, 19, and 20 of the '367 patent would have been obvious in view of the combined teachings of Reinhold, Csabai, and Polozola; and (5) claims 4, 8, 14, and 18 of the '367 patent would have been obvious in view of the combined teachings of Reinhold, Csabai, Polozola, and Hansen.

IV. ORDER

For the reasons given, it is

ORDERED that, by a preponderance of the evidence, claims 1–20 of the '367 patent are unpatentable; and

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

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