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Paper 22
Entered: September 1, 2015

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FISERV, INC.,
Petitioner,

v.

DATATREASURY CORPORATION,
Patent Owner.

CBM2014-00088
Patent 6,032,137 C1

Before MICHAEL P. TIERNEY, WILLIAM V. SAINDON, and MATTHEW R. CLEMENTS, *Administrative Patent Judges*.

SAINDON, *Administrative Patent Judge*.

DECISION

Final Written Decision
35 U.S.C. § 328(a) and 37 C.F.R. § 42.73

Dismissing Patent Owner's Motion to Exclude as Moot
37 C.F.R. § 42.64(c)

I. INTRODUCTION

We have jurisdiction under 35 U.S.C. § 6(c). This Final Written Decision is entered pursuant to 35 U.S.C. § 328(a) and 37 C.F.R. § 42.73.

With respect to the grounds asserted in this trial, we have considered the papers submitted by the parties and the evidence cited therein. For the reasons discussed below, we determine that Petitioner has shown by a preponderance of the evidence that claims 1, 2, 16, 18, 22, 25, 26, 29, 36, 38–43, 50, 51, 55, 62, and 63 of U.S. Patent No. 6,032,137 C1 (Ex. 1002, "the '137 patent") are unpatentable, but has not shown that claims 9, 19, 48, 54, 60, and 66 are unpatentable.[1] In addition, for the reasons discussed below, we dismiss Patent Owner's Motion to Exclude as moot because we expunge the exhibits sought to be excluded, for being improperly filed.

A. Procedural History

Petitioner filed a Petition (Paper 1, "Pet.") requesting a covered business method patent review of claims 1–7, 9–27, and 29–67 of the '137 patent over five proposed grounds of unpatentability. *See* Pet. i–iii. Petitioner filed therewith a Declaration including the testimony of James Knox, Ph.D. Ex. 1003. Patent Owner filed a Preliminary Response. Paper 5 ("Prelim. Resp."). Reviewing the arguments and evidence then before us, we issued a Decision Instituting Covered Business Method Review (Paper 6, "Dec. Inst."), instituting review on claims 1, 2, 9, 16, 18, 19, 22, 25, 26, 29,

[1] Patent Owner argues that the evidentiary standard is "clear and convincing proof" (Paper 9, 2) but 35 U.S.C. § 326(e) makes clear the appropriate standard is "preponderance of the evidence."

36, 38–43, 48, 50, 51, 54, 55, 60, 62, 63, and 66 over one of the five proposed grounds of unpatentability. Dec. Inst. 15.

Patent Owner subsequently filed a Response to the Petition (Paper 9, "PO Resp."), including the testimony of Paul M. Ginsberg (Ex. 2004). Petitioner filed a Reply (Paper 10, "Pet. Reply"). Upon the request of the parties, an Oral Hearing was held. *See* Paper 21 (Transcript of the Hearing, cited as "Tr.").

Patent Owner filed a Motion to Exclude certain evidence. Paper 16 ("PO Mot. Excl."). Petitioner filed an Opposition to that Motion (Paper 17, "Pet. Opp. Mot. Excl."), to which Patent Owner filed a Reply (Paper 20, "PO Reply Mot. Excl.").

B. Related Matters

The parties indicate that the '137 patent is asserted in a number of district court actions. Pet. xi–xii; Paper 4. The '137 patent is the subject of a number of proceedings before this Board, including *Fidelity National Information Services, Inc. v. DataTreasury Corp.*, Case CBM2014-00020 (PTAB) ("Fidelity CBM")[2] and *Jack Henry and Associates, Inc. v. DataTreasury Corp*, Case CBM2014-00056 (PTAB) ("Jack Henry CBM").[3] Paper 4.

[2] In the Fidelity CBM proceeding, a Final Written Decision (Paper 34) was issued on April 29, 2015 determining claims 1–67 of the '137 patent to be unpatentable under 35 U.S.C. §§ 101 and 112, first paragraph. The Board received a Notice of Appeal to the Federal Circuit of this Decision on August 27, 2015.

[3] In the Jack Henry CBM, a Final Written Decision (Paper 37) was issued on July 8, 2015 determining claims 42 and 43 of the '137 patent to be

The ’137 patent is a continuation-in-part of the application that issued as U.S. Patent No. 5,910,988 C1, which is also the subject of a number of district court actions and matters before the Board. Pet. xi–xii.

C. The ’137 Patent

The ’137 patent is directed to a system for remote data acquisition, and centralized processing and storage of the acquired data. Ex. 1002, Abstract. An object of the invention is to provide an automated system to manage and store captured electronic and paper transactions from various activities including banking and consumer applications. *Id.* at 3:22–26. Generally, the ’137 patent describes scanning documents using a scanner attached to a general purpose network computer that is connected via a carrier cloud to a server that inserts images and data received into a database. *Id.* at Figs. 1–2, 3:37–58, 4:65–5:15, 5:45–51, 16:53–60. Additionally, the general purpose network computer encrypts the images and data to provide a system with maximal security. *Id.* at 3:30–36, 7:38–46, 8:10–15.

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unpatentable under 35 U.S.C. § 102. The Board received a Notice of Appeal to the Federal Circuit of this Decision on August 27, 2015.

Figure 1 of the ’137 patent, provided below, depicts a preferred embodiment of the system having three major operational elements:

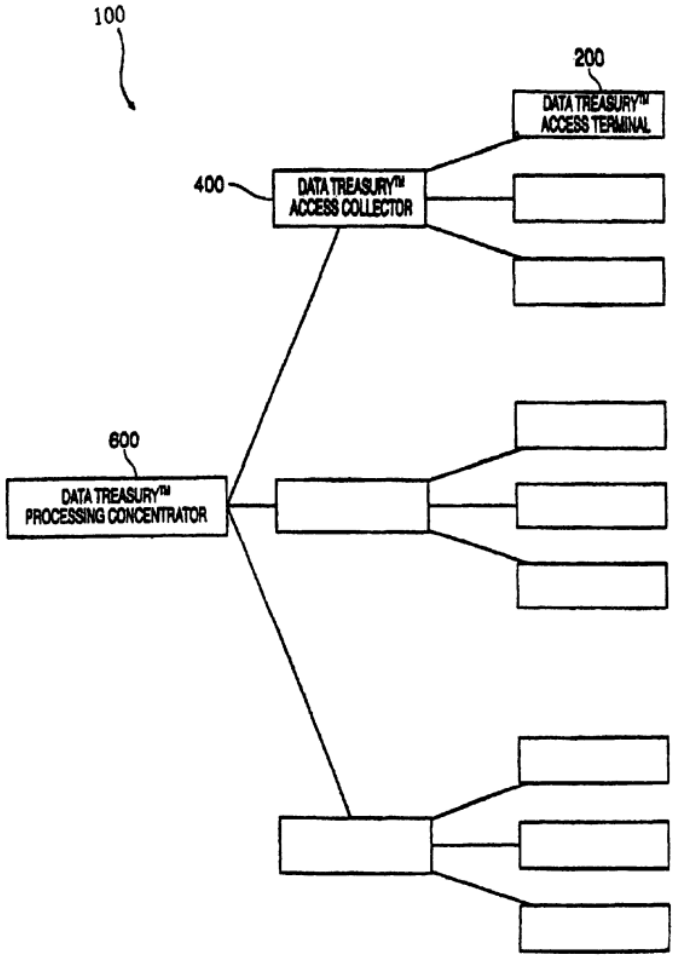

FIG. 1 (Amended)

The ’137 patent describes the tiered arrangement depicted in Figure 1 as follows:

> FIG. 1 shows the architecture of the DataTreasury™ System **100**. The DataTreasury™ System **100** has three operational elements: the DataTreasury™ System Access Terminal (DAT) **200** (the remote data access subsystem), the DataTreasury™ System Access Collector (DAC) **400** (the intermediate data collecting subsystem), and the DataTreasury™ System Processing

> Concentrator (DPC) **600** (the central data processing subsystem).

Id. at 4:66–5:6.

Figure 2 of the ’137 patent, provided below, depicts a block diagram of the DAT:

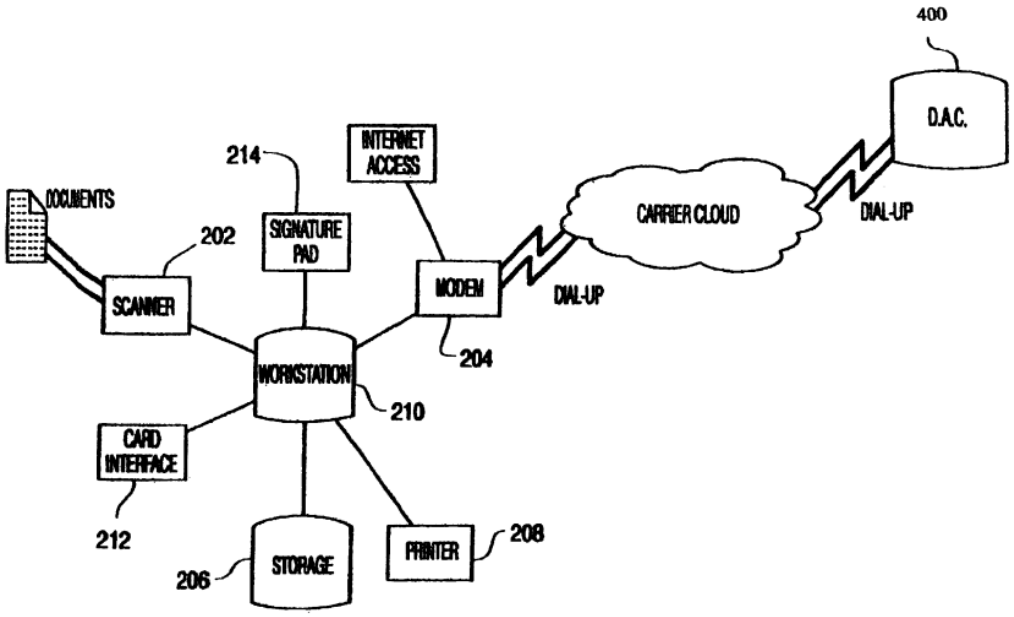

FIG. 2 (Amended)

As shown in Figure 2, scanner 202 is connected to workstation 210, which is connected to data system access collector 400. The workstation can be a general purpose computer and performs tasks including compressing, encrypting, and tagging a scanned bitmapped image. *Id.* at 5:40–45, 7:31–35.

The specification of the ’137 patent states that the disclosed system improves upon the prior art by providing an automated, reliable, secure system to process electronic and paper transactions. *Id.* at 3:32–37.

D. Illustrative Claims

Of the claims challenged, claims 1, 26, 42, and 43 are independent. Claims 42 and 43 are illustrative:

> 42. A system for central management, storage and report generation of remotely captured paper transactions from checks comprising:
>
> one or more remote data access subsystems for capturing and sending paper transaction data and verifying transaction data from the checks comprising at least one imaging subsystem for capturing the checks and at least one data access controller for managing the capturing and sending of the transaction data;
>
> at least one central data processing subsystem for processing, sending, verifying and storing the paper transaction data and the subsystem identification information comprising a management subsystem for managing the processing, sending and storing of the . . . transaction data; and
>
> at least one communication network for the transmission of the transaction data within and between said one or more data access subsystems and said at least one data processing subsystem, with the data access subsystem providing encrypted subsystem identification information and encrypted paper transaction data to the data processing subsystem.
>
> 43. A method for central management, storage and verification of remotely captured paper transactions from checks comprising the steps of:
>
> capturing an image of the check at one or more remote locations sending a captured image of the check;
>
> managing the capturing and sending of the transaction data;
>
> collecting, processing, sending and storing the transaction data at a central location;
>
> managing the collecting, processing, sending and storing of the transaction data;

> encrypting subsystem identification information and the transaction data;
>
> verifying the transaction data from the check; and
>
> transmitting the transaction data and the subsystem identification information within and between the remote location(s) and the central location.

E. Asserted Grounds and Prior Art

A covered business method patent review was instituted as to claims 1, 2, 9, 16, 18, 19, 22, 25, 26, 29, 36, 38–43, 48, 50, 51, 54, 55, 60, 62, 63, and 66 as anticipated by Campbell under 35 U.S.C. § 102. Dec. Inst. 15.

II. ANALYSIS

A. The '137 Patent Is a Covered Business Method Patent

Patent Owner argues that the '137 patent is not eligible for covered business method patent review because one or more of its claims are directed to a technological invention. PO Resp. 22–26. We have discussed whether the '137 patent is eligible for covered business method patent review at length in our Decision to Institute and Final Written Decision in the Fidelity CBM. *See* Fidelity CBM, Paper 13, 9–13; *id.* at Paper 34, 8–9. For the same reasons as those we expressed in the Fidelity CBM, we hold that the '137 patent is eligible for covered business method patent review.

B. Patent Owner's Motion to Exclude

Patent Owner moves to exclude Exhibits 1062–1065, filed by Petitioner on April 7, 2015, over two months after Petitioner filed its Reply and 22 days before oral hearing. PO Mot. Excl. 2–3. Petitioner characterizes its submission as "supplemental information" and "apologizes

for its oversight" of the "minor procedural defect" of not seeking authorization to file a motion for supplemental information. Pet. Opp. Mot. Excl. 2. We dismiss as moot Patent Owner's Motion to Exclude because we hereby order the expungement of Exhibits 1062–1065 for being filed without prior authorization.

C. Claim Construction

We interpret the claims of an unexpired patent using the broadest reasonable interpretation in light of the specification of the patent. 37 C.F.R. § 42.100(b); *In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1278–80 (Fed. Cir. 2015). Under the broadest reasonable interpretation standard, claim terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art, in the context of the entire disclosure. *In re Translogic Tech. Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definition for a claim term must be set forth with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

In our Decision to Institute this trial, we determined the broadest reasonable interpretation of "subsystem identification information" is "information that identifies a subsystem." Dec. Inst. 8. There, as here, we relied on our prior interpretation of this term in the Jack Henry CBM. *See id.*; *see also* Jack Henry CBM, Paper 17, 9–10 (explaining that we adopt neither Petitioner's nor Patent Owner's proposed constructions); *id.*, Paper 37, 8–11 (keeping the same construction, based upon Patent Owner's admission and a more developed record). Notably, we determined, as an ancillary matter to construing the term, that "nothing in the claims, as would

be understood by a person of ordinary skill in the art in view of the specification, requires any form of ownership or other type of corporate relationship between the various subsystems; only that they function in the manner set forth in the claims." *Id.*, Paper 37, 10.[4]

Patent Owner does not comment specifically on or discuss our prior claim construction of "subsystem identification information" ("SSID"). Instead, Patent Owner attacks as "Completely Unacceptable" Petitioner's proposed construction in the Petition, which we did not adopt. PO Resp. 20; Dec. Inst. 8 (adopting our prior construction of the term in the Jack Henry CBM rather than Petitioner's proposed construction); Jack Henry CBM, Paper 17, 8–10 (adopting neither Petitioner's nor Patent Owner's then-proffered constructions of SSID).[5] Patent Owner then suggests that we consider and accept a district court construction of SSID, without providing any explanation for why we should adopt that construction, especially given that we have explicitly considered and did not accept that construction

[4] Our reasoning in this regard was confirmed by Patent Owner's admission during Oral Argument during the Jack Henry CBM that common ownership is not required. *See* Jack Henry CBM, Paper 37, 10. Although Petitioner impermissibly filed the transcript of this Oral Argument as Exhibit 1064, which we expunged, we are nevertheless aware of Patent Owner's admission because we took part in the Jack Henry CBM oral hearing.

[5] Patent Owner does not explain what errors it sees in the construction offered by Petitioner in its Petition. Petitioner proposed: "Information that identifies a remote data access subsystem, *such as the identification of a specific branch or terminal of a banking institution*, or a subsystem or component that is a part of a remote data access subsystem." Pet. 7 (emphasis added). The difference between Petitioner's and Patent Owner's construction lies in the emphasized language, which appears to be a non-limiting example.

before (Jack Henry CBM, Paper 17, 9–10).[6] PO Resp. 21–22. Patent Owner notes that, if we do not adopt that construction, it will "abide by the Board's decision." *Id.* at 21. We decline to adopt the district court construction, a construction previously considered and not adopted, in the absence of arguments explaining why we should adopt that construction, and in the presence of a statement that Patent Owner will abide by our construction should we not choose to adopt that construction.

Upon consideration of the record before us, we maintain that the broadest reasonable interpretation of "subsystem identification information" is "information that identifies a subsystem."

D. Anticipation by Campbell

Petitioner asserts that claims 1, 2, 9, 16, 18, 19, 22, 25, 26, 29, 36, 38–43, 48, 50, 51, 54, 55, 60, 62, 63, and 66 are anticipated by Campbell. Pet. 10–39.[7]

Campbell discloses a system that transmits check images and routes those images between banks. Ex. 1019, Abstract. A first entity in the system lies within sending bank 14. *Id.* at Fig. 1. Within this first bank,

[6] The difference between the district court interpretation and ours is minor and not outcome-determinative in this case. The district court limited the SSID to identification of the remote access device, whereas our analysis concluded that the broadest reasonable interpretation of the term did not require limiting the SSID to identifying any particular subsystem, so long as it identified *some* subsystem of the system. *See* Jack Henry CBM, Paper 17, 9–10. In application to this case, the difference is immaterial because, in Petitioner's ground, the alleged SSID in Campbell identifies the remote access device (sending bank).

[7] The Petition also lists claims 49 and 61 (Pet. 13), but we did not institute a review of those claims. Dec. Inst. 13.

hardware and software are configured to create a check image and other data (e.g., source and destination identifiers). *Id.* at 2:64–3:32, 5:23–28; *see also id.* at 4:10–25 (describing the same hardware and software performing the same operations for a dishonored check). The first bank sends the gathered information to a second entity of the system, node 12, over a network. *Id.* at 3:20–36; *see also id.* at 4:26–29 and 4:59–5:1 (describing the transmission in the dishonored check example). Node 12 performs various tasks with the sent information, one task being the forwarding of the check image to the appropriate receiving bank. *Id.* at 1:60–67, 2:30–32. Receiving bank 16, therefore, is a third entity in the system. *See id.* at Figs. 1, 2. The system is equipped to send and receive encrypted information between the banks and within its own central node 12. *Id.* at 5:55–60, 6:37–38.

We have reviewed Patent Owner's arguments against Petitioner's ground (PO Resp. 28–60); the principal arguments are addressed below.

1. Claim 1

Independent claim 1 requires, *inter alia*, a remote data access subsystem that captures images of paper transaction data and provides encrypted SSID and image data. Claim 1 also requires a central data processing system and a communications network.

Petitioner reads the remote data access subsystem on the sending bank of Campbell, the central data processing subsystem on the node of Campbell, and the communications network on the communications network in Campbell. Pet. 28 (addressing the particular limitations found in claim 1 but directing the reader to its analysis of claim 42), 19–24 (setting forth Petitioner's assertions for these limitations as also found in independent

claim 42). Petitioner asserts that Campbell captures images of checks and sends that data to the central subsystem via the network. *Id.* at 19–24. Petitioner also asserts that Campbell transmits an encrypted SSID in the form of an endorsement or as additional identifying data sent along with the encrypted check image. *Id.* at 13–19.

With respect to independent claim 1, Patent Owner principally argues that Campbell fails to disclose a) "subsystems" and b) "encryption" of the SSID in the manner required by the claim. *See, e.g.*, PO Resp. 30–31, 33, 35, 36 (arguing "subsystem"); *id.* at 31–32, 33–36 (arguing "encryption").

a. "subsystem"

Campbell discloses a system for transporting the images of checks. Ex. 1019, 2:18–20 ("FIG. **1** shows an example of a system for transporting images of checks"). As such, we are persuaded by Petitioner's position that the various separately identifiable objects operating within this system—namely, the first bank, the node, and the second bank—are subsystems within this system.[8] Except for the "encryption" aspect of the claim, discussed below, Patent Owner raises no credible argument that the first bank, the node, or the second bank in Campbell fail to disclose any element of claim 1. Instead, Patent Owner's argument appears to be that one or more entities in Campbell are not commonly owned or are not subsystems of each

[8] "system. A collection of components organized to accomplish a specific function or set of functions." *IEEE Standard Glossary of Software Engineering Terminology* 73 (IEEE Std 610.12-1990, 1990) (Ex. 3001). "subsystem. A secondary or subordinate system with a larger system." *Id.* at 72.

other. *See, e.g.*, PO Resp. 31, 33.[9] As we noted in our claim construction of SSID, however, there is no ownership requirement to be a "subsystem" of the claimed system. Further, the claims do not require one subsystem to be a subsystem of another subsystem, but merely that there are subsystems of the claimed system. Accordingly, Patent Owner's arguments are unpersuasive. Reviewing the record before us, we are persuaded that Petitioner has established that the "remote data access subsystem" reads on the first bank in Campbell, and the "central data processing system" reads on the node.

b. "encryption"

Patent Owner's arguments regarding "encryption" fall in two lines:
i) arguments that Campbell does not disclose an encrypted SSID because Campbell does not disclose a SSID (*see, e.g.*, PO Resp. 31, 35); and
ii) arguments that Campbell does not require encryption of check images (*see, e.g.*, *id.* at 32, 33, 36).

i. SSID

We have determined already that the hardware and software system at the first bank is a subsystem of the check image processing system of Campbell. When the system of the first bank transmits the check to the node, it includes information identifying itself. Pet. 14–19, 20–21; s*ee also id.* at 28 (stating that the analysis for claims 42 applies to claim 1); Ex. 1019, 5:23–28 ("The [node] may read some data accompanying check images, for

[9] Patent Owner's Declarant, Mr. Ginsberg, testifies that "Petitioner (and also the Board) mistakes the two banks in Figure 1 of the Campbell patent as being remote data access subsystems of a single bank." Ex. 2004 ¶ 11. We cannot find any such assertion by Petitioner or the Board, and neither PO nor its Declarant direct us to where such an assertion exists.

example . . . information may instruct the node 12 about the identity of the sending institution and the intended receiving institution."). Accordingly, we are persuaded by Petitioner's assertion that the first bank transmits a SSID because it transmits information that identifies a subsystem (the first bank subsystem).[10] Patent Owner argues:

> Again, Campbell does not state that the identity of the sending and/or receiving institutions has been encrypted. But even if the identity of the sending and/or receiving institutions were encrypted in the Campbell patent, a given bank such as a Sending Bank or a Payor Bank is simply **not** a subsystem of a Receiving Bank or a Bank of First Deposit. Thus, Campbell might be able to identify a given Sending Bank and/or a given Bank of First Deposit, but the identity of such banks does not qualify as **subsystem** identification information. Placing a serial number, or other identification number, on a scanner that imaged a check in a Sending Bank or a Bank of First Deposit does not necessarily provide subsystem identification information, since it is the identification name/number of the subsystem, and not the serial number of a scanner, or a name of bank, that is encrypted in the '137 Patent.

PO Resp. 35.[11,12]

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[10] Petitioner also provides an alternative reading of SSID on Campbell: that the endorsement printed on the check itself is a SSID. *See* Pet. Reply 5–6; *see also* Dec. Inst. 10 (pointing out that Petitioner has two readings of the term on Campbell). Although Patent Owner does not appear to discuss this particular alternative reading, we do not rely on this alternative reading in reaching our Decision.

[11] Patent Owner's Declarant, Mr. Ginsberg, seems to contradict Patent Owner here, by implying that the ID number of a scanner would be a SSID:

Patent Owner here appears to argue that the name of a bank is not a SSID because one bank is not the subsystem of another bank. Patent Owner also appears to argue that a SSID is "not the serial number of a scanner, or a name of bank" that is encrypted. *Id.* Patent Owner points to no portions of the record and provides no credible analysis in support of these assertions. We are persuaded that the bank is a subsystem; thus, the name of the bank would serve to identify that subsystem and meets the limitation of claim 1 requiring a SSID.[13] Reviewing the record before us, Patent Owner's argument that Campbell does not describe an encrypted SSID because it does not disclose a SSID is unpersuasive in view of the arguments and evidence offered by Petitioner.

"Nowhere does Campbell teach that a receiving institution would have any use for information such as the ID number of a scanner in a sending institution." Ex. 2004 ¶ 15.

[12] Patent Owner seems to have taken an opposite position in its Preliminary Response, suggesting that information that identifies a scanner is a SSID: "claim 1 requires encrypting identification information that identifies 'at least one imaging subsystem' (such as the 3897 scanner of the IBM 3890 system . . .) and requires identification information that identifies 'at least one data access controller' (such as a workstation that operates the 3897 scanner)." Prelim. Resp. 22.

[13] Further, although not necessary to reach our finding here, we are persuaded by Petitioner's logic that the SSID is "particularly apt where financial institutions have myriad branches or equipment that send data to a central location." Pet. 16. In other words, Petitioner implies that one of ordinary skill would understand that the identifying information (SSID) in Campbell is not just a bank name but the name of a particular bank.

ii. Requiring Encryption

Campbell discusses encryption of information as follows:

> The controller **42** may read some data accompanying check images, for example, it may identify that TCP/IP protocol information accompanying those images. That information may instruct the node **12** about the identity of the sending institution and the intended receiving institution. That information may also identify the disposition of the check . . . .
>
> The controller **42** may also be configured to handle information encrypted by sending institutions to provide security for the images transported by the network **38**. The controller **42** may have its own encryption and decryption equipment to provide a secure environment in the node **12**.

Ex. 1019, 5:14–60; *see also* Pet. 13–19 (explaining Petitioner's position regarding encrypting the SSID). In our Decision to Institute this trial, we determined that Campbell's system "is equipped to send and receive encrypted information between the banks," relying on the above-cited passage in Campbell. Dec. Inst. 8–9 (citing Ex. 1019, 5:55–60).

With a full record, we find that the preponderance of the evidence supports Petitioner's position. Campbell does not state that only the *image* is encrypted. Instead, Campbell states that "*information* [is] encrypted . . . to provide security *for the images* transported." Ex. 1019, 5:55–58 (emphasis added). Thus, Campbell uses the terms *information* and *image* to refer to different collections of data. Earlier in that column, Campbell also explains what it means by "information," and it is clear that this information is not just images but rather includes "information [that] *accompan[ies]* those images." *Id.* at 5:25–26 (emphasis added). For example, the information

identifies the "sending institution," "receiving institution," and "the disposition of the check." *Id.* at 5:26–31. As we discussed in a prior claim construction of this term, we are persuaded that information identifying the sending institution is a SSID. *See* Jack Henry CBM, Paper 37, 8–11. Thus, when this information is encrypted, it is an encrypted SSID, as required by claim 1. *See also* Ex. 1003 ¶¶ 64–65, 78–84, 91 (Petitioner's Declarant, Dr. Knox, testifying that the encrypted information in Campbell identifies the receiving institution).

Patent Owner argues that Campbell discloses that the controller *may* be configured to handle encrypted information, which means that it "does not necessarily encrypt subsystem information" and that encryption is not "necessarily always . . . accomplished." PO Resp. 32–34.[14] Patent Owner does not provide an explanation as to how this, even if true, would preclude anticipation: Campbell would still disclose encrypted SSIDs if it disclosed the encryption as a capability but not a necessity of the system. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 772 (Fed. Cir. 1983) ("The law of anticipation does not require that the reference 'teach' what the subject patent teaches. . . . . [I]t is only necessary that the claims under attack, as construed by the court, 'read on' something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or 'fully met' by it"); *see also* Pet. Reply 5–6 (arguing that there is no requirement that the prior

[14] Later in its Response, Patent Owner argues that, although Campbell may "encrypt the name of th[e] bank," Campbell does not "encrypt[] identification information that identifies a particular subsystem of the . . . Bank." PO Resp. 48–49. Thus, Patent Owner appears to recognize that in fact Campbell discloses encrypting the name of the bank (while disputing that the name is sufficient to be a SSID).

art mandate the use of a disclosed feature). Notwithstanding, we disagree that Campbell only occasionally encrypts SSIDs, for the reasons explained in the prior paragraph. Reviewing the record before us, we are persuaded that Campbell discloses transmitting an encrypted SSID.

c. Conclusion Regarding Claim 1

In view of the above, we determine that Petitioner has shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claim 1.

2. Claim 2

Claim 2 depends from claim 1 and further requires that the data access subsystem comprises a scanner. Petitioner asserts that Campbell's imaging equipment scans the check. Pet. 29.[15] Patent Owner identifies the claim language in claim 2 and argues that Petitioner's ground is deficient because Campbell does not anticipate claim 1. PO Resp. 36. We determine that Petitioner has shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claim 2.

3. Claims 9 and 19

Claim 9 depends from claim 1 and further requires "at least one server for polling said one or more remote data access subsystems for transaction

[15] Petitioner misquotes the Decision to Institute as having said that: "'Patent Owner did not discuss these claims in its Preliminary Response and that the claims will remain invalid unless rebutted.' Paper 6, p. 13." Pet. Reply 9. The cited portion of our Decision to Institute states: "Patent Owner does not discuss these claims at this time. Prelim. Resp. 24. We have reviewed Petitioner's assertions and determine that, if unrebutted, they demonstrate that these claims are more likely than not anticipated by Campbell."

data." Claim 19 includes the same limitation. Petitioner asserts that "billing interface in the interface 52 will periodically poll the node controller 42." Pet. 29 (citing Ex. 1019, 7:33–42). Patent Owner argues that polling for information about billing is not the same thing as polling the remote data access subsystems for transaction data. PO Resp. 37–38.

Patent Owner's argument is persuasive. The portions of Campbell Petitioner cites are directed to a component of the node polling another component of the node, not the remote data access subsystems as claimed. Petitioner offers no further analysis in its Petition; Petitioner only cites to the above-noted portion of Campbell. In its Reply, Petitioner explains how Campbell describes polling for various types of information, but does not explain how the node polls the remote data access subsystem in Campbell (i.e., the bank). *See* Pet. Reply 9–10. Accordingly, we determine that Petitioner has not shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claims 9 and 19.

4. Claim 16

Claim 16 depends from claim 1 and further requires that the remote data access and data processing subsystems each contain a local area network (LAN) and that they are connected by a wide area network (WAN). Petitioner asserts that Campbell's imaging equipment is formed of "large multiworkstation systems" that sends images to "a network interface" of the remote data access subsystem (sending bank) and then subsequently sends information to the data processing subsystem (node), which has its own LAN 56. Pet. 23–24, 30–32 (explaining how Campbell discloses LANs and a WAN). Patent Owner argues that "Campbell teaches a single LAN 56, and

does not teach a WAN." PO Resp. 39–40. Patent Owner, aside from citing to its Declarant, Mr. Ginsberg, provides no further credible explanation for its argument. We address each of these challenged limitations below.

a. WAN

A WAN is simply a network that spans geographically separated areas.[16] As explained by Petitioner's Declarant, Dr. Knox:

> Campbell discloses the transmission of data between sending bank 14 and node 12 using a public switched telephone network 10. Campbell further discloses that the network 10 may be a frame relay network. Ex. 1019, 2:61. "Frames" is a general term in telecommunication, and is included in many protocols. A frame relay network is a type of Wide Area Network.

Ex. 1003 ¶ 158.

Notably, the '137 patent also describes its WAN as using a frame relay network over a telecommunications company network. Ex. 1002, 12:50–61. Patent Owner's Declarant, Mr. Ginsberg, acknowledges that Campbell describes transmission of signals over a public switched telephone network, but states that "the 'central offices' are not described as being remote from the receiving bank." Ex. 2004 ¶ 22. Mr. Ginsberg appears to be discussing the portion of Campbell where it describes the signals

[16] "Wide Area Network (WAN)[:] A data communications network that covers geographically separated areas, typically containing cities. Thus a WAN is usually composed of Local Area Networks (LAN) interconnected by other communications links hired from a PTT or other common carrier." *Focal Dictionary of Telecommunications* (1999) *available at* http://search.credoreference.com/content/entry/bhfidt/wide_area_network_wan/0 (Ex. 3002).

produced by the sending bank being transmitted on network access lines 22 to reach telephone network 10 and, more specifically, that "[t]he signals received by the network on line **22** may be transmitted through the network **10** via . . . one or more central offices to the check image processing node **12**." Ex. 1019, 3:17–43. Mr. Ginsberg does not explain how this passage supports his conclusion. Whether the "central offices" (not relied on by Petitioner for this claim) are remote to the sending bank has no bearing, which we can see, on whether Campbell describes a WAN.

Campbell describes transmission of information between the *sending bank* and the *node* over a public switched telephone network; it is that communication that Petitioner asserts occurs over a WAN. *See* Pet. Reply 11–12; Pet. 30–31. A public switched telephone network covers geographically distinct locations. One of ordinary skill in the art would understand that transmitting information over such a network generally involves the sender and receiver being in different locations; likewise, the system of Campbell makes little sense if the banks and the node are all in the same location.[17] Accordingly, Mr. Ginsberg's testimony on this point is unpersuasive. On the other hand, Petitioner's Declarant, Dr. Knox, explains how the Campbell system uses a public switched telephone network and a frame relay network, which Dr. Knox testifies is a type of WAN. Ex. 1003 ¶ 158. This testimony is persuasive, under its own reasoning and because, as

[17] *See also* PO Resp. 47, "Patent Owner also agrees in principle that Campbell's sending institution may be considered to be a *remote location*" (emphasis added).

we mentioned above, the WAN in the '137 patent involves a frame relay network over a telecommunications company's network.

Patent Owner's Declarant also testifies that "Campbell does not teach . . . a wide area network that transmits data within and between the [claimed subsystems]." Ex. 2004 ¶ 22. The wide area network in claim 16 does not require data to be transmitted "within and between," but rather just "between," the remote and data processing subsystems. Accordingly, Mr. Ginsberg's testimony is directed to language not found in the claims (and even if it were, his conclusory statement is entitled to little or no weight).

Lastly, Patent Owner's Declarant argues that Campbell does not teach a "carrier cloud." *Id.* ¶ 23.[18] Mr. Ginsberg here directs us to the testimony of Petitioner's Declarant, Dr. Knox, at Exhibit 1003, paragraphs 174 and 175. Dr. Knox's testimony there is directed to claim 22, not claim 16; Dr. Knox does not discuss a "carrier cloud" with respect to claim 16. *See generally* Ex. 1003 ¶¶ 169–177 (Dr. Knox's testimony discussing claim 22); *see also* ¶¶ 154–158 (Dr. Knox's testimony discussing claim 16). Thus, Mr. Ginsberg's testimony is unpersuasive.

Reviewing the arguments and evidence before us, we are persuaded that Campbell discloses a WAN as claimed.

b. LAN

Petitioner's position is that the "multiworkstation systems [at the banks] cited in Campbell necessarily include a LAN." Pet. 23 (citing Ex. 1003 ¶ 112, Ex. 1020, 2); Ex. 1019, 3:10–12 ("The imaging equipment may be large multiworkstation systems available from companies such as IBM,

[18] Neither claim 16 nor claim 22 include a "carrier cloud" limitation.

UNISYS, or NCR.").[19] To bolster that point, Petitioner's Declarant, Dr. Knox, testifies and offers evidence that the imaging device mentioned by Campbell and offered for sale by IBM at that time "manage[d] the distribution of image and coded data on the LAN." Ex. 1003 ¶ 112 (quoting Ex. 1020, 193654). We find Dr. Knox's testimony persuasive. Patent Owner offers no persuasive evidence or explanation to the contrary, merely stating that Petitioner's claim chart "simply does not address the two LANs recited in claim 1." PO Resp. 40. Reviewing the arguments and evidence before us, we are persuaded that Campbell discloses the LANs as claimed.

c. Conclusion for Claim 16

Reviewing the arguments and evidence before us, we determine that Petitioner has shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claim 16.

5. Claim 18

Claim 18 depends from claim 1 and requires "a further management subsystem for managing the collecting and sending of the transaction data."[20] In effect, this subsystem serves as an intermediary, collecting data

[19] Petitioner's assertion that node 12 includes a LAN is supported by the evidence and does not appear to be in dispute.

[20] Claim 18 depends from claim 1 and refers to "the electronic or paper transaction data" of claim 1 but there is no antecedent basis for "electronic transaction data." In addition, claim 1 limits the data to "paper transaction data"; it would be impermissible for dependent claim 18 to expand the scope of claim 1 beyond paper transaction data. 35 U.S.C. §112(d). We take no position on the definiteness of the claims but limit our application of them on the art to the "paper transaction data" aspect of the "the electronic or paper transaction data" element.

and then sending it on. *See* Ex. 1002, Fig. 4 (wherein the DAC collects data from the DAT and sends it to the DPC). Petitioner asserts that Campbell discloses check processing and transmitting equipment and that banks may transmit images through one or more central offices. Pet. 31 (citing Ex. 1019, 3:32–41 (describing sending data to node 12), 3:17–20 (describing images collected by the imaging equipment and sent across the network)); Ex. 1003 ¶¶ 159–168 (Dr. Knox's explanation for how the limitation is met).

Reviewing Petitioner's citations, we understand Petitioner to be asserting that the claimed "data collecting subsystem" that has the "management subsystem" is one of the intermediaries Campbell describes as between the banks and the node. *See*, *e.g.*, Pet. 31 (citing to portions of Campbell that discuss routing the images through intermediaries); Ex. 1003 ¶ 161 ("sending bank 14 can send images indirectly to a node 12 through a trunk or central office. Ex. 1019, 3:32–36. The trunks and/or central office may be another bank 14 and/or 16.").

Patent Owner argues that, "[a]lthough Dr. Knox's analysis is interesting, it is irrelevant and without support, since claim 18 depends directly from claim 1," and that "Campbell . . . does not indicate that any two banks are subsidiaries of one another." PO Resp. 41. As we explained above, however, the claims do not require such a "subsidiary" feature, and we have determined already claim 1 is anticipated by Campbell.

Reviewing the arguments and evidence before us, we determine that Petitioner has shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claim 18.

6. Claim 22

Claim 22 depends from claim 18 and specifies that each of the (now three) subsystems include a LAN, and that each of the subsystems are connected by a WAN. Petitioner largely points to the same things in Campbell as it did for claim 18. Pet. 31–33; *see also* Ex. 1019, 3:46–48 ("The check image processing equipment [at the receiving bank] may be similar to the imaging equipment **18** located in the sending institution **14**"). Petitioner's Declarant, Dr. Knox, testifies that Campbell describes an intermediary bank being a second sending bank, which would then have its own multi-workstation system forming a LAN. Ex. 1003 ¶ 172; *see also id.* ¶ 161 (setting forth Dr. Knox's reasons for concluding that the "trunks and/or central office may be another bank 14 and/or 16"). As we discussed above, Petitioner has shown persuasively that the banks have LANs (via multi-workstation systems) and are connected via a WAN (over the public switched telephone network).

Patent Owner argues that "Campbell simply does not mention a wide area network at all." PO Resp. 42. It is well established that a reference need not teach a limitation *in haec verba*. *In re Bode*, 550 F.2d 656, 660 (CCPA 1977). Patent Owner's argument is nothing more than observing that the term does not appear in Campbell; such is not the test for anticipation. *See id.* Apparently in contesting Petitioner's assertion that the frame relay network 38 shown in Figure 2 of Campbell is a WAN, Patent Owner also argues that Figure 2 "is illustrative and certainly not drawn to scale in any manner, [such that] it is impossible to conclude from the drawings that Campbell teaches anything remotely resembling a wide area network." PO Resp. 42. A wide area network is not defined by its size but

rather by the geographic separateness of the entities communicating over it. *See supra* n.16. As we discussed in our analysis of claim 16, addressing whether Campbell describes a WAN, we are persuaded that frame relay network 38 (over the public switched telephone network) is a WAN, because it connects geographically separate entities.

Reviewing the arguments and evidence before us, we determine that Petitioner has shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claim 22.

7. Claim 25

Claim 25 depends from claim 1 and further specifies that the LANs recited in claim 22 include "at least one network switch for routing transaction data within [the LAN]." Petitioner asserts that Campbell discloses multi-workstation imaging systems that form a LAN at the bank and that a network switch is inherent to a LAN. Pet. 33 (citing Ex. 1003 ¶¶ 182–185).

Patent Owner argues that "Campbell is completely silent regarding network switches." PO Resp. 43. Petitioner's ground, however, asserts that Campbell *inherently* describes the feature; by this, Petitioner is admitting that Campbell is silent on the matter.

Patent Owner also points us to "several documents that describe means other than a network switch to operate a network," citing us to "[f]ootnote 5, at page 10, *supra*." *Id.* We find no such footnote on page 10 of the Response, but find a series of URLs on page 28 in a footnote 5. There is no indication that the documents at the URLs are in evidence, nor do we see them in the record. *See* 37 C.F.R. § 42.63(a) ("All evidence must be

filed in the form of an exhibit"). There is no explanation of what these documents contain, when and whether they were published, or how, specifically, they are relevant to the discussion at hand. *See* 37 C.F.R. § 42.23(b) ("All arguments for the relief requested in [a Response] must be made in the [Response]"); *see also* 37 C.F.R. § 42.220(a) (indicating the Response is filed as an opposition, and thus subject to Rule 42.23). The documents at these URLs are not in evidence, not discussed in a paper, and, therefore, are not considered.

Petitioner's Declarant, Dr. Knox, sets out his reasoning that network switches are a standard part of LANs and that a person of ordinary skill in the art envisioning a LAN would also envision it having a network switch. Ex. 1003 ¶ 184 (testifying, "such a switch is a standard part of a modern local area network"); *id.* at ¶¶ 182–185 (setting forth Dr. Knox's reasoning on the network switch, which includes testimony that the claimed network switch "would be a part of virtually all of the prior art disclosing a LAN"). Whether a network switch is "standard" or in "virtually all" of the prior art, however, goes to whether a network switch is obvious, not whether a network switch is inherent in Campbell.

Reviewing the record before us, we determine that Petitioner has not shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claim 25.

8. Claim 48

Claim 48 depends from claim 1 and further requires that the system "automatically generates at least one of credit card statements, bank statements, and tax reports." Petitioner points to the disclosure in Campbell

of the data used in the billing interface: tracking the "number of checks processed, converted, stored, and transmitted." Pet. 37 (citing Ex. 1019, 5:35–38, 7:33–42). The testimony of Petitioner's Declarant, Dr. Knox, simply quotes language from Campbell, without analysis or explanation. Ex. 1003 ¶¶ 304–305.

Reviewing the arguments and evidence before us, we determine that Petitioner has not shown sufficient evidence that this billing interface information is, or produces, one of the claimed statements or reports. The billing interface certainly provides reports, but the claims require the functionality to gather and present certain information in those reports. Credit card and bank statements typically are understood to refer to a list of account activities for a consumer account; a tax report is typically understood to refer to taxes. Although the number of checks processed, etc., may be related to things that eventually make it on a bank statement, Petitioner does not set forth a claim construction or analysis that would allow us to conclude, by a preponderance of the evidence, that such features are a "bank statement" as claimed (or any of the other claimed reports). As such, we determine that Petitioner has not shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claim 48.

9. Claim 50

Claim 50 depends from claim 1 and specifies that the "transaction data comprises more than one type of transaction data." Petitioner cites to the description in Campbell of the multi-workstation imaging systems as well as the testimony of Dr. Knox. Pet. 37–38 (citing Ex. 1019, 2:64–66, 3:10–12; Ex. 1003 ¶¶ 689–690). At the cited portion of Dr. Knox's

testimony, we are directed to "the discussion above regarding the '988 Patent, Claim 57." At that portion of his testimony, Dr. Knox characterizes the various types of transaction data as "including images, [Magnetic Ink Character Recognition] codeline data and various types of transaction data derived through optical character recognition." Ex. 1003 ¶ 308; *see also id.* ¶¶ 307–309 (setting out Dr. Knox's testimony regarding this limitation). Patent Owner argues that Petitioner's claim chart "fails to address" this limitation and that claim 50 is not anticipated by way of its dependency from claim 1. PO Resp. 45–46. On the contrary, however, Petitioner does address the limitation in the claim chart, and we have determined already that Campbell anticipates claim 1. Petitioner's unrebutted assertion that the image and magnetic data types are the claimed more than one types of transaction data is persuasive. We determine that Petitioner has shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claim 50.

10. Claim 26

Independent claim 26 is similar in scope to independent claim 1. Petitioner's assertions for unpatentability and Patent Owner's arguments are substantially similar to those we discussed in our analysis of claim 1. *See* Pet. 24–28; PO Resp. 46–49. For the reasons expressed above, we determine that Petitioner has shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claim 26.

11. Claims 29, 36, and 38–41

Claim 29 depends from claim 26 and requires a plurality of remote locations and a plurality of central locations. Claim 36 depends from claim

29 and requires intermediate locations between the remote and central locations. Claims 38–41 depend indirectly from independent claim 26 and generally provide more detail to the steps previously recited. Claim 41, in particular, specifically recites that the transmission between the intermediate location and the central location occurs via frames.

For claim 29, Petitioner asserts that there are a plurality of remote locations (banks) and a plurality of central locations (nodes). Pet. 33–34; Ex. 1019, 2:27–29 (disclosing "network **10** contains at least one check image processing node"). For claim 36, Petitioner also asserts that there are intermediate locations between the bank and node. Pet. 34–35; Ex. 1019, 2:46–49 ("One or both of institutions **14** and **16** may also be any intermediary institution . . . between a bank of first deposit and a payor bank."). For claims 38–40, Petitioner's position is largely the same as for claims 29 and 36. *See* Pet. 35–36. For claim 41, Petitioner asserts that Campbell describes a frame relay network transmitting data between the banks and the node. *Id.* at 37.

For claims 29 and 36, Patent Owner reiterates its unpersuasive arguments about the banks not being subsystems of one another. *See* PO Resp. 49–51. For claims 38–41, Patent Owner argues that the claims require "transmitting data within and between subsystems," or depend from a patentable parent claim. *Id.* at 51–53. Patent Owner's arguments are unpersuasive because we have determined already the parent claims are shown to be unpatentable and because none of these claims require transmission between subsystems of the same tier, as Patent Owner implies. Specifically, claims 26, 29, 36, and 38–41 do not require transmitting information between subsystems at the same level, i.e., the claims require

transmitting information "within" the same level and "between" different levels. *See, e.g.*, Ex. 1002, 27:23–32 (claim 38 claiming transmitting data "within the [remote/intermediate/central] locations" and separately claiming transmitting data "from [remote/intermediate] location to a corresponding [intermediate/central] location"); *id.* at Figs. 1, 2, 4 (showing each so-called tier as only communicating with other tiers, not with other entities in the same tier).

Reviewing the arguments and evidence before us, we determine that Petitioner has shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claims 29, 36, and 38–41.

12. Claim 51

Claim 51 depends from claim 26 and further requires "capturing electronic transaction data." Petitioner asserts that Campbell discloses this limitation where it describes the multi-workstation imaging equipment. Pet. 38 (citing Ex. 1019, 2:64–66, 3:10–12; Ex. 1003 ¶¶ 691–693). Dr. Knox's Declaration discusses his understanding of the term to read on "any transaction data that is in electronic form, [i.e.,] a scanned image [of a check]." Ex. 1003 ¶ 310.

Patent Owner appears to consent to this construction because Patent Owner argues that Campbell "does not necessarily produce electrical signals representing the image of a check" because Campbell teaches that "optical signals may represent the image of a check" and the optical signals are "converted for transmission" over the network. PO Resp. 54 (citing Ex. 1019, 2:65–3:48. The portion of Campbell cited by Patent Owner, however, makes clear that "check imaging equipment . . . produce[d] *electrical or*

optical signals representing the image of a check." Ex. 1019, 2:64–66 (emphasis added). Those signals are then converted "into signals suitable for transmission on the telephone network," for example, "*digital* transmission." *Id.* at 3:17–31 (emphasis added). Based on these disclosures, Patent Owner's arguments are unpersuasive. Instead, we are persuaded that Campbell discloses capture of *electronic* transaction data in the form of digital data.

Reviewing the arguments and evidence before us, we determine that Petitioner has shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claim 51.

13. Claim 54

Claim 54 is similar in scope to claim 48 above, requiring the generation of reports. Petitioner's position is the same unpersuasive position it took for claim 48. Pet. 37. Accordingly, for the reasons discussed above with respect to claim 48, we determine that Petitioner has not shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claim 54.

14. Claim 55

Claim 55 is similar in scope to claim 50 above, requiring two or more types of transaction data. Petitioner's position is the same position it took for claim 50. Pet. 37–38. Patent Owner's argument is also the same. PO Resp. 55–56. Accordingly, for the reasons discussed above with respect to claim 50, we determine that Petitioner has shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claim 54.

15. Claims 42, 60, and 62

Independent claim 42 is similar to independent claim 1. PO Resp. 56. Petitioner's analysis of claims 1 and 42 are virtually the same. Pet. 28 (Petitioner's assertions for claim 1 relying on those for claim 42); *id.* at 19–24 (setting forth Petitioner's assertions for the limitations in claim 42). Patent Owner's arguments are the same as those we addressed with respect to claim 1 above. *See* PO Resp. 56.

Claim 60 depends from claim 42 and, similar to claim 48, requires the generation of reports. Petitioner's and Patent Owner's positions are the same as for claim 48. Pet. 37; PO Resp. 56–57.

Claim 62 depends from claim 42 and, similar to claim 50, requires two or more transaction data types. Petitioner's and Patent Owner's positions are the same as for claim 50. Pet 37–38; PO Resp. 57.

For the reasons we discussed above with respect to claims 1, 48, and 50, we determine that Petitioner has shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claims 42 and 62, but that Petitioner has not shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claim 60.

16. Claims 43, 63, and 66

These claims are similar to claims 1, 51 (electronic transaction data), and 48 (reports), respectively. Petitioner asserts that claims 43, 63, and 66 are anticipated for much the same reasons as we have discussed above with respect to claims 1, 51, and 48. Pet. 24–28 (setting forth Petitioner's assertions for claim 43); *id.* 37 (setting forth Petitioner's assertions for claims 48, 54, 60, and 66); *id.* at 38 (setting forth Petitioner's assertions for

claims 51 and 63). Patent Owner's arguments for claims 43 and 63 are the same unpersuasive arguments we have addressed already in our discussions of claims 1 (encryption, subsystem), claims 29, 36, and 38–41 (within and between), and claim 51 (electronic transaction data). PO Resp. 58–60. Patent Owner's arguments for claim 66, regarding the generation of reports, are persuasive for the reasons expressed above with respect to claim 48. *See id.* at 60.

For the reasons we discussed above with respect to claims 1, 29, 36, 38–41, and 51, we determine that Petitioner has shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claims 43 and 63, but that Petitioner has not shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claim 66.

17. Conclusion for the Campbell Anticipation Ground

Reviewing the arguments and evidence before us, we determine that Petitioner has shown, by a preponderance of the evidence, that Campbell anticipates the subject matter of claims 1, 2, 16, 18, 22, 25, 26, 29, 36, 38–43, 50, 51, 55, 62, and 63, but has not made a sufficient showing for claims 9, 19, 48, 54, 60, and 66.

III.ORDER

In view of the foregoing, it is hereby:

ORDERED that claims 1, 2, 16, 18, 22, 25, 26, 29, 36, 38–43, 50, 51, 55, 62, and 63 are unpatentable;

FURTHER ORDERED that Exhibits 1062–1065 are to be expunged;

FURTHER ORDERED that Patent Owner's Motion to Exclude is dismissed as moot; and

FURTHER ORDERED that, because this is a Final Written Decision, the 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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