UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PNC BANK, N.A.,
Petitioner,

v.

UNITED SERVICES AUTOMOBILE ASSOCIATION,
Patent Owner.

IPR2022-00049
Patent 10,402,638 B1

Before MICHAEL R. ZECHER, TERRENCE W. McMILLIN, and
JULIET MITCHELL DIRBA, *Administrative Patent Judges.*

McMILLIN, *Administrative Patent Judge.*

DECISION
Denying Institution of *Inter Partes* Review
35 U.S.C. § 314
Granting Motions to Seal and Entering Protective Order
37 C.F.R. §§ 42.14, 42.54

I. INTRODUCTION

A. Background and Summary

PNC Bank, N.A. ("Petitioner")[1] filed a Petition to institute an *inter partes* review of claims 20 and 22 of U.S. Patent No. 10,402,638 B1 (Ex. 1101, "the '638 patent") pursuant to 35 U.S.C. § 311 *et seq.* Paper 4 ("Petition" or "Pet."). United Services Automobile Association ("Patent Owner")[2] filed a Preliminary Response. Paper 11 ("Preliminary Response" or "Prelim. Resp."). Pursuant to our authorization, Petitioner filed a Reply, Paper 14 ("Reply"), and Patent Owner filed a Sur-reply, Paper 18 ("Sur-reply").[3]

We have authority under 35 U.S.C. § 314, which provides that an *inter partes* review may not be instituted unless the information presented in the Petition and the Preliminary Response shows that "there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition." 35 U.S.C. § 314(a) (2018). After considering the Petition, the Preliminary Response, the Reply, the Sur-reply, and the evidence of record, we do not institute an *inter partes* review.

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[1] Petitioner identifies PNC Bank N.A., as the real party-in-interest to this proceeding. Pet. 2.

[2] Patent Owner identifies United Services Automobile Association, as the real party-in-interest to this proceeding. Paper 6, 2.

[3] Patent Owner also submitted a redacted version of its Preliminary Response as Paper 12, Petitioner submitted a redacted version of its Reply as Paper 16, and Patent Owner submitted a redacted version of its Sur-reply as Paper 20.

B. Related Proceedings

The parties identify *United Servs. Auto. Ass'n ("USAA") v. PNC Bank N.A.*, No. 2:21-cv-00246-JRG (E.D. Tex.) as a related proceeding in which the '638 patent is asserted. Pet. 2; Paper 6, 2. The parties further identify as related proceedings: *USAA v. PNC Bank N.A.*, No. 2:20-cv-00319-JRG (E.D. Tex.) in which four patents (U.S. Patent Nos. 7,949,788, 8,868,786, 8,380,623, and 8,682,754) are asserted; and *USAA v. PNC Bank N.A.*, No. 2:21-cv-00110-JRG (E.D. Tex.), in which two additional patents (U.S. Patent Nos. 7,949,788 and 8,886,768) are asserted, including the grandparent of the '638 patent. Pet. 2–3; Paper 6, 2.

Patent Owner also identifies *USAA v. Wells Fargo Bank*, No. 2:18-cv-00366-JRG (E.D. Tex.) in which Patent Owner asserted against Wells Fargo two patents from the '638 patent's family (U.S. Patent Nos. 10,013,605 and 8,708,227) as well as three patents not formally related to the '638 patent family, but containing overlapping inventors and related subject matter (U.S. Patent Nos. 8,392,332, 9,224,136, and 10,013,681). Paper 6, 3.

The parties identify the following *inter partes* review proceedings that challenge patents asserted against Petitioner: IPR2022-00050 (challenging the '638 patent); IPR2021-01070 (challenging U.S. Patent No. 8,699,779); IPR2021-01073 (challenging U.S. Patent No. 8,977,571); IPR2021-01071 (challenging U.S. Patent No. 10,482,432); IPR2021-01074 (challenging U.S. Patent No. 10,482,432); IPR2021-01076 (challenging U.S. Patent No. 10,621,559); IPR2021-01077 (challenging U.S. Patent No. 10,621,559); IPR2021-01399 (challenging U.S. Patent No. 10,013,605); and IPR2021-01381 (challenging U.S. Patent No. 10,013,681). Pet. 2–3; Paper 6, 3; Paper 15, 1. The parties also identify IPR2020-01516, in which Wells Fargo Bank,

N.A. challenged the '638 patent, CBM2019-00029 (challenging U.S. Patent No. 10,013,605) and IPR2020-01742 (challenging U.S. Patent No. 10,013,605) filed by Mitek Systems, Inc. Pet. 2; Paper 6, 3–4. The parties identify the following other post-grant proceedings involving patents in the '638 patent's family, or involving patents not formally related to the '638 patent family but containing overlapping inventors and related subject matter: CBM2019-00027 (challenging U.S. Patent No. 9,224,136); CBM2019-00028 (challenging U.S. Patent No. 10,013,681); IPR2022-00075 (challenging U.S. Patent No. 9,224,136); and IPR2022-00076 (challenging U.S. Patent No. 10,769,598). Pet. 3; Paper 6, 3–4; Paper 8, 2. The parties also identify *inter partes* review petitions (IPR2021-01163 and IPR2021-01248) filed by Patent Owner challenging U.S. Patent Nos. 7,949,788 and 8,868,786. Pet. 2–3; Paper 6, 2.

Patent Owner additionally identifies the following U.S. Patent Applications that claim priority to U.S. Patent No. 8,708,227 (the oldest patent in the '638 patent's family): 15/709,071; 15/709,126; 15/709,143; 16/025,679; 16/025,701; 16/507,595; 16/657,677; and 16/871,681. Paper 6, 4.

C. The '638 Patent

The '638 patent is titled "Digital Camera Processing System." Ex. 1101, code (54). The '638 patent explains that "[c]hecks typically provide a safe and convenient method for an individual to purchase goods and/or services" but "receiving a check may put certain burdens on the payee, such as the time and effort required to deposit the check. For example, depositing a check typically involves going to a local bank branch and physically presenting the check to a bank teller." *Id.* at 1:19–20, 1:65–

2:8. In addition, traditional check deposit and clearing do not provide quick access to the funds from the check. *Id.* at 2:19–25. Thus, the '638 patent explains, "there is a need for a convenient method of remotely depositing a check while enabling the payee to quickly access the funds from the check." *Id.* at 2:23–25. The '638 patent addresses this need by providing "a system, method and computer-readable medium with computer-executable instructions for remotely redeeming a negotiable instrument," whereby "computer readable medium bearing instructions . . . configure a customer's general purpose computer to facilitate a check deposit." *Id.* at 2:26–30, 2:47–51. "Acting under direction of such instructions, the general purpose computer may instruct a customer, for example via a display coupled [to] such computer, in utilizing an image capture device to generate an electronic image of . . . a check," whereby "the customer computer, acting under direction of the instructions, may deliver an approved electronic image [of the check] to financial institution electronics." *Id.* at 2:51–3:2.

Figure 1 of the '638 patent, reproduced below, illustrates a system for facilitating remote check deposit. *Id.* at 3:10–12, 3:50–55.
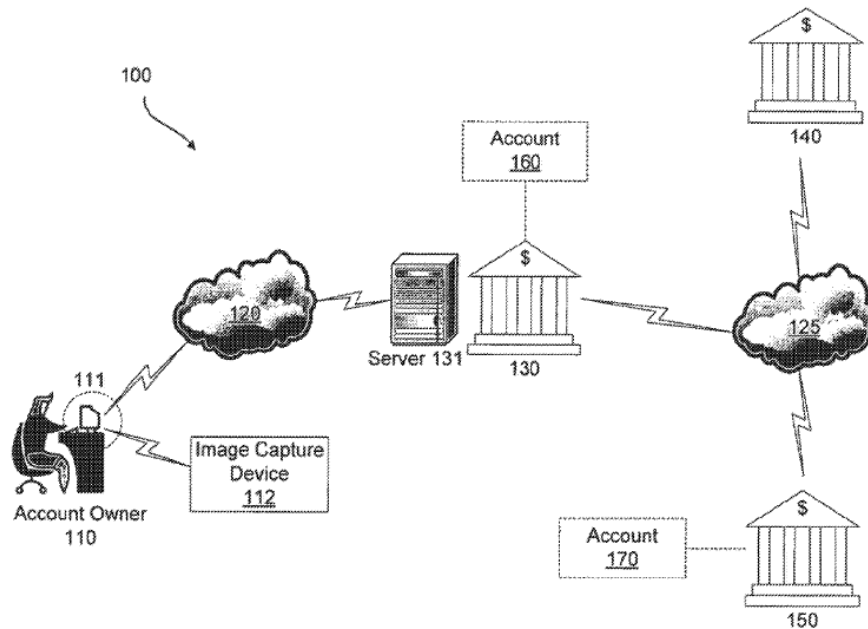
FIGURE 1

Figure 1 illustrates a system for facilitating remote check deposit. *Id.* at
3:10–12, 3:50–55.

Figure 1 depicts system 100 including: (i) "customer-controlled, general
purpose computer 111" used by account owner 110 (e.g., a bank customer in
a private residence); (ii) "image capture device 112 [that] may be
communicatively coupled to the computer 111"; and (iii) financial
institutions 130, 140, and 150, such as retail banks, investment banks,
investment companies, or other types of entities capable of processing a
transaction involving a negotiable instrument. *Id.* at 3:50–4:6, 6:40–44, 7:3–
7. Account owner 110 owns account 160 held at financial institution 130.
Id. at 3:63–65. When account owner 110 wishes to deposit a check into the
account, "[a]ccount owner 110 may deposit the check into account 160 by
converting the check into electronic data and sending the data to financial
institution 130." *Id.* at 9:30–34. "[A]ccount owner 110 may convert the
check into a digital image by scanning the front and/or back of the check

using image capture device 112." *Id.* at 9:39–42. Account owner 110 then sends the digital image to financial institution 130. *Id.* at 9:42–44. Upon receiving the digital image, financial institution 130 may credit the funds to account 160. *Id.* at 9:46–52. Financial institution 130 may clear the check by presenting the digital image to an intermediary bank. *Id.*

Figure 5 of the '638 patent, reproduced below, illustrates a system for facilitating and processing a check deposit transaction. *Id.* at 3:24–28, 10:19–23.
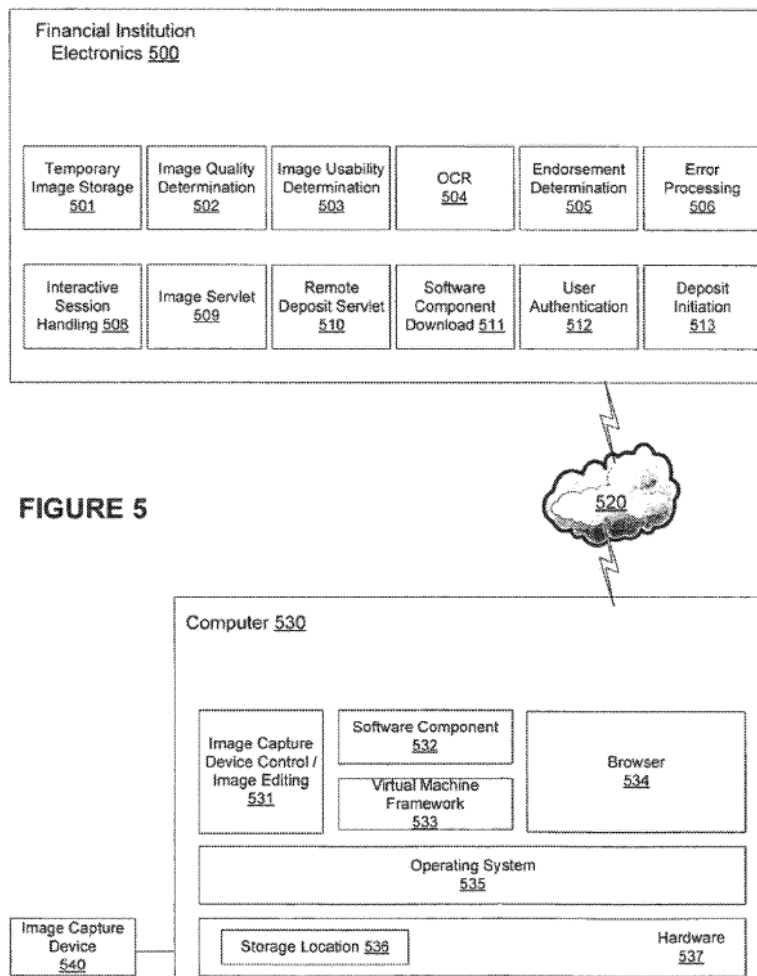

Figure 5 illustrates a system for facilitating and processing a check deposit transaction. *Id.* at 3:24–28, 10:19–23.

The system illustrated in Figure 5 facilitates deposit of a check via financial institution electronics 500 that communicates with computer 530 via network 520. *Id.* at 10:19–21. Financial institution electronics/server 500 includes: subsystem 511 for providing software component 532 to customer's/customer-controlled computer 530, to facilitate a deposit while allowing the financial institution to control certain aspects of the check image generation and delivery process; subsystem for user authentication 512 that requires a username and password; subsystem 510 for receiving from customer's computer 530, an identification of an account for deposit of a check, and an amount of the check; image servlet 509 for receiving from computer 530 an image of the check; subsystems 502 (image quality determination subsystem) and 503 (image usability determination subsystem) for analyzing the check image to determine if it meets at least one criterion; a subsystem for performing Optical Character Recognition (OCR) on the check image, to determine, for example, MICR line information, such as routing number, account number, and check number; error processing subsystem 506 for determining if there is an error in the deposit of the check, and for comparing an amount of the check as provided by the customer to the amount determined by performing OCR on the check image; endorsement determination subsystem 505 for determining if a signature appears on the back side of the check; and subsystem 513 for initiating the deposit of the check into the specified account. *Id.* at 10:19–11:21, 11:38–12:15, 12:25–57.

Customer's computer 530 executes software component 532 to enable check image creation and delivery (to the financial institution) by computer 530. *Id.* at 10:33–40, 12:61–13:3. The customer connects to server 500

8

using browser application 543 that executes on computer 530. *Id.* at 13:4–12. Image capture device control software and/or image edit software 531 also executes on computer 530. *Id.* at 13:13–27. Software 531 interfaces with image capture device 540 to serve functions such as initiating image capture, managing image retrieval, facilitating image editing, and providing an interface so that it can be controlled to some extent by software component 532. *Id.* Additionally, "at any step along the way, the customer can be instructed to perform certain functions using software 531 or component 432[sic], if such functions are better performed, or more conveniently performed by a human." *Id.* The operations performed by computer 530, component 532, image capture software 531, image capture device 540, and the customer may include the following:

> providing customer credentials, identifying an account, identifying an amount of a deposit, capturing an image of a front side of a check according to the criteria required by the bank via component 532, cropping and rotating the image of a front side of a check according to the criteria required by the bank via component 532, endorsing and capturing an image of a back side of a check according to the criteria required by the bank via component 532, and delivering such images to server 500.

Id. at 13:32–44.

Figure 6 of the '638 patent, reproduced below, illustrates an embodiment (software component 600) of software component 532 in a system for facilitating deposit of a check from a customer-controlled general purpose computer. *Id.* at 3:29–32, 13:45–54.
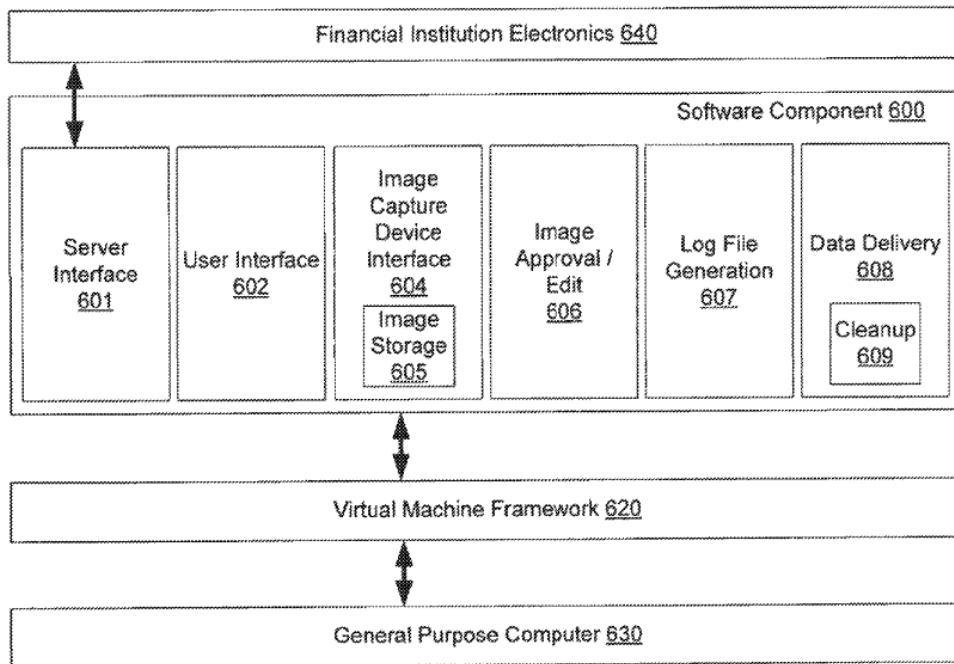
FIGURE 6

Figure 6 illustrates an embodiment (software component 600) of software component 532 in a system for facilitating deposit of a check from a customer-controlled general purpose computer. *Id.* at 3:29–32, 13:45–54.

Software component 600 illustrated in Figure 6 includes functional subsystems 601–609. *Id.* at 13:46–54. Subsystem 602 instructs the customer, via a user interface visible on a display coupled to the customer's computer 630, to use an image capture device to generate an electronic image of a check that meets at least one criterion. *Id.* at 13:63–14:9. For example, the customer may be instructed by subsystem 602 to place the check in a certain orientation. *Id.* Subsystem 604 (an image capture device interface) receives the check image from the image capture device, and enables the image to be immediately uploaded to server 640, or to be temporarily persisted pending certain customer modifications. *Id.* at 14:9–19. Software component 600 further instructs the customer to modify the

electronic check image such that the image meets an additional criterion. *Id.* at 14:40–51. For example, an image as scanned may be presented to the customer, and the customer may be asked to select a bottom right corner of the check in the image. *Id.* The customer's selection of the bottom right corner of the check may then be used to crop out the image portion that goes beyond the boundaries of the check. *Id.*

D. Challenged Claims

Petitioner challenges claims 20 and 22 of the '638 patent. Pet. 5, 7. Claim 20 is an independent system claim, and claim 22 directly depends from claim 20. Ex. 1101, 16:44–17:3, 17:6–8. Claim 20 recites:

> 20. A system for allowing a customer to deposit a check using a customer's handheld mobile device, the system configured to authenticate the customer using data representing a customer fingerprint, the system including:
>> a customer's handheld mobile device including a downloaded app, the app associated with a bank and causing the customer's handheld mobile device to perform the following steps:
>>> instructing the customer to take a photo of the check;
>>> using a display of the customer's handheld mobile device to assist the customer in taking the photo of the check;
>>> assisting the customer as to an orientation for taking the photo; and
>>> using a wireless network, transmitting a copy of the photo from the customer's handheld mobile device and submitting the check for mobile check deposit;
>> a bank computer programmed to update a balance of an account to reflect an amount of the check submitted for mobile check deposit by the customer's handheld mobile device;

> the system being configured to ***check for errors before the submitting is performed*** by the customer's handheld mobile device; and
>
> the system being configured to confirm that the mobile check deposit can go forward after optical character recognition is performed on the check in the photo.

Id. at 16:44–17:3 (emphasis added).

E. The Asserted Grounds

Petitioner challenges claims 20 and 22 of the '638 patent based on the grounds set forth in the table below.

Claims Challenged	35 U.S.C. §	Reference(s)/Basis
20, 22	103	Garcia,[4] Byrne,[5] Lev,[6] Watanabe[7]
20, 22	103	Garcia, Byrne, Lev, Watanabe, Maeda[8]

Pet. 7. Petitioner supports its showing of unpatentability of the challenged claims of the '638 patent with the Declaration of Dr. Todd Mowry. (Ex. 1102).

II. ANALYSIS

A. Claim Construction

Petitioner submits that "other than 'handheld mobile device' and 'digital camera,' resolving potential disputes over [claim construction] is

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[4] WO 2005/043857 A1, published May 12, 2005 (Ex. 1103). Exhibit 1103 comprises the Spanish original of this reference (Ex. 1103, 4–26), a declaration certifying the accuracy of its translation (*id.* at 1–2), and an English translation (*id.* at 28–46).
[5] US 2006/0249567 A1, published Nov. 9, 2006 (Ex. 1104).
[6] US 2006/0164682 A1, published July 27, 2006 (Ex. 1105).
[7] US 7,027,171 B1, issued Apr. 11, 2006 (Ex. 1106).
[8] US 2003/0051138 A1, published Mar. 13, 2003 (Ex. 1107).

unnecessary because those terms are taught by the prior art references regardless of the construction." Pet. 13. Petitioner submits that, for purposes of this proceeding, it relies on Patent Owner's district court construction for the phrase "handheld mobile device" found in U.S. Patent No. 10,013,605 (a grand-parent of the '638 patent), that construction allegedly equating the "handheld mobile device" with a "handheld computing device." Pet. 13–14. Patent Owner submits that "the deficiencies identified in this Preliminary Response are present regardless of which construction the Board adopts for 'handheld mobile device,' so no construction is necessary at this time [for handheld mobile device]." Prelim. Resp. 21–22.

With respect to the preamble of claim 20, Patent Owner submits that the parties have agreed in the parallel district court case that the entire preamble for claim 20 is limiting; accordingly, the Board should find, in accordance with the parties' agreement in the district court, that the entire preamble of claim 20 is limiting. Prelim. Resp. 22–24 (citing Ex. 2008, 4[9]).

Claim construction in this proceeding is governed by 37 C.F.R. § 42.100(b), which provides:

> In an *inter partes* review proceeding, a claim of a patent, or a claim proposed in a motion to amend under §42.121, shall be construed using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b), including construing the claim in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.

[9] All references to the page numbers of the Joint Claim Construction and Prehearing Statement are to the page numbers inserted by Patent Owner in the bottom, right-hand corner of each page in Exhibit 2008.

Under the standard set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–19 (Fed. Cir. 2005) (en banc), claim terms are given their ordinary and customary meaning, as would have been understood by a person of ordinary skill in the art at the time of the invention, in light of the language of the claims, the specification, and the prosecution history of record. *See Thorner v. Sony Comput. Ent. Am. LLC*, 669 F.3d 1362, 1365–66 (Fed. Cir. 2012). There is a "heavy presumption," however, that a claim term carries its ordinary and customary meaning. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002) (citation omitted).

We determine we need not explicitly construe any claim terms for purposes of this Decision. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) ("we need only construe terms 'that are in controversy, and only to the extent necessary to resolve the controversy'" (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng'g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

B. Legal Standards

A patent claim is unpatentable as obvious if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary

skill in the art; and (4) objective evidence of non-obviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

"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*, 815 F.3d at 1363 (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")). 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).

C. *Level of Ordinary Skill in the Art*

With regard to the level of ordinary skill in the art, Petitioner contends that:

> A person of ordinary skill in the relevant field or art ("POSITA") as of the claimed priority date of the '638 patent would have had a bachelor's degree in electrical engineering, computer science, computer engineering, or equivalent field, and at least two years of prior experience with image capture/scanning technology, involving transferring and processing of image data to and at a server. Less work experience may be compensated by a higher level of education and vice versa.

Pet. 14 (citing Ex. 1102 ¶¶ 45–47). Patent Owner notes that, "[f]or the purposes of this Preliminary Response only, Patent Owner applies the skill level of a POSITA proposed by Petitioner," and "may propose a different level of skill in the art in the event that the Board institutes review." Prelim. Resp. 21.

For purposes of this Decision, we adopt Petitioner's definition of the level of ordinary skill in the art because it is consistent with the '638 patent and the asserted prior art.

D.   *Claim 20: Consideration of Alleged Obviousness in View of Garcia, Byrne, Lev, and Watanabe, With or Without Maeda*

As noted above, Petitioner contends that independent claim 20 of the '638 patent would have been obvious in view of a combination of the teachings of the cited references. Pet. 7, 19–51, 54–59. In this proposed combination, Petitioner argues, "Garcia teaches using a customer's handheld mobile device to capture a check image and transmit the image to a bank for processing," and for "certain implementation details recited in the challenged claims [that] are not expressly described in Garcia, these details would have been obvious in view of analogous art, including Byrne, Lev, and Watanabe." *Id.* at 19–20. Specifically, Petitioner asserts that, although these features are not disclosed by Garcia, a skilled artisan would have been motivated to combine the teachings of the cited references so:

> When Garcia's system is implemented . . . in view of Byrne, Lev, and Watanabe, the resulting "Garcia/Byrne/Lev/Watanabe" combination provides that Garcia's mobile device includes a computer application that: (1) is implemented as a downloaded app provided by a bank per Byrne; (2) checks for errors before transmitting/submitting the check to a bank per Byrne; and (3) instructs a customer to take a photo of the check per Lev; and (4) uses the display of the handheld mobile device to assist the customer in taking the photo of the check and assisting the customer as to an orientation for taking the photo per Watanabe.

Id. at 33. The Petition includes separate sections to support modifying Garcia to include (1) a downloaded app in view of Byrne (*id.* at 20–25),

(2) checking for errors in view of Byrne (*id.* at 25–27), (3) providing interactive instructions to a customer in view of Lev (*id.* at 27–30), and (4) using a display to assist a customer in taking the photo of the check in view of Watanabe (*id.* at 30–33).

Patent Owner asserts that "the Petition wholly fails to explain why a POSITA would have been motivated, without the benefit of hindsight, to combine the references to create the claimed invention" and "relies on entirely conclusory statements, lacking any explanation how the modifications would be carried out, much less why a POSITA would have perceived the benefits of such changes to outweigh the risks." Prelim. Resp. 27. The Patent Owner argues:

> The instant Petition recycles almost verbatim the same arguments regarding the same prior art reference combination that were presented in IPR2021-01074, which challenges US10,482,432 ("the '432 patent") having the same priority date. Like the '638 patent, the '432 patent recites a mobile device check deposit system involving the step of "checking for errors before the submitting step." Like the instant Petition, the petition directed to the '432 patent argued a combination of the Byrne reference and the Garcia reference rendered obvious this error checking strategy. In fact, the motivation to combine analysis in both petitions is essentially identical.

Id. at 1–2. Patent Owner contends that arguments raised in the current Petition have been raised, and rejected, in prior proceedings including IPR2021-01074, in which Petitioner's "motivation to combine analysis [for Garcia and Byrne] . . . is essentially identical" to the present Petition, and in which the "PTAB expressly rejected this argument." *Id.* at 1–6.

The sole independent, challenged claim (claim 1) of the '432 patent at issue in IPR2021-01074 recited, "checking for errors before the submitting

step" (IPR2021-01074, Ex. 1101, 14:48), and the sole independent, challenged claim (claim 20) of the '638 patent recites, "the system being configured to check for errors before the submitting is performed by the customer's handheld mobile device" (Ex. 1101, 16:65–67). Petitioner's arguments and evidence with regard to these limitations are substantially the same in all relevant respects. *Compare* IPR2021-01074, Paper 4 (Petition), 24–26, 45–46, *with* Pet. 25–27, 46–47; *see also* Prelim. Resp. 1–6. In IPR2021-01074, we considered the arguments and evidence relating to the "checking for errors" limitation in the challenged claims and denied institution. IPR2021-01074, Paper 21 (Decision Denying Institution). Our decision here is substantially the same as our decision in IPR2021-01074.

Having considered the relevant portions of the Petition, we determine that Petitioner has not shown a reasonable likelihood of establishing that a skilled artisan would be motivated to combine the teachings of Garcia and Byrne to arrive at "the system being configured to check for errors before the submitting is performed by the customer's handheld mobile device" limitation of claim 20. Ex. 1101, 16:65–67; *see also* Pet. 25–27.

Petitioner acknowledges that Garcia does not teach this limitation. Pet. 25 ("Garcia does not expressly teach that the system is configured to check for errors before the customer's handheld device submits the check image."). When addressing this limitation in the Petition, the only reference cited by Petitioner as teaching the elements of this limitation is Byrne (Ex. 1104). *Id.* at 46–47; *see also id.* at 25 ("Byrne teaches that the user's device performs checking for errors before the transmitting/submitting step."). And, Petitioner argues that "a POSITA would have found it obvious to incorporate Byrne's 'checking for errors before the submitting' into Garcia's

computer application that carries out the interactive check deposit session."
Id. at 47; *see also id.* at 25–27.

Petitioner relies on paragraphs 174–180 of Byrne as teaching this limitation. Pet. 25 ("Byrne teaches that, before the check image is submitted to the bank server, the user's device 'detect[s] whether the check is endorsed,' and 'check[s] … that the check had been properly scanned.'") (citing Ex. 1104 ¶¶ 174–180), 46 ("During Byrne's check deposit process, the user's device 'detect[s] whether the check is endorsed,' and 'uses a checking means, such as checking for an imprint image, a scanned serial number, and the like, to indicate that the check had been properly scanned.'") (citing Ex. 1104 ¶¶ 174–180).

With regard to incorporating these teachings of Byrne into the mobile device of Garcia, the Petition states:

> A POSITA would have been motivated to combine Garcia with Byrne so that Garcia's handheld mobile device checks for errors before submitting. Garcia sends images by "a mobile telephone communications network, for example a GSM/GPRS network. . . ." EX1103, 11:21-12:1. A POSITA would have known that such networks are bandwidth and resource-constrained, and that communications over such networks takes time. Accordingly, a POSITA would have been motivated to address errors at Garcia's handheld mobile device, before the check image is submitted to ***avoid wasting communications resources and adding delays.*** A POSITA would have understood that Byrne provides the requisite solution to this problem—checking for errors before the check image is sent. EX1104, [0174]-[0183]. Byrne's checking steps would have improved Garcia's overall functionality and experience by helping reduce the number of useless transactions. The combination would have merely amounted to using a known technique (checking for errors before submitting the check image) to improve similar devices (Garcia's mobile

19

> device for check deposit) in the same way (***avoid wasting
> resources and adding delays***). EX1102, ¶83.
>
> A POSITA would have had a reasonable expectation of
> success in combining Garcia with Byrne so that Garcia's
> handheld mobile device checks for errors before submitting.
> *First*, it was well-known that mobile devices could analyze
> check images for certain information or error. *See* EX1115
> [Ramachandran], 8:23-46 (explaining that a "portable terminal"
> may "scan[] and read[] written indicia," which "may include the
> signature of an authorized user," to be reproduced on the
> portable terminal's display "for purposes of identifying the
> authorized user or the authenticity of a transaction"). *Second*,
> Byrne's error checking would have simply been another step in
> Garcia's check deposit process to provide predictable results of
> identifying checks with errors before they are submitted to the
> bank. A POSITA would have understood that the checking step
> would not have affected the overall functionality of Garcia's
> handheld mobile device, particularly because Byrne teaches that
> its checking step occurs during a check deposit process similar
> to Garcia's check deposit process. *Compare* EX1104, [0173]-
> [0186] *with* EX1103, 10:10-17. EX1102, ¶84-86.
>
> Combining Garcia's computer application with Byrne's
> teaching would have merely amounted to applying a known
> technique (Byrne's checking for errors before submitting) to a
> known device (Garcia's computer application) ready for
> improvement (ready for ***reducing wasteful network
> transmission and delays***) to yield predictable results of
> reducing time/cost of sending check images and the number of
> rejected transactions. EX1102, ¶87.

Pet. 25–27 (emphasis added) (alterations in original). Although this passage

is somewhat lengthy, the only reasons provided for combining the relevant

teachings of Garcia and Byrne are "to avoid wasting communications

resources and adding delays," "avoid wasting resources and adding delays,"

and "reducing wasteful network transmission and delays." *See id.*

However, the only argument as to the existence of the alleged motivating

waste and delay is: "Garcia sends images by 'a mobile telephone communications network, for example a GSM/GPRS network... A POSITA would have known that such networks are bandwidth and resource-constrained, and that communications over such networks take[ ] time." *Id.* at 25 (quoting Ex. 1103, 11:21–12:1). In the Petition, there is no explanation or reasoning to support concluding, based on Garcia's statement that images are sent using a mobile telephone communications network, that a skilled artisan would recognize waste and delay even if such networks are bandwidth and resource-constrained and that communications over such networks take time. *See id.* And, there is no explanation or reasoning for concluding that a skilled artisan would recognize that to "check for errors before the submitting" in the manner taught by Byrne would help alleviate waste and delay in Garcia's system.

The only articulated rationale to combine in the Petition is a simple, unelaborated assertion that a skilled artisan would have known that "networks are bandwidth and resource-constrained" and "communications over such networks take time." This assertion is too general[10] and conclusory to accorded much weight and is inadequate to support the finding of rationale to combine. There is no elaboration in the Petition as to what is meant by this sentence. The Petition fails to explain what pertinent knowledge a skilled artisan would have had and how exactly this would have motivated the combination of the relevant teachings of Garcia and Byrne.

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[10] We believe a skilled artisan would appreciate that all networks are bandwidth and resource-constrained and all communications over all networks take time.

Petitioner also fails to consider the entire disclosure of Garcia regarding the networks used for communications. In the Petition (and paragraph 83 of the Mowry Declaration (Ex. 1102)), the following quote from Garcia is provided in the motivation to combine section: "Garcia sends images by 'a mobile telephone communications network, for example a GSM/GPRS network.'" Pet. 25 (quoting Ex. 1103, 11:21–12:1). The entire sentence from which this quotation is extracted states: "[t]he communication link between each user and the institution consists of a mobile telephone communications network, for example a GSM/GPRS network *or any future technology with the technological capabilities adapted to the present and future demands of the method of reference*." *Id.* at 11:20–12:3 (emphasis added); *see also id.* at 12:15–17 (In the description of a preferred embodiment, the communications are by "mobile network (GSM, GPRS, *or any future technology*) of a telecommunications operator company.") (emphasis added). Petitioner (and Dr. Mowry) do not reconcile the contentions regarding motivation to combine with Garcia's statement that a GSM/GPRS network is just an example and that Garcia specifically contemplates the use of future technology with technological capabilities adapted to use with the disclosed method for remote deposit of checks. Moreover, GSM/GPRS networks were widely adopted and used which undermines Petitioner's contention that a skilled artisan would know that these networks had a problem with bandwidth, resource-constraints, and/or time delays.

Moreover, Garcia states:

> This system achieves greater *simplicity, speed,* and security in the process of accepting bank documents and bills, and particularly in depositing checks, by replacing the

> traditional check reader with a multi-purpose mobile device. The ***immediate processing*** of the information transmitted by this system and the electronic treatment thereof allows the ***immediate availability*** in the user's account and the ***elimination of manual mechanization*** by the institution, which thus ***reduces the labor necessary*** because the truncation process is performed by remote devices external to the financial institution. The user of this service ***avoids unnecessary trips to the bank branch*** to present documents for collection, and the ***immediate display*** of the image in his account. In general, ***this system will facilitate the implementation of electronic banking*** in order to perform the transactions for which it is intended.

Ex. 1103, 7:18–8:4 (emphasis added). Garcia compares prior processes involving trips to the bank by the user and manual handling by the bank with the immediacy of its electronic system. Thus, the reference Petitioner proposes to modify because of waste and delay explicitly extolls the "simplicity [and] speed" of its system, which contradicts Petitioner's rationale. And, compared with the prior art processes for depositing and processing checks, Garcia's system for submitting and processing checks using a mobile device does not appear to suffer from the problems of waste and delay. Petitioner does not reconcile this passage in Garcia with its arguments relating to rationale to combine.

For these reasons, we are not persuaded that a skilled artisan would have been motivated to combine the relevant teachings of Garcia and Byrne in the manner proposed in the Petition. Accordingly, we determine that Petitioner has not presented adequate and persuasive reasoning to combine the cited references to establish that the "check for errors before the submitting" limitation would have been obvious in the context of claim 20 of the '638 patent.

E. Dependent Claim 22

As noted above, Petitioner also challenges dependent claim 22 of the '638 patent. *See* Pet. 7. Claim 22 recites, "[t]he system of claim 20, wherein the customer's handheld mobile device is a Personal Digital Assistant (PDA)." Ex. 1101, 17:6–8. With regard to claim 22, Petitioner relies on its showing with regard to claim 20 for all the limitations of claim 22, except the additional limitation specifically recited in claim 22 (i.e., "wherein the customer's handheld mobile device is a Personal Digital Assistant (PDA)"). *See* Pet. 51–54, 59–60.

With regard to challenged dependent claim 22, Patent Owner argues that claim 22 would not have been obvious for at least the same reasons as claim 20. Prelim. Resp. 58 ("Claim 22 depends directly from claim 20, and therefore is not obvious over the [asserted] prior art combination[s] . . . for at least the same reasons as described above with respect to claim 20."). For the reasons discussed above with regard to claim 20, we determine that the Petition does not show a reasonable likelihood of establishing the unpatentability of challenged dependent claim 22.

III. MOTIONS TO SEAL

There are three joint motions to seal pending: Paper 9 (relating to the Preliminary Response and Exhibit 2006); Paper 13 (relating to the Reply); and Paper 17 (relating to the Sur-reply). In each of these motions, the parties seek to protect as confidential certain information that relates to the issue of whether Petitioner has properly identified all the real parties in interest in its Petition. *See* 35 U.S.C. § 312(a)(2). As we deny the Petition on the merits and do not grant the request to institute an *inter partes* review, the issue of identification of the real parties in interest to this proceeding is

moot. Therefore, we do not reach the arguments and evidence of the parties relating to whether Petitioner identified all the real parties in interest in the Petition, and we make no reference in this Decision to the documents and information that the parties seek to protect as confidential.

In the first Joint Motion to Seal, the parties request entry of a Protective Order that is substantially the same as the Board's Default Protective Order (*see* Consolidated Trial Practice Guide[11] at 107–122 (App. B, Protective Order Guidelines and Default Protective Order)). Paper 9, 2.[12] The parties also request sealing of Exhibit 2006 and sealing of portions of the Preliminary Response relating to that exhibit. *Id.* at 2–3. The portions of the Preliminary Response (Paper 11) requested to be sealed can be identified from the redacted version of the Preliminary Response filed as Paper 12. Based on the representations in the Joint Motion to Seal (Paper 9), the parties have shown good cause for entering the Protective Order and for sealing Exhibit 2006 and the identified portions of the Preliminary Response.

Paper 13 (Joint Motion to Seal the Reply) and Paper 17 (Joint Motion to Seal the Sur-reply) request sealing of the portions of the Reply and Sur-reply relating to Exhibit 2006. The portions of the Reply (Paper 14) and Sur-reply (Paper 18) requested to be sealed can be identified from the redacted version of the Reply filed as Paper 16 and from the redacted version of the Sur-reply filed as Paper 20. Based on the representations in

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[11] *Available at* https://www.uspto.gov/TrialPracticeGuideConsolidated.
[12] Pages 2–11 of Paper 9 are numbered 1–10, respectively. We refer to the actual page numbers.

these two Joint Motions to Seal (Papers 13 and 17), the parties have shown good cause for sealing the identified portions of the Reply and Sur-reply.

For these reasons, we *grant* the three joint motions to seal (Papers 9, 13, 17).

IV. CONCLUSION

The Petitioner has not persuasively established that a skilled artisan would have been motivated to combine the cited references so as to render any of the challenged claims unpatentable. Accordingly, we determine that Petitioner has not demonstrated a reasonable likelihood of showing at least one of the claims challenged in the Petition would have been obvious.

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), no *inter partes* review as to any claim of the '638 patent is instituted; and

FURTHER ORDERED that the motions to seal (Papers 9, 13, 17) are *granted*; a Protective Order in the form of Attachment A to Paper 9 is entered; and Exhibit 2006 and the portions of the Preliminary Response, Reply, and Sur-reply requested to be sealed are sealed until further order. [13]

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[13] The attention of the parties is directed to 37 C.F.R. § 42.56 ("After denial of a petition to institute a trial or after final judgment in a trial, a party may file a motion to expunge confidential information from the record.").

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