UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TRUIST BANK, Petitioner,

v.

UNITED SERVICES AUTOMOBILE ASSOCIATION, Patent Owner.

IPR2023-00143 Patent 10,482,432 B1

Before KRISTEN L. DROESCH, TERRENCE W. McMILLIN, and JULIET MITCHELL DIRBA, *Administrative Patent Judges*.

Opinion for the Board filed by Administrative Patent Judge McMILLIN.

Opinion Concurring filed by Administrative Patent Judge DIRBA.

McMILLIN, Administrative Patent Judge.

DECISION Denying Institution of *Inter Partes* Review 35 U.S.C. § 314

#### I. INTRODUCTION

Truist Bank ("Petitioner") filed a Petition to institute an *inter partes* review of claims 1–23 (the "challenged claims") of U.S. Patent No. 10,482,432 B1 (Ex. 1001, the "'432 patent") pursuant to 35 U.S.C. § 311 *et seq.* Paper 1 ("Petition" or "Pet."). United Services Automobile Association ("Patent Owner") filed a Preliminary Response. Paper 11 ("Preliminary Response" or "Prelim. Resp."). With our authorization (*see* Ex. 1032), Petitioner filed a Reply to the Preliminary Response (Paper 12 ("Preliminary Reply" or "Prelim. Reply")) and Patent Owner filed a Surreply to the Preliminary Reply (Paper 14 ("Preliminary Sur-reply" or "Prelim. Sur reply")).

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, and the Surreply and the evidence of record, we do not institute an *inter partes* review of the '432 patent on the grounds of unpatentability presented in the Petition.

#### A. Related Proceedings

The parties identify the following district court litigation as related matters because they involve the '432 patent: (1) *United Services Automobile Association v. Truist Bank*, 2:22-cv-00291-JRG-RSP (E.D. Tex.); (2) *United Services Automobile Association v. BBVA USA*, 2:21-cv-00311-JRG (E.D. Tex.); and (3) *United Services Automobile*  Association v. PNC Bank N.A., 2:20-cv-00319-JRG-RSP (E.D. Tex.). Pet. 73; Paper 5 (Patent Owner's Mandatory Notices), 2.

The parties also identify the following completed (institution denied) proceedings before the Board as involving the '432 patent: *PNC Bank, NA v. United Services Automobile Association*, IPR2021-01071; and *PNC Bank, NA v. United Services Automobile Association*, IPR2021-01074. Pet. 73; Paper 5, 2.

And, Patent Owner identifies "IPR2023-00144 [that] was filed concurrently by Petitioner also challenging the '432 patent" as a related matter. Paper 5, 2; *see also* Paper 3 (Petitioner's Notice Ranking Petitions).

#### B. The '432 Patent

The '432 patent is titled "Systems and Methods For Remote Deposit Of Checks." Ex. 1001, code (54). The disclosure relates to "[r]emote deposit of checks . . . facilitated by a financial institution[, a] customer's general purpose computer[,] and image capture device . . . leveraged to capture an image of a check and deliver the image to financial institution electronics" such that a "[check deposit] transaction can be automatically accomplished utilizing the images and data thus acquired." *Id.*, code (57).

The '432 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 1:22–24, 2:1–6. In addition, traditional check deposit and clearing do not provide quick access to the funds from the check. *Id.* at 2:1–27. Thus, the '432 patent addresses "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 2:27–30.

Figure 1 of the '432 patent is reproduced below.



FIGURE 1

Figure 1 of the '432 patent, reproduced above, "illustrates a broad view of a [network] system in which the described embodiments may be employed." *Id.* at 3:15–16.

The system 100 includes: (i) a "customer-controlled, general purpose computer 111" used by an account owner 110, e.g., a bank customer located at the customer's private residence; (ii) an "image capture device 112 [that] may be communicatively coupled to the computer"; and (iii) financial institutions 130, 140, and 150, which are retail banks, investment banks, investment companies, or other type of entities capable of processing a transaction involving a negotiable instrument. *Id.* at 3:46–4:64, 5:4–14.

Account owner 110 owns an account 160 held at financial institution 130. *Id.* at 5:26–31. 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 5:62–65. "[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 6:4–7. Account owner 110 then sends the image to financial institution 130. *Id.* at 6:6–9. Upon receiving the image, financial institution 130 communicates with other financial institutions (e.g., 140 and 150) to clear the check and credit the funds to account 160. *Id.* at 6:12–49.

Figure 2 of the '432 patent is reproduced below.



Figure 2, reproduced above, "illustrates a method for facilitating deposit of a check from the customer controlled general purpose computer." *Id.* at 3:17–19.

The '432 patent explains that the steps "may be viewed as performed by a server computer associated with a financial institution, in conjunction with a software component that operates from a customer-controlled general purpose computer." *Id.* at 6:52–58. More particularly, "the darker boxes [in

Figure 2] indicate steps that are performed by the server, for example by delivering information to the user through the user's browser application," while "[the] lighter boxes inside 211 indicate steps that are performed by the software component, as it executes on the customer computer," with "alternative configurations . . . readily achievable by moving functions from server to software component or vice-versa." *Id.* at 6:59–7:2.

As shown in Figure 2, after downloading or otherwise accepting a software component (e.g., from a financial institution's server) to be installed on the customer-controlled general purpose computer 200, the customer has the capability to make deposits from his general purpose computer. Id. at 7:3–42. After identifying a deposit account, identifying an amount of a check or other negotiable instrument the customer wishes to deposit, and endorsing the check (steps 201–204 in Figure 2), "[t]he customer may next be instructed to provide an image of a front side of a check 205, for example, by using an image capture device." Id. at 7:47-8:7. For example, "the customer may be instructed to place the check face down on a flatbed scanner, and may further be instructed as to the location and orientation of the check on the scanner," or "the customer is instructed to take a digital photograph of the check using a digital camera . . . [and] instructed as to the position and orientation of the check, lighting, angle of camera, distance and focal length (zoom) of camera, and so forth." Id. at 8:5–21. The software component on the customer's device may guide the customer by providing a graphical illustration of how the customer should provide the image. Id.

The software component on the customer's device "may next cause the image of the check to be presented to the customer for editing, e.g. by

asking the customer to crop and/or rotate the check image to a predetermined orientation 206." *Id.* at 8:45–48. The customer may also be asked to indicate the bottom right corner of the check image, and the image may be cropped to contain only the check image, thereby removing a portion of the originally obtained image. *Id.* at 8:51–55. After obtaining and storing (in a storage location, step 207) images of front and back sides of the check, a log file may be generated 209 to collect data for processing or troubleshooting the deposit transaction. *Id.* at 8:56–64. Once the desired images are collected and edited, they are delivered to the bank server for processing the deposit 210. *Id.* at 9:1–3. If the bank's (or other financial institution's) server determines that the delivered images and any corresponding data are sufficient to go forward with the deposit, the customer's account is provisionally credited, and a confirmation page is delivered to the customer via customer's browser application 212. *Id.* at 9:3–11.

### C. Challenged Claims

Of the challenged claims (which constitute all claims of the '432 patent), claim 1 is the only independent claim. Ex. 1001, 14:23– 16:20 (all claims). Claim 1 recites:

- 1. A system comprising:
- a customer's *mobile device* including a downloaded app, the downloaded app provided by a bank to control check deposit by causing the customer's *mobile device* to perform:
  - instructing the customer to have a *digital camera* take a photo of a check;
  - giving an instruction to assist the customer in placing the *digital camera* at a proper distance away from the check for taking the photo;

presenting the photo of the check to the customer after the photo is taken with the *digital camera*;

using a wireless network, transmitting a copy of the photo from the customer's *mobile device* and submitting the check for mobile check deposit in the bank after presenting the photo of the check to the customer; and

- 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 *mobile device*;
- wherein the downloaded app causes the customer's *mobile device* to perform additional steps including:
  - confirming that the mobile check deposit can go forward after optical character recognition is performed on the check in the photo; and

checking for errors before the submitting step.

Ex. 1001, 14:23-48 (emphasis added).

D. The Asserted Grounds

Petitioner challenges claims 1–23 of the '432 patent based on the

| grounds se | t forth in | n the table below. | Pet. 2–3. |   |
|------------|------------|--------------------|-----------|---|
|            |            |                    |           | - |

| Ground | <b>Claims Challenged</b>  | 35 U.S.C. | Reference(s)                                                |
|--------|---------------------------|-----------|-------------------------------------------------------------|
| 1      | 1, 2, 8, 9, 11–17, 22, 23 | § 103     | Acharya, <sup>1</sup> King, <sup>2</sup> Dance <sup>3</sup> |
| 2      | 3, 4                      | § 103     | Acharya, King, Dance,<br>Slater <sup>4</sup>                |
| 3      | 5, 6                      | § 103     | Acharya, King, Dance,<br>Maloney <sup>5</sup>               |
| 4      | 7                         | § 103     | Acharya, King, Dance,<br>Maloney, Jones <sup>6</sup>        |

<sup>&</sup>lt;sup>1</sup> US 2005/0267843 A1, pub'd Dec. 1, 2005 (Ex. 1005).

<sup>&</sup>lt;sup>2</sup> US 2006/0026140 A1, pub'd Feb. 2, 2006 (Ex. 1006).

<sup>&</sup>lt;sup>3</sup> US 2003/0086615 A1, pub'd May 8, 2003 (Ex. 1007).

<sup>&</sup>lt;sup>4</sup> US 7,792,753 B1, issued Sep. 7, 2010 (Ex. 1008).

<sup>&</sup>lt;sup>5</sup> US 7,028,886 B1, issued Apr. 18, 2006 (Ex. 1009).

<sup>&</sup>lt;sup>6</sup> US 2002/0145035 A1, pub'd Oct. 10, 2002 (Ex. 1010).

| Ground | <b>Claims Challenged</b> | 35 U.S.C. | Reference(s)                                   |
|--------|--------------------------|-----------|------------------------------------------------|
| 5      | 10, 18–20                | § 103     | Acharya, King, Dance,<br>Beck <sup>7</sup>     |
| 6      | 21                       | § 103     | Acharya, King, Dance,<br>Takehara <sup>8</sup> |

Petitioner asserts that, "[a]ssuming an effective filing date of October 31, 2006," (*see* Ex. 1001, code (63)), then the cited references qualify as prior art. Pet. 1–2. Patent Owner does not contest this assertion. *See generally* Prelim. Resp.

Petitioner additionally relies on the Declaration of Dr. David Doermann (Ex. 1003 ("Doermann Decl.")).

# II. ANALYSIS

We deny the Petition and do not institute trial, because Petitioner relies on the combination of Acharya and King for all the asserted grounds and Petitioner has failed to establish that a skilled artisan would have been motivated to combine Acharya and King as asserted in the Petition.

# A. 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

<sup>&</sup>lt;sup>7</sup> US 7,996,312 B1, issued Aug. 9, 2011 (Ex. 1011).

<sup>&</sup>lt;sup>8</sup> JP 2004-23158 A, pub'd Jan. 22, 2004 (Ex. 1014).

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

When evaluating a combination of teachings, we must also "determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue." *KSR*, 550 U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)); *Unigene Labs., Inc. v. Apotex, Inc.*, 655 F.3d 1352, 1360 (Fed. Cir. 2011) ("[O]bviousness requires the additional showing that a person of ordinary skill at the time of the invention would have selected and combined those prior art elements in the normal course of research and development to yield the claimed invention.").

"In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable." *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (citing 35 U.S.C. § 312(a)(3) (requiring *inter partes* review petitions to identify "with particularity . . . the evidence that supports the grounds for the challenge to each claim")). Petitioner, however, 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).

#### B. Level Ordinary Skill in the Art

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

A person of ordinary skill in the art (POSA) of the '432 patent would have had either: (1) a Bachelor of Science degree in Electrical Engineering, Computer Engineering, Computer Science, or an equivalent field, with at least two years of academic or industry experience in financial technology, including image processing; or (2) a Master of

Science degree in Electrical Engineering, Computer Engineering, Computer Science, or an equivalent field, with at least a year of academic or industry experience in the same field. Higher levels of education may offset less experience and vice versa.

Pet. 5 (citing Doermann Decl. ¶¶ 24–26). "For the purposes of this Preliminary Response only, Patent Owner applies the skill level of a [POSA] proposed by Petitioner," but "may propose a different level of skill in the art in the event that the Board institutes review." Prelim. Resp. 22.

Petitioner's proposal is consistent with the technology described in the Specification of the '432 patent and the cited prior art. In order to determine whether Petitioner has demonstrated a reasonable likelihood of showing the unpatentability of at least one of the challenged claims, we adopt Petitioner's proposed level of skill in the art.

### C. Claim Construction

We construe claims using the same claim construction standard that would be used in a civil action under 35 U.S.C. § 282(b), as articulated by the Federal Circuit in *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (*en banc*), and subsequent cases. *See* 37 C.F.R. § 42.100(b). Under the standard set forth in *Phillips*, 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).

Petitioner asserts that "the Board need not construe any terms[] because the claims are invalid under any reasonable interpretation." Pet. 7 (citing Ex. 1003 (Doermann Decl.) ¶¶ 27–31). "Patent Owner does not take any position regarding claim construction at this stage in the proceedings." Prelim. Resp. 22.

We agree with Petitioner that no claim construction is necessary to make this decision on institution. *See Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (explaining that construction is needed only for terms that are in dispute, and only as necessary to resolve the controversy).

#### D. Cited References

The only two cited references discussed in this decision are Acharya and King which are summarized below.

#### 1. Acharya (Ex. 1005)

Acharya is titled "System and Method for Electronic Deposit of Third-Party Checks by Non-Commercial Banking Customers from Remote Locations." Ex. 1005, code (54). Acharya "relates generally to a system and method for initiating a deposit transaction, where the depositor is a non-commercial banking customer located at a remote location, and where the item to be deposited is a paper check." *Id.* ¶ 1.

"The enabling system features a Remote Customer Terminal (RCT) with certain input devices[] connected to a bank system." *Id.*, code (57). The preferred embodiment includes an RCT located at a home and constituting "a personal computer with an attached image scanner." *Id.* ¶ 14. To remotely deposit the check, a bank customer uses the system to capture

an image of the check and transmit the image to a bank of first deposit (BOFD). *Id.* 

Acharya's Figure 2, reproduced below (next page), illustrates a "flow diagram from the perspective of a bank customer, according to one embodiment of the invention." *Id.* ¶ 17. The process "begins when the bank customer receives a check payable to him/her 200." *Id.* ¶ 33. The bank customer may "log on" to a BOFD system from a RCT "using a Personal Identification Number (PIN), password, and/or other means of identification 210." *Id.* ¶ 34. After "select[ing] 'check deposit' from a menu of transaction options 220," the bank customer "may respond to prompts for



Acharya's Figure 2, reproduced above, illustrates a process that "begins when the bank customer receives a check payable to him/her 200." *Id.* ¶¶ 32–33.

each item of data needed to deposit the check." *Id.* ¶¶ 34–35. "[T]he [bank] customer may enter a predetermined set of data all at once [230], for example where all data input fields are visible on a video display screen." *Id.* ¶ 35. "A complete set of data may comprise customer identification,

customer account number, name of payor, name and routing number of payor's bank, the amount of the check, an image of the check, and other information." *Id.* "The [bank] customer may be prompted to supply missing information [240]." *Id.* After providing "[a] complete set of data" preferably "all at once," the bank customer "may then submit the transaction data to the BOFD system for processing 250" and, in response, "may receive acknowledgment from the BOFD system that the transaction is being processed 260." *Id.* ¶¶ 35–36. The bank customer also "may receive a response 270 indicating . . . that immediate provisional credit has been given, that full credit has been awarded, or that the transaction request has been denied." *Id.* ¶ 37. If the bank customer was issued provisional credit, "the paper check may be subjected to certain check actions 280 in order to prevent re-deposit of the same check," such as marking the check "by human or machine readable ink" or physically capturing the check by the RCT for "deposit into an [automated teller machine (ATM)] vault." *Id.* ¶ 38.

#### 2. King (Ex. 1006)

King is titled "Content Access with Handheld Document Data Capture Devices." Ex. 1006, code (54). King "relates generally to search and retrieval of electronic materials and, more specifically, to data gathering systems and methods for use in providing access to digital content from searches based on information captured from rendered documents."  $Id., \P 4$ .

King describes "[s]canning or capturing [as] the process of systematic examination to obtain information from a rendered document" and that "may involve optical capture using a scanner or camera (for example a camera in a cellphone)." *Id.*, ¶ 21. The disclosed "capture device" is generalized as follows:

Each capture device is able to communicate with other parts of the system such as a computer 212 and a mobile station 216 (e.g., a mobile phone or PDA) using either a direct wired or wireless connection, or through the network 220, with which it can communicate using a wired or wireless connection[.] In some embodiments, the capture device is integrated in the mobile station, and optionally shares some of the audio and/or optical components used in the device for voice communications and picture-taking.

*Id.* ¶ 31. Describing needed capabilities of the capture device, King states:

A capture device for use with the system needs little more than a way of capturing text from a rendered version of the document. As described earlier (Section 1.2), this capture may be achieved through a variety of methods including taking a photograph of part of the document or typing some words into a mobile phone keypad. This capture may be achieved using a small hand-held optical scanner capable of recording a line or two of text at a time, or an audio capture device such as a voicerecorder into which the user is reading text from the document. The device used may be a combination of these-an optical scanner which could also record Voice annotations, for example-and the capturing functionality may be built into some other device such as a mobile phone, PDA, digital camera or portable music player.

*Id.* ¶ 277.

Describing a "Scanner as Payment, Identity and Authentication Device," King states "the capture process generally begins with a device of some sort, typically an optical scanner . . . [;] this device may be used as a key that identifies the user and authorizes certain actions." *Id.* ¶ 109. Then describing a corresponding means to "Associate Scanner with Phone," King states "[t]he device may be embedded in a mobile phone or in some other way associated with a mobile phone account[;]" e.g., "a scanner may be associated with a mobile phone account by inserting a SIM card

associated with the account into the scanner." *Id.* ¶ 110. King also states the "scanner will often communicate with some other device," *e.g.*, "a PC, PDA, phone or digital camera to perform many of the functions of the system, including more detailed interactions with the user." *Id.* ¶ 231. Describing image capture by a mobile phone, King states:

In some embodiments, the camera built into many mobile phones is used to capture an image of the text. The phone display, which would normally act as a viewfinder for the camera, may overlay on the live camera image information about the quality of the image and its suitability for OCR, which segments of text are being captured, and even a transcription of the text if the OCR can be performed on the phone.

In some embodiments, the phone is modified to add dedicated capture facilities, or to provide such functionality in a clip-on adaptor or a separate Bluetooth-connected peripheral in communication with the phone. . . . A phone typically has sufficient processing power for many of the functions of the system to be performed locally, and sufficient storage to capture a reasonable amount of data.

*Id.* ¶¶ 307–308.

### E. Motivation to Combine Acharya and King

As shown above, Petitioner relies on combining the teachings of Acharya and King for all the asserted grounds. Pet. 2–3. Sole independent claim 1 recites two customer devices: (1) a "mobile device" and (2) a "digital camera." Ex. 1001, 14:23–48. Despite acknowledging that Acharya discloses neither a "mobile device" nor a "digital camera," (*see* Pet. 12, 21), Petitioner contends that "*Acharya* alone discloses most elements;" "*Acharya* discloses the core principles of the '432 patent;" and "[t]he '432 patent claims are indistinguishable from *Acharya* in principle" (*id.* at 7).

Patent Owner argues that Petitioner has failed to establish that a skilled artisan would have been motivated to combine the relevant teachings of Acharya and King. *See generally* Prelim. Resp. The Preliminary Response states:

The challenged claims are directed to a system using a customer's mobile device with a downloaded app that controls the mobile device and its digital camera to perform a mobile check deposit. *See* Ex. 1001, cl. 1. Petitioner does not identify any prior art system that possessed this functionality. Instead, Petitioner's asserted grounds are based on hindsight reconstruction of the challenged claims by beginning with a scanner-based remote deposit system—Acharya—and picking and choosing portions of other references to supply features, such as a digital camera, that Petitioner asserts in entirely conclusory fashion are obvious to "substitute." Petitioner does not identify any reason why a person of ordinary skill *would have* made any of these changes to Acharya.

Prelim. Resp. 1.

Petitioner relies on a combination of the teachings of Acharya and King for the "mobile device" element as recited in claim 1. *See* Pet. 10–17. Petitioner acknowledges that Acharya does not teach a "mobile device" and relies on King for teaching this claim element. *Id.* at 12 ("*Acharya* does not expressly disclose a customer's *mobile* device, but *King* does."). In support of combining these teachings of Acharya and King, Petitioner contends "[i]t would have been obvious to POSAs [persons of skill in the art] to implement *Acharya*'s RCT [Remote Customer Terminal] as a 'mobile device' such as *King*'s mobile phone, laptop, or PDA." *Id.* at 13.

With regard to motivation to combine these teachings of Acharya and King, the Petition states, "[t]he teachings and motivations disclosed in *Acharya* suggest the combination with *King*'s mobile devices." *Id*.

at 14. However, the only "teachings and motivations disclosed in *Acharya*" discussed in the Petition are:

Acharya suggests mobile devices may be used as the RCT, so long as the device is "capable of collecting data and communicating with [Bank of First Deposit] BOFD system 110" and allows non-commercial bank customers to deposit checks from the convenience of their home. *Acharya*, [0009], [0014], [0022]. *Acharya* stresses convenience, speed, and independence as key motivations behind its invention. *id.*, [0004], [0010].

Id. at 13. Petitioner's contention that Acharya "suggests mobile devices" is not further explained or supported. But, "obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." KSR, 550 U.S. at 418 (quoting In re Kahn, 441 F. 3d 977, 988 (Fed. Cir. 2006)). And, none of the paragraphs cited in Acharya suggest a "mobile device." See Ex. 1005 ¶¶ 4, 9, 10, 14, 22. Paragraph 4 discusses the advantages of Electronics Fund Transfer (EFT) in the "Background of the Invention" and does not address the system or RCT of Acharya. Id. ¶ 4 ("Two principal advantages of EFT, from the perspective of the customer, are convenience and speed. They are convenient to the extent that they do not require customers to physically visit the bank in order to initiate a financial transaction."). Paragraph 9 states, "it is one object of the invention to provide a system and method for allowing non-commercial bank customers to deposit third-party checks from remote locations." Paragraph 10 states that it is an object of the invention to provide a system and method to "initiate . . . transactions from home" especially "for customers who are confined to their homes due to poor health,

disability, or for other reasons." Thus, paragraph 10 would seem to suggest that "mobile devices" would be less useful or not needed. Paragraph 14 states, "[i]n the preferred embodiment of the invention, the RCT is located at home, and is a personal computer with an attached scanner." Paragraph 22 states "The RCT [Remote Customer Terminal] 100 may be a telephone, fax machine, personal computer, ATM, or any other computer, apparatus, or system capable of collecting data and communicating with BOFD [Bank of First Deposit] system 110." Although none of these passages *prohibit* using a mobile device as an RCT, there also is no suggestion to do so. Indeed, some of these passages suggest that the RCT should be located "at home," which seems to indicate that the only requirement is that a RCT needs to be located within a user's home, in contrast to a RCT being required to be located within a user's home as well as other locations outside a user's home. And, our review of Acharya indicates that Acharya does not suggest the use of a "mobile device" elsewhere.

In the Petition, it is contended that "*Acharya* at least suggests using a mobile device, such as a laptop, because *Acharya* discloses using a PC or any type of computer." Pet. 9 (citing Ex. 1005 ¶ 22). The cited paragraph of Acharya, in its entirety, states: "The RCT [Remote Customer Terminal] 100 may be a telephone, fax machine, personal computer, ATM, or any other computer, apparatus, or system capable of collecting data and communicating with BOFD [Bank of First Deposit] system 110." Ex. 1005 ¶ 22. There is no explicit teaching of using a mobile device in this passage. In the next paragraph, Acharya states, "The RCT input devices 101 may comprise a keypad, a keyboard, a microphone, a Magnetic Ink Character

Reader (MICR), a Digital Image Scanner (DIS), and any other device capable of collecting data." *Id.* ¶ 23. At the least, the use of "a Magnetic Ink Character Reader (MICR)" or "a Digital Image Scanner (DIS)" would restrict mobility. And, we do not agree that disclosing the use of a PC or any type of computer suggests a mobile device.

Moreover, considering the entirety of Acharya's disclosure, it does not appear to suggest the use of a mobile device. Acharya states that "[i]n the preferred embodiment of the invention, *the RCT is located at home*, and is a personal computer with an attached image scanner." Ex. 1005 ¶ 14 (emphasis added). A "personal computer with an attached image scanner" that "is located at home" does not suggest a "mobile device." And, in the "Summary of the Invention," Acharya provides the following two objects of the invention:

It is another object of the invention to provide a system and method that would *allow bank customers to initiate such transactions at home*. Such a method would be a convenience to many bank customers, and provide a new level of independence for customers who are confined to their homes due to poor health, disability, or for other reasons.

It is another object of the invention to provide a method that *would allow bank customers to deposit third party checks at ATM machines*. Most ATM's simply provide a means for holding paper checks until they are collected for processing. The present invention would make ATM's more useful by providing for electronic deposit of third party checks.

*Id.* at ¶¶ 10, 11 (emphasis added). Thus, Acharya teaches as objects of the invention initiating transactions at home or using an ATM. Acharya's teaching as objects of the invention initiating transactions at home or using an ATM and expressing a preference for "a personal computer with an

attached image scanner" that is located at home contradicts Petitioner's contention that Acharya suggests the use of a mobile device. We determine that, considering the entirety of Acharya, Acharya does not suggest the use of a "mobile device."

Petitioner also argues that "it was known before 2006 to use mobile devices for RCD [Remote Check Deposit]" and

Against this backdrop, implementing *Acharya*'s RTC as a mobile device as disclosed by *King* would have involved nothing more than simple substitution of *Acharya*'s personal computer RCT with the known mobile devices (a mobile phone, PDA, laptop, or digital camera) of *King*, to yield the same predictable result of performing check capture recognized in *Acharya*, while furthering *Acharya*'s goal of conveniently capturing check images from a customer's home. Doermann, ¶ 64.

Pet. 14–15. These arguments speak to whether a skilled artisan could have made the substitution of a "mobile device" for the RTC disclosed in Acharya but fail to provide a reason as to why a skilled artisan would have been motivated to make the substitution. *Belden Inc. v. Berk-Tec LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) ("obviousness concerns whether a skilled artisan not only *could have made* but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention"). Petitioner acknowledges that Acharya requires devices that "would have operated from the convenience of a customer's home." Pet. 14. As Petitioner acknowledges that Acharya requires operating from a customer's home, there would seem to be no reason to use a "mobile device."

In addition, Petitioner relies on a combination of the teachings of Acharya and King for the "digital camera" element as recited in claim 1. *See* Pet. 20–23. Patent Owner argues that the Petition "offers *no* reason why a person of ordinary skill in the art would have replaced Acharya's digital image scanner with a digital camera. The Petition simply asserts in entirely conclusory fashion that scanners and cameras are 'interchangeable.'" Prelim. Resp. 3.

Petitioner acknowledges that Acharya does not teach a "digital camera" and relies on King for teaching this claim element. Pet. 21 ("*Acharya* does not expressly disclose a digital camera, but *King* does."). Petitioner argues that, because Acharya includes the catch-all phrase "any other device capable of collecting data" in its list of input devices, "a POSA would have understood this to suggest digital cameras—ubiquitous image capture devices before the earliest priority date of the '432 patent." *Id.* (citing Ex. 1005 ¶ 23 ("The RCT input devices 101 may comprise a keypad, a keyboard, a microphone, a Magnetic Ink Character Reader (MICR), a Digital Image Scanner (DIS), and any other device capable of collecting data.")). We discern no teaching or suggestion of a "digital camera" in Acharya.

Petitioner contends that "[i]t would have been obvious to POSAs to implement *Acharya*'s input device used for image capture with *King*'s digital camera." Pet. 22. With regard to the motivation to combine Acharya and King in this manner, the Petition states, "POSAs would have found it obvious to implement *Acharya*'s image capture device with a digital camera, because *Acharya* discloses using *any* device capable of collecting data, and *King* discloses scanners and digital cameras as *interchangeable* image

capture devices." *Id.* (citing Ex. 1006 ¶¶ 21, 277, 300–303, 307). The term "digital camera" appears three times in King. *See* Ex. 1006 ¶¶ 231, 277, 303. Paragraph 231, that Petitioner does not cite, is the first time "digital camera" appears in King and states, "A *scanner* will often communicate with some other device, such as a PC, PDA, phone or *digital camera* to perform many of the functions of the system, including more detailed interactions with the user." Here, King teaches using a scanner together with a digital camera. Paragraphs 277 and 303 contemplate using a mobile phone rather than a scanner to capture information for King's system, but we do not agree that these paragraphs broadly teach or suggest a digital camera is interchangeable with a scanner.

Moreover, we determine that, even if King discloses that scanners and digital cameras are interchangeable, this would show that they *could* be substituted for each other and does not establish a motivation for a skilled artisan to use a digital camera as disclosed in King for "any device capable of collecting data" as disclosed in Acharya. *Belden*, 805 F.3d at 1073 ("obviousness concerns whether a skilled artisan not only *could have made* but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention"). Petitioner fails to articulate any specific reason why a skilled artisan *would have been* motivated to interchange a digital camera for "any device capable of collecting data."

Thus, we determine that Petitioner has failed to show that a skilled artisan would have been motivated to combine the teachings of Acharya and King as set forth in sole independent claim 1 of the '432 patent and as proposed in the Petition. On this basis, Petitioner has failed to show a

reasonable likelihood of prevailing with respect to any of the claims challenged in the Petition. We, therefore, deny the Petition and do not institute *inter partes* review.

#### III. CONCLUSION

For the reasons discussed above, 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.

### IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that no *inter partes* review is instituted on any challenged claims under the grounds presented in the Petition.

### UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TRUIST BANK, Petitioner,

v.

UNITED SERVICES AUTOMOBILE ASSOCIATION, Patent Owner.

IPR2023-00143 Patent 10,482,432 B1

Before KRISTEN L. DROESCH, TERRENCE W. McMILLIN, and JULIET MITCHELL DIRBA, *Administrative Patent Judges*.

DIRBA, Administrative Patent Judge, concurring.

I agree with my colleagues that Petitioner fails to show the requisite motivation to replace Acharya's scanner with King's digital camera. Petitioner contends that Acharya and King each suggest the proposed combination (*see* Pet. 20–23), but like my colleagues, I disagree. Acharya teaches that a "customer captures the image of the third-party check on the scanner" (Ex. 1005 ¶ 14), and none of the cited passages of Acharya suggest

using a different device to capture the check image (*see id.* ¶¶ 22–24). Petitioner relies on Acharya's statement that its RCT may include "any other device capable of collecting data" in addition to its "Digital Image Scanner (DIS)" and "keyboard" (*id.* ¶ 23), but this at most suggests that Acharya's RCT may *also* include other input devices, not that any of these other devices should *replace* Acharya's scanner. Moreover, I agree with my colleagues that the cited passages of King do not broadly teach or suggest that scanners and digital cameras are interchangeable image capture devices. *See* Ex. 1006 ¶¶ 21, 277, 300–303, 307 (*cited in* Pet. 21–22). Also, as my colleagues explain, even if King taught that scanners and digital cameras were interchangeable, this would at most show that Acharya's scanner *could* be replaced with a digital camera, not that an ordinary artisan *would* have been motivated to make this substitution.

For this reason, I determine that Petitioner fails to show a reasonable likelihood that it will prevail with respect to any challenged claims. I decline to address the sufficiency of Petitioner's rationale to combine Acharya and King to yield the claimed "mobile device." As a result, I concur in the majority's decision to deny institution.

#### **PETITIONER:**

Lionel Lavenue Cory Bell Kara Specht Kai Rajan Robert High Xirui Zhang Umber Aggarwal FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER, LLP lionel.lavenue@finnegan.com cory.bell@finnegan.com kara.specht@finnegan.com kai.rajan@finnegan.com robert.high@finnegan.com xirui.zhang@finnegan.com umber.aggarwal@finnegan.com

Sharonmoyee Goswami Cravath, Swaine & Moore LLP sgoswami@cravath.com

PATENT OWNER:

Anthony Rowles Michael Fleming Jonathan Lindsay IRELL & MANELLA LLP trowles@irell.com mfleming@irell.com jlindsay@irell.com