

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

BANK OF AMERICA, N.A.,
Petitioner,

v.

NANT HOLDINGS IP, LLC,
Patent Owner.

IPR2021-01333
Patent 7,899,252 B2

Before JAMESON LEE, ROBERT J. WEINSCHENK, and
ELIZABETH M. ROESEL, *Administrative Patent Judges*.

WEINSCHENK, *Administrative Patent Judge*.

JUDGMENT
Final Written Decision
Determining No Challenged Claims Unpatentable
35 U.S.C. § 318(a)
Denying Petitioner's Motion to Exclude
37 C.F.R. § 42.64(c)

I. INTRODUCTION

A. Background and Summary

Bank of America, N.A. (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting an *inter partes* review of claims 18, 26, 27, 29, and 31 (“the challenged claims”) of U.S. Patent No. 7,899,252 B2 (Ex. 1001, “the ’252 patent”). Nant Holdings IP, LLC (“Patent Owner”) filed a Preliminary Response (Paper 6, “Prelim. Resp.”) to the Petition. We instituted an *inter partes* review of the challenged claims on February 22, 2022. Paper 9 (“Dec. on Inst.”), 19. After institution, Patent Owner filed a Response (Paper 15, “PO Resp.”) to the Petition, Petitioner filed a Reply (Paper 19, “Pet. Reply”) to the Response, and Patent Owner filed a Sur-reply (Paper 24, “PO Sur-reply”) to the Reply. We held an oral hearing on November 10, 2022, and a transcript of the hearing is included in the record. Paper 34 (“Tr.”).

For the reasons set forth below, Petitioner has not shown by a preponderance of the evidence that claims 18, 26, 27, 29, and 31 of the ’252 patent are unpatentable.

B. Real Parties in Interest

Petitioner identifies itself and Bank of America Corporation as the real parties in interest. Pet. 63. Patent Owner identifies itself as the only real party in interest. Paper 3, 2.

C. Related Matters

The parties indicate that the ’252 patent is the subject of the following district court case: *NantWorks, LLC v. Bank of America Corporation*, No. 2:20-cv-07872 (C.D. Cal.). Pet. 63–64; Paper 3, 2.

D. The '252 Patent

The '252 patent relates to “digital imaging.” Ex. 1001, 1:26. Specifically, the '252 patent states that a portable imaging device captures an image of an object and transmits information regarding the image to a distal server. *Id.* at 4:30–35. At least one of the portable device and the server derives a search term from at least one of the image and the transmitted information. *Id.* at 4:35–38. At least one of the portable device and the server submits the search term to a search engine. *Id.* at 4:38–41. The search engine uses the search term to produce a results set and transmits at least a portion of the results set to the portable device. *Id.* at 4:41–44.

The '252 patent claims the benefit of several provisional applications, the earliest of which was filed November 6, 2000. *Id.* at code (60).

Petitioner does not contest this priority date. *See* Pet. 1, 12.

E. Illustrative Claim

Of the challenged claims, claim 18 is independent. Claim 18 is reproduced below.

18. A method for retrieving information from image processing, the method comprising:

providing a mobile device having a camera the mobile device configured to capture an image and configured to transmit data relating to the image an image processing platform;

configuring the image processing platform to receive the data relating to the image and to conduct image processing, including:

operating on the data relating to the image to determine if the image contains one or more recognizable symbols; and

decoding the recognizable symbols to extract symbol information by analyzing the recognizable symbols according to type;

providing access to a distal server configured to use a database to identify pertinent information associated with the recognizable symbols based on the symbol information; and

allowing the mobile device to receive the pertinent information over a network.

Ex. 1001, 19:6–26.

F. Evidence

Petitioner submits the following evidence:

Evidence	Exhibit No.
Declaration of Jeffrey J. Rodriguez, Ph.D. (“Rodriguez Declaration”)	1003
Ogasawara, US 6,512,919 B2, issued Jan. 28, 2003 (“Ogasawara”)	1005
Bolle, US 5,546,475, issued Aug. 13, 1996 (“Bolle”)	1006
Cusmariu, US 6,519,362 B1, issued Feb. 11, 2003 (“Cusmariu”)	1030
Second Declaration of Jeffrey J. Rodriguez, Ph.D. (“Second Rodriguez Declaration”)	1050

Patent Owner submits the Declaration of Chandrajit Bajaj, Ph.D.

Ex. 2010 (“Bajaj Declaration”).

G. Asserted Grounds

Petitioner asserts that the challenged claims are unpatentable on the following grounds:

Claims Challenged	35 U.S.C. §	Reference(s)/Basis
18, 26, 27	102(e) ¹	Ogasawara
29	103(a)	Ogasawara, Cusmariu
31	103(a)	Ogasawara, Bolle

II. ANALYSIS

A. Legal Standards

A claim is anticipated if each limitation of the claim is disclosed in a single prior art reference arranged as in the claim. *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008). A claim is unpatentable as obvious under 35 U.S.C. § 103(a) 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 the 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) any objective indicia of non-obviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).

B. Level of Ordinary Skill in the Art

Petitioner argues that a person of ordinary skill in the art would have had a “Bachelor of Science in Electrical Engineering, Computer Science, Computer Engineering, or equivalent, and one to two years of experience

¹ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 287–88 (2011), amended 35 U.S.C. §§ 102, 103. Because the ’252 patent was filed before the effective date of the relevant amendment, the pre-AIA versions of §§ 102, 103 apply.

working with image processing, image recognition, or a related field.” Pet. 17 (citing Ex. 1003 ¶ 43). Petitioner’s description of the level of ordinary skill in the art is supported by the testimony of Petitioner’s declarant, Dr. Jeffrey Rodriguez. Ex. 1003 ¶ 43. Patent Owner does not propose a description of the level of ordinary skill in the art or dispute Petitioner’s description. PO Resp. 15. We adopt Petitioner’s description, which is consistent with the level of ordinary skill in the art at the time of the invention as reflected in the asserted prior art.

C. Claim Construction

In an *inter partes* review proceeding, a patent claim is construed using the same standard used in federal district court in a civil action under 35 U.S.C. § 282(b), including construing the claim in accordance with the ordinary and customary meaning of the claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent. 37 C.F.R. § 42.100(b) (2020). Patent Owner proposes construing the term “the image” in all challenged claims to refer to “the same, single image.” PO Resp. 20. Based on this proposed construction, Patent Owner argues that the combination of Ogasawara and Bolle does not teach the limitations of claim 31. *Id.* at 59–60. As discussed below, for reasons unrelated to the term “the image,” Petitioner does not meet its burden to show that the challenged claims are unpatentable. *See* Sections II.D–II.F. Therefore, we determine that the term “the image” does not require an express construction to resolve the parties’ disputes regarding the asserted grounds of unpatentability.

D. Anticipation of Claims 18, 26, and 27 by Ogasawara

Petitioner argues that claims 18, 26, and 27 are anticipated by Ogasawara. Pet. 19–29. For the reasons discussed below, Petitioner has not shown by a preponderance of the evidence that claims 18, 26, and 27 are anticipated by Ogasawara.

1. Overview of Ogasawara

Ogasawara relates to “an electronic shopping system which utilizes a program downloadable wireless video phone as a purpose-type dedicated terminal which enable a shopper to capture, recognize and decode captured images.” Ex. 1005, 1:16–21. Specifically, Ogasawara describes a wireless videophone with a digital camera and a purchase transaction program. *Id.* at 18:11–22. “[A] purchaser may use the wireless videophone, in particular the digital camera, to select various items which the consumer desires to purchase . . . by capturing an image of an item’s UPC bar code data, or the like, within the image field of the digital camera.” *Id.* at 20:41–47. The purchaser “need only inform the system that the image is ready for processing by a pressing a pre-defined key on the system’s keyboard.” *Id.* at 20:51–55. The purchase transaction program “include[s] character recognition and/or pattern recognition, as well as bar code decode, software” for recognizing “various . . . codes, indicia, text, icons, and the like” in the image. *Id.* at 18:15–22, 20:55–58.

2. Claim 18

Claim 18 recites configuring an image processing platform to receive data relating to an image and to conduct image processing, including 1) “operating on the data relating to the image to *determine* if the image contains one or more recognizable symbols” (“the determining limitation”);

and 2) “decoding the recognizable symbols to extract symbol information by *analyzing* the recognizable symbols according to type” (“the analyzing limitation”). Ex. 1001, 19:12–20 (emphases added).

For the determining limitation, Petitioner argues that “Ogasawara teaches that the purchase transaction program and/or personal shopping application contain pattern recognition routines to recognize and decode symbols . . . where such symbols include barcodes, icons, text, and other indicia.” Pet. 23–24 (citing Ex. 1005, 18:11–58, 20:41–67). Petitioner also argues that “Ogasawara’s software enables a shopper to ‘capture, ***recognize and decode*** captured images.’” Pet. Reply 6 (citing Ex. 1005, 1:15–21). According to Petitioner, “Ogasawara’s system detects and recognizes those symbols that are supported (i.e., recognizable) by software downloaded to its program—i.e., its system is ‘governed solely by ***operation of the downloaded program*** which is ***coded to recognize*** either characters or patterns as ***appropriate to the application.***” *Id.* (citing Ex. 1005, 21:1–5, 22:63–66; Ex. 1050 ¶¶ 34–35).

For the analyzing limitation, Petitioner argues that Ogasawara’s “[c]haracter or pattern recognition software translates the bar or icon code image into an appropriate item identifier.” Pet. 24 (citing Ex. 1005, code (57)). “[F]or example, ‘[o]nce the bar code image has been captured, the program decodes the bar code image data to its corresponding numeric bar code data, by operating on the bar code image with pattern recognition software.’” *Id.* at 24–25 (citing Ex. 1005, 21:15–20). Petitioner also argues that “Ogasawara discloses that its pattern recognition software analyzes and decodes recognizable symbols according to type of character or pattern.” *Id.* at 25 (citing Ex. 1005, 20:55–58). According to Petitioner, “[c]haracter

recognition software supports identifying a product based on a numeric or alphanumeric code, while pattern recognition software supports recognition ... based on bar code data.” Pet. Reply 4 (citing Ex. 1005, 22:48–51).

Patent Owner argues that “Petitioner does not cite to anything in Ogasawara that operates on the image to determine if the image contains recognizable symbols like a barcode.” PO Resp. 25 (citing Pet. 22–25). Patent Owner contends that “[b]y contrast, the ’252 patent discloses ‘*a discriminator algorithm*’ which operates on the input image 18 and determines whether the input image contains recognizable symbols *If such symbols are found*, the image 18 is sent to the decode symbol 28 process.” *Id.* (citing Ex. 1001, 11:14–19). Patent Owner further argues that although “Petitioner points to several disclosures that the recognition routines *recognize* the symbol,” “Ogasawara’s ‘recognition’ refers to the decoding of the symbol to an identifier, not the act of determining the presence of the symbol in the first place.” PO Sur-reply 7 (citing Pet. Reply 5–6; Ex. 1005, code (57)). In addition, Patent Owner argues that “Ogasawara expressly states that it is *the user* which informs the system whether or not the image contains recognizable symbols such as a barcode.” PO Resp. 24–25 (citing Ex. 1005, 21:12–20).

The parties agree that claim 18 requires an image processing platform that determines if an image contains one or more recognizable symbols *before* analyzing the recognizable symbols to extract information. Pet. 3 (“if a recognizable barcode is found, . . . the software decodes that barcode”); *id.* at 23–24 (“[T]he image processing platform determines *if* the captured image contains one or more recognizable symbols . . . The image processing platform *then* decodes the recognizable symbols.”) (emphases added); PO

Resp. 26 (“The detection/discrimination step could . . . be a useful filter to avoid performing unnecessary recognition.”). The parties’ interpretation is consistent with the claim language. As discussed above, claim 18 recites “operating on the data . . . to determine if the image contains one or more recognizable symbols” and “analyzing the recognizable symbols according to type.” Ex. 1001, 19:15–20. Also, because it is logical to determine if an image contains any recognizable symbols before analyzing the symbols, claim 18 indicates that the determining limitation is performed *before* the analyzing limitation. See *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1369 (Fed. Cir. 2003) (“First, we look to the claim language to determine if, as a matter of logic or grammar, [the recited steps] must be performed in the order written.”).

The parties’ interpretation also is supported by the written description of the ’252 patent. Specifically, the ’252 patent describes “a discriminator algorithm which operates on the input image 18 and determines whether the input image contains recognizable symbols, such as barcodes, matrix codes, or alphanumeric characters.” Ex. 1001, 11:14–18. According to the ’252 patent, “[i]f such symbols are found, the image 18 is sent to the decode symbol 28 process.” *Id.* at 11:18–19 (emphasis added). “The image can *then* be analyzed to determine the location, size, and nature of the symbols in the decode symbol 28 [process].” *Id.* at 11:30–35 (emphasis added). On the other hand, if the discriminator algorithm does not confidently find a symbol in the image, the image can “also or alternatively be sent to the Object Image branch of the process flow.” *Id.* at 11:19–23, Fig. 1. Thus, the written description indicates that the discriminator algorithm determines if the image contains recognizable symbols *before* the decode symbol process analyzes

the symbols. *See Altiris*, 318 F.3d at 1370 (“[W]e next look to the rest of the specification to determine whether *it* ‘directly or implicitly requires such a narrow construction.’”).

Petitioner does not show persuasively that Ogasawara expressly or implicitly discloses the determining limitation of claim 18. The portions of Ogasawara cited by Petitioner indicate that Ogasawara’s computing platform invokes its recognition software to analyze image data *without* first determining if the image contains a recognizable symbol. *See* Pet. 23–25 (citing Ex. 1005, 18:11–58, 20:41–67, 21:15–20). Ogasawara discloses that the user of its device verifies that an image contains an entire symbol when capturing the image and before transmitting the image data to the computing platform. Ex. 1005, 20:47–51 (“While the consumer is scanning a particular bar code with the digital camera, . . . the consumer can visually verify that the entire image has been captured.”); *see also id.* at 20:41–47, 22:10–13, 22:59–63 (disclosing that a user captures an image of an item’s bar code by placing it within the image field of the digital camera). As a result, when Ogasawara’s computing platform receives the image data, it simply invokes recognition software to analyze the image data.² *Id.* at 18:32–37, 21:17–20. For example, Ogasawara discloses that “[o]nce the bar code image has been captured, the program decodes the bar code image data . . . by operating on the bar code image with pattern recognition software.” *Id.* at 21:17–20; *see also id.* at 18:32–37 (“Once this information is received . . . , a character

² In fact, Petitioner appears to acknowledge that Ogasawara’s device operates in this manner. Pet. 24–25 (“[o]nce the bar code image has been captured, the program decodes the bar code image data . . . with pattern recognition software.”).

recognition and/or pattern recognition application routine can be invoked . . . to . . . decode the bar code.”). Thus, Ogasawara supports Patent Owner’s position that Ogasawara’s computing platform does *not* determine if an image contains a recognizable symbol *before* analyzing the image.

Petitioner argues that the term “recognize” in Ogasawara discloses determining if an image contains a recognizable symbol, whereas the term “decode” discloses analyzing the symbol to extract information. Pet. Reply 6 (“capture, *recognize and decode* captured images.”). We disagree. Ogasawara uses both terms—recognize and decode—to describe analyzing image data to extract information. Ex. 1005, 18:32–37, 21:17–20. For example, Ogasawara discloses that its computing platform invokes recognition software “to either *decode* the bar code videographic data or to perform pattern *recognition* functions on a[n] icon-like patter[n].” *Id.* at 18:32–37 (emphases added); *see also id.* at 21:17–20 (“the program *decodes* the bar code image data . . . by operating on the bar code image with pattern *recognition* software”) (emphases added). Thus, Petitioner’s reliance on the term “recognize” does *not* show that Ogasawara discloses the determining limitation of claim 18.

For the reasons discussed above, Petitioner does not show sufficiently that Ogasawara discloses all the limitations of claim 18.

3. Claims 26 and 27

Claims 26 and 27 depend, directly or indirectly, from claim 18. Ex. 1001, 20:8–12. Petitioner’s arguments and evidence for claims 26 and 27 do not compensate for the deficiencies discussed above for claim 18. *See* Pet. 28–29. Thus, for the same reasons discussed above for claim 18,

Petitioner does not show sufficiently that Ogasawara discloses all the limitations of claims 26 and 27.

4. Summary

For the foregoing reasons, Petitioner has not shown by a preponderance of the evidence that claims 18, 26, and 27 are anticipated by Ogasawara.

E. Obviousness of Claim 29 over Ogasawara and Cusmariu

Petitioner argues that claim 29 would have been obvious over Ogasawara and Cusmariu. Pet. 30–38. Claim 29 depends from claim 18. Ex. 1001, 20:15–17. Petitioner’s arguments and evidence for claim 29 do not compensate for the deficiencies discussed above for claim 18. *See* Pet. 30–38. Thus, for the same reasons discussed above for claim 18, Petitioner has not shown by a preponderance of the evidence that claim 29 would have been obvious over Ogasawara and Cusmariu.

F. Obviousness of Claim 31 over Ogasawara and Bolle

Petitioner argues that claim 31 would have been obvious over Ogasawara and Bolle. Pet. 38–56. Claim 31 depends from claim 18. Ex. 1001, 20:21–25. Petitioner’s arguments and evidence for claim 31 do not compensate for the deficiencies discussed above for claim 18. *See* Pet. 38–56. Thus, for the same reasons discussed above for claim 18, Petitioner has not shown by a preponderance of the evidence that claim 31 would have been obvious over Ogasawara and Bolle.

G. Petitioner’s Motion to Exclude

Petitioner filed a Motion to Exclude (Paper 27, “Pet. Mot. Excl.”), Patent Owner filed an Opposition (Paper 28, “PO Opp. Excl.”) to the Motion, and Petitioner filed a Reply (Paper 30, “Pet. Reply Excl.”) to the

Opposition. We have considered the parties' arguments, and, for the reasons discussed below, Petitioner's Motion to Exclude is *denied*.

Petitioner argues that portions of paragraphs 38, 39, 41, 44–46, 50, 51, 55–59, 61–66, 68–81, 83, 85–88, 90–92, and 94 of the Bajaj Declaration (Ex. 2010) should be excluded under Fed. R. Evid. 702, “because they contain conclusory statements or opinions that lack sufficient supporting facts or data.” Pet. Mot. Excl. 5. We do not rely on any of the identified paragraphs in this Decision. Thus, because Petitioner does not suffer any prejudice by our admission of paragraphs 38, 39, 41, 44–46, 50, 51, 55–59, 61–66, 68–81, 83, 85–88, 90–92, and 94, Petitioner's Motion to Exclude is *denied* with respect to those paragraphs of Exhibit 2010.

Petitioner argues that paragraph 57 of the Bajaj Declaration (Ex. 2010) should be excluded as 1) lacking foundation; 2) lacking authentication; 3) impermissible hearsay; 4) lacking supporting evidence; and 5) improper demonstratives. Pet. Mot. Excl. 11–15. We do not rely on paragraph 57 in this Decision. Thus, because Petitioner does not suffer any prejudice by our admission of paragraph 57, Petitioner's Motion to Exclude is *denied* with respect to paragraph 57 of Exhibit 2010.

Petitioner argues that paragraphs 74–81 of the Bajaj Declaration (Ex. 2010) should be excluded as 1) lacking foundation; 2) irrelevant, misleading, confusing, and not probative; 3) lacking authentication; 4) impermissible hearsay; 5) lacking supporting evidence; and 6) improper demonstratives. Pet. Mot. Excl. 11–15. We do not rely on paragraphs 74–81 in this Decision. Thus, because Petitioner does not suffer any prejudice by our admission of paragraphs 74–81, Petitioner's Motion to Exclude is *denied* with respect to paragraphs 74–81 of Exhibit 2010.

III. CONCLUSION

Petitioner has not shown by a preponderance of the evidence that claims 18, 26, 27, 29, and 31 of the '252 patent are unpatentable.

In summary:

Claims	35 U.S.C. §	Reference(s)/Bas is	Claims Shown Unpatentable	Claims Not Shown Unpatentable
18, 26, 27	102(e)	Ogasawara		18, 26, 27
29	103(a)	Ogasawara, Cusmariu		29
31	103(a)	Ogasawara, Bolle		31
Overall Outcome				18, 26, 27, 29, 31

IV. ORDER

It is hereby

ORDERED that claims 18, 26, 27, 29, and 31 of the '252 patent are not shown unpatentable;

FURTHER ORDERED that Petitioner's Motion to Exclude is *denied*; and

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

IPR2021-01333
Patent 7,899,252 B2

PETITIONER:

Dustin J. Edwards
Michael A. Tomasulo
WINSTON & STRAWN LLP
dedwards@winston.com
mtomasulo@winston.com

PATENT OWNER:

James M. Glass
Todd M. Briggs
Eric Huang
Quincy Lu
QUINN EMANUEL URQUHART & SULLIVAN, LLP
jimglass@quinnemanuel.com
toddbriggs@quinnemanuel.com
erichuang@quinnemanuel.com
quincylu@quinnemanuel.com