

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ASKELADDEN, L.L.C.,
Petitioner,

v.

JABAA, L.L.C.,
Patent Owner.

IPR2024-00915
Patent 7,480,637 B2

Before HYUN J. JUNG, MICHELLE N. WORMMEESTER, and
DONALD E. DAYBELL, *Administrative Patent Judges*.

JUNG, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. Background and Summary

Askeladden L.L.C. (“Petitioner”) filed a Petition (Paper 3, “Pet.”) requesting institution of an *inter partes* review of claims 1–6 and 21–24 of U.S. Patent No. 7,480,637 B2 (Ex. 1001, “the ’637 patent”). Current assignee Jabaa, L.L.C. (“Patent Owner”) did not file a preliminary response.

Patent Owner also failed to file its mandatory notices required under 37 C.F.R. § 42.8(a)(2). *See also* Paper 4, 2 (stating “Patent Owner is advised of the requirement to submit mandatory notice information under 37 C.F.R. § 42.8(a)(2) within 21 days of service of the petition”). According to Petitioner, the Petition and supporting documents were served on May 24, 2024 by Federal Express to Mr. Douglas Kozlay (contact person according to Office records), Mr. Cortney S. Alexander (litigation counsel), and Jabaa, LLC (assignee). Pet. 95. After the Board sent a reminder to file mandatory notices by email, Mr. Alexander responded that he is not counsel of record in this proceeding. Ex. 3001.

Under 35 U.S.C. § 314, an *inter partes* review may not be instituted “unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” Upon consideration of the Petition and for the reasons explained below, we determine that Petitioner has shown a reasonable likelihood of prevailing with respect to at least one of the challenged claims.

Thus, we institute an *inter partes* review of claims 1–6 and 21–24 of the ’637 patent on all presented challenges. 37 C.F.R. § 42.108(a) (“When instituting . . . review, the Board will authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for

each claim.”); *see also SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1359–60 (2018).

B. Real Parties in Interest

Petitioner identifies Askeladden, L.L.C. as a real party in interest. Pet. 1 (citing Ex. 1008; Ex. 1009). As noted above, Patent Owner has not yet filed its mandatory notices.

C. Related Matters

Petitioner lists eight terminated district court proceedings in which the ’637 patent has been involved. Pet. 1–2. Petitioner also identifies IPR2024-00916. *Id.* at 2.

D. The ’637 Patent (Ex. 1001)

The ’637 patent issued on January 20, 2009 from an application filed on December 23, 2005. Ex. 1001, codes (22), (45). The ’637 patent discloses an Internet Transaction Authentication (“ITA”) apparatus. *Id.* at 3:27–28. Figure 1A of the ’637 patent is below reproduced.

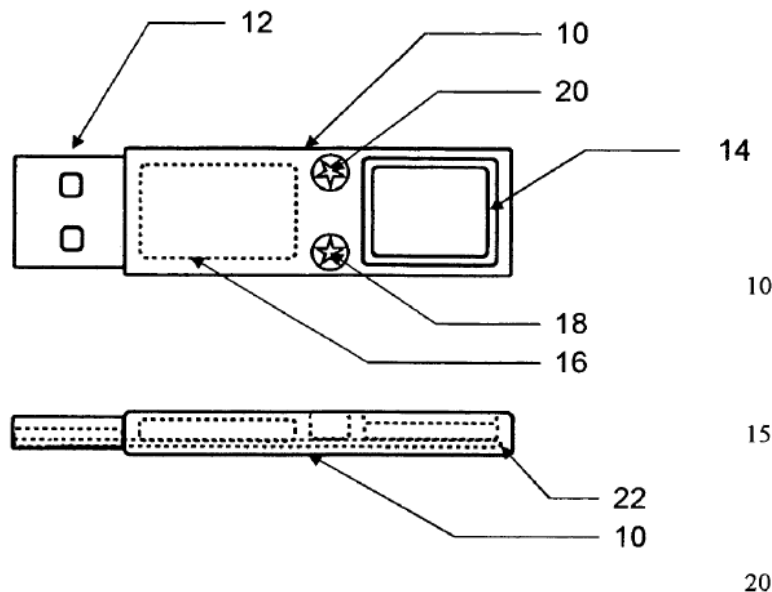


Figure 1A shows two views of the ITA apparatus in USB dongle form. Ex. 1001, 4:14–15, 4:61–62. The apparatus includes electronics

enclosure body 10 with “embedded electronics, including at least one printed circuit board (PCB) or printed circuit substrate such as circuit substrate 22” having “at least one processor or microcontroller such as processor 16.” *Id.* at 4:62–5:2. The apparatus also includes USB connector 12 that is coupled to circuit substrate 22 and extends out from body 10. *Id.* at 5:21–24. A biometric fingerprint authentication component, such as integrated fingerprint sensor array 14, is provided and coupled to substrate 22. *Id.* at 5:25–27.

“[P]rocessor 16 is multifunctional, providing USB interface processing, fingerprint biometrics processing, transactions processing, and other processing” and “contains memory for the execution of programs plus communications buffers for sending and receiving data.” Ex. 1001, 5:9–11, 5:13–15. “Resident within and executing within the processor 16, is transaction security software.” *Id.* at 5:12–13.

E. Illustrative Claim

The ’637 patent includes 24 claims, of which Petitioner challenges claims 1–6 and 21–24 in this proceeding. Of the challenged claims, claims 1 and 21 are independent. Claim 1 is reproduced below.

1. A biometric customer authentication apparatus for improving online transaction security and for assuring the identity of a customer, comprising:
 - an electronic enclosure including a fingerprint sensor disposed thereupon and further including an external communications interface;
 - at least one processor comprised within said enclosure and coupled to said fingerprint sensor;
 - transaction security software resident within and executing on said at least one processor further comprising biometric fingerprint authentication software for authenticating authorized customers and also comprising cryptographic

transaction authentication software for authenticating transactions;

at least one of a memory and a communications buffer coupled to said at least one processor and further coupled to said external communications interface; and

a communications subsystem coupled into said external communications interface for relaying data messages between at least one external system and said apparatus.

Ex. 1001, 8:43–62.

F. Asserted Prior Art and Proffered Testimonial Evidence

Petitioner identifies the following references as prior art in the asserted grounds of unpatentability:

Name	Reference	Exhibit
Lim	US 2003/0005336 A1, published Jan. 2, 2003	1007
Mathiassen	US 2004/0123113 A1, published June 24, 2004	1005
Ryan	US 2005/0109841 A1, published May 26, 2005	1006

Petitioner contends that Mathiassen and Lim are prior art under §§ 102(a) and 102(b) and Ryan is prior art under § 102(a).¹ Pet. 3–4. Petitioner also provides a Declaration of Dr. Henry Houh. Ex. 1003.

¹ The relevant sections of the Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112–29, 125 Stat. 284 (Sept. 16, 2011), took effect on March 16, 2013. Because the ’637 patent issued from an application that was filed before that date, our citations to 35 U.S.C. §§ 102 and 103 in this Decision are to their pre-AIA versions. *See also* Pet. 3 n.1 (“The ’637 patent is a pre-AIA patent filed on December 23, 2005.”).

G. Asserted Grounds

Petitioner asserts that claims 1–6 and 21–24 are unpatentable on the following grounds:

Claims Challenged	35 U.S.C. §	References/Basis
1–6, 21–24	103(a)	Mathiassen, Ryan
1–6, 21–24	103(a)	Mathiassen, Ryan, Lim

Pet. 4.

II. ANALYSIS

A. Legal Standards

“In an [*inter partes* review], the petitioner has the burden from the onset to show with particularity why the patent [claim] it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016). This burden of persuasion never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). The Board may authorize an *inter partes* review if we determine that the information presented in the Petition shows that there is a reasonable likelihood that Petitioner will prevail with respect to at least one of the claims challenged in the petition. 35 U.S.C. § 314(a).

Petitioner contends that the challenged claims of the ’637 patent are unpatentable under § 103. Pet. 4. A claim is unpatentable under § 103 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 skill in the art; and (4) where in evidence, so-called secondary considerations. *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)). Whether a combination of elements produces a predictable result weighs in the ultimate determination of obviousness. *Id.* at 416–417.

B. Level of Ordinary Skill in the Art

Petitioner argues that a person of ordinary skill in the art “would have had a bachelor’s degree in electrical engineering, computer engineering, computer science, or a related subject, and one to two years of work experience in electronic device design, secure electronic communications, or a related field” and that “[l]ess experience may be necessary with additional education, and likewise, less education may be necessary with additional work experience.” Pet. 6 (citing Ex. 1003 ¶¶ 40–41).

Based on the preliminary record, we adopt Petitioner’s asserted level of ordinary skill to determine whether there is a reasonable likelihood that Petitioner would prevail with respect to at least one of the claims challenged in the Petition.

C. Claim Construction

In an *inter partes* review, the claims are 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.

37 C.F.R. § 42.100(b) (2021); *see Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc).

Petitioner proposes interpreting “resident within” recited by claims 1 and 21 to mean “temporary storage of the software while the software is being executed” with citations to the Specification, declaration, and other prior art. Pet. 8–11. Petitioner also proposes that other terms should be given their plain and ordinary meaning. *Id.* at 8 (citing Ex. 1003 ¶¶ 42–44).

At this stage, the language of the claims and the cited portions of the Specification and declaration support Petitioner’s proposed interpretation of “resident within.” Pet. 8–9; Ex. 1001, 5:12–20, 7:63–65, 8:57–58; Ex. 1003 ¶¶ 45–54. We, therefore, adopt Petitioner’s proposed interpretation of “resident within” to mean “temporary storage of the software while the software is being executed.” Pet. 8.

We also determine that express claim interpretation of other terms is not necessary to determine whether Petitioner shows a reasonable likelihood of prevailing. *Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those 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)).

D. Asserted Obviousness of Claim 1 Based on Mathiassen and Ryan

1. Mathiassen (Ex. 1005)

An object of Mathiassen is to provide “a portable access device for being coupled to, and for allowing only authorized users access to, an access-limited apparatus, device, network or system, e.g. a computer terminal, an internet bank or a corporate or government intranet.” Ex. 1005 ¶ 16. Figure 3a of Mathiassen is below reproduced.

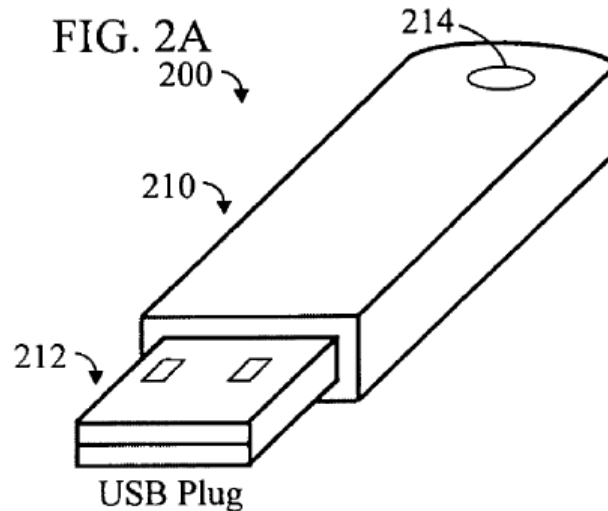


Figure 2A shows an embodiment in the form of a smart fob apparatus. Ex. 1006 ¶¶ 149, 201. Device 200 has main body portion 210 housing translation module 104 for moving signals between a smart card interface format and USB interface format, processor module 106, output module 108 with RF antenna and modulator, and USB plug 212 extending from an end of body portion 210. *Id.* ¶¶ 178, 181, 201.

The smart fob can be used to download tickets, store e-coupons, load cash value, encrypt and store credit card details, or “conduct a business transaction in a secure fashion.” Ex. 1006 ¶¶ 223–225, 232, 236, 238, 249, 367, 368. It “could store a biometric—such as fingerprint, iris scan etc., in a memory cell that is locked” so that “to gain access to a controlled area, the user touches his finger to a reader, waves the smart fob in front of a reader, the finger print is compared to the stored info, the user’s identity is verified, and he is granted access.” *Id.* ¶ 229.

3. Independent Claim 1

Petitioner argues that, to the extent the preamble is limiting, Mathiassen discloses “[a] biometric customer authentication apparatus . . . for assuring the identity of a customer” and Ryan discloses “improving

online transaction security.”² Pet. 25–29 (citing Ex. 1003 ¶¶ 82–91; Ex. 1005, code (57), ¶¶ 16, 47, 48, 50, 54, Fig. 3a; Ex. 1006, code (57), ¶¶ 149, 201, 223–225, 229, 232, 236, 241, Fig. 2A).

For “an electronic enclosure including a fingerprint sensor disposed thereupon and further including an external communications interface” (Ex. 1001, 8:46–48), Petitioner argues that Mathiassen discloses that its portable device has a housing that includes fingerprint sensor (5) and USB interface (12). Pet. 29–33 (citing Ex. 1003 ¶¶ 92, 93; Ex. 1005 ¶¶ 50, 54, 55, Figs. 2b, 3a).

For “at least one processor comprised within said enclosure and coupled to said fingerprint sensor” (Ex. 1001, 8:49–50), Petitioner argues that Mathiassen discloses processor (2) within the housing of its portable device and coupled to fingerprint sensor (5) via high-speed bus (3). Pet. 33–37 (citing Ex. 1003 ¶¶ 94–98; Ex. 1005 ¶¶ 37, 47, 48, 50, 54, 66–69, Figs. 2b, 3a).

Petitioner also argues that Mathiassen’s administrative software running on processor (2) discloses or would have rendered obvious “transaction security software resident within and executing on said at least one processor” (Ex. 1001, 8:51–52) consistent with the disclosure of the ’637 patent. Pet. 37–39 (citing Ex. 1001, 5:9–20; Ex. 1003 ¶¶ 99–103; Ex. 1005 ¶¶ 50, 72, 91–95, Fig. 2b). Petitioner further argues that Mathiassen’s administrative software discloses or would have rendered obvious “biometric fingerprint authentication software for authenticating

² We do not need to determine whether the preamble is limiting because we are persuaded on the present record that the prior art teaches it.

authorized customers.” Ex. 1001 8:52–54; Pet. 39–41 (citing Ex. 1003 ¶¶ 104–108; Ex. 1005 ¶¶ 49, 50, 65–74).

According to Petitioner, the combination of Mathiassen and Ryan would have rendered obvious “cryptographic transaction authentication software for authenticating transactions” (Ex. 1001, 8:54–56) because Mathiassen’s administrative software includes a subset for generating cryptographic data and Ryan describes encrypting transaction data. Pet. 41–43 (citing Ex. 1003 ¶¶ 109–112; Ex. 1005, code (57), ¶¶ 77–83, 91–95, 97, 98; Ex. 1006 ¶¶ 105, 238, 249, 367, 368).

Petitioner argues that Mathiassen’s non-volatile memory (7A) discloses or would have rendered obvious “at least one of a memory” (Ex. 1001, 8:57) and Mathiassen’s volatile memory (6C) discloses or would have rendered obvious “a communications buffer” (*id.*). Pet. 43–47 (citing Ex. 1001, 5:13–15; Ex. 1003 ¶¶ 113–119; Ex. 1005 ¶¶ 49, 50, 52, Fig. 2b). Petitioner also argues that Mathiassen discloses or would have rendered obvious those components being “coupled to said at least one processor and further coupled to said external communications interface” (Ex. 1001 8:58–59). Pet. 47–52 (citing Ex. 1003 ¶¶ 120–125; Ex. 1005 ¶¶ 49, 50, Fig. 2b).

Petitioner further argues that Mathiassen discloses or would have rendered obvious “a communications subsystem coupled into said external communications interface for relaying data messages between at least one external system and said apparatus” (Ex. 1001, 8:60–62) because Mathiassen teaches its USB interface block 9A coupled to USB mechanical interface 12C to relay data messages between network (N) and the portable device. Pet. 52–54 (citing Ex. 1001, Figs. 1A, 1B; Ex. 1003 ¶¶ 126–131; Ex. 1005 ¶¶ 47, 50, 53, 54, Figs. 1b, 3a; Ex. 1006 ¶ 124, Figs. 1A, 2B).

a) Reasons to Combine

Petitioner argues that Mathiassen and Ryan are analogous art because they are in the same field of endeavor and reasonably pertinent to a problem of the '637 patent. Pet. 18–19 (citing Ex. 1003 ¶¶ 72–74).

According to Petitioner, one of ordinary skill in the art “would have been motivated to modify Mathiassen’s portable device to conduct and authenticate transactions, as taught by Ryan.” Pet. 18 (citing Ex. 1003 ¶ 72); *see also id.* at 19–21 (citing Ex. 1003 ¶¶ 74–77; Ex. 1005, code (57), ¶¶ 50, 65–98; Ex. 1006 ¶¶ 105, 223–225, 232, 235, 238, 249, 368). Petitioner also argues that one of ordinary skill in the art “would have been motivated to modify Mathiassen’s portable device to conduct transactions using a wireless interface, as taught by Ryan, to enable Mathiassen’s portable device to communicate wirelessly with external devices.” *Id.* at 18; *see also id.* at 21–22 (citing Ex. 1003 ¶¶ 78; Ex. 1005, code (57); Ex. 1006 ¶¶ 151, 223–225, 235, 248).

Petitioner further argues that the proposed combination would have merely been prior art elements combined according to known methods to yield a predictable result. Pet. 22–23 (citing Ex. 1003 ¶ 79). Petitioner additionally argues that the proposed combination would have been modifying a similar device in a same way. *Id.* at 24 (citing Ex. 1003 ¶ 81; Ex. 1005 ¶ 50, Fig. 2b; Ex. 1006 ¶ 175). In Petitioner’s view, the proposed combination also represents a mere substitution of one known element in the field for another known element. *Id.* at 24–25 (citing Ex. 1001, 6:50–54; Ex. 1003 ¶ 81; Ex. 1006 ¶¶ 223, 235).

Petitioner contends that one of ordinary skill in the art would have had a reasonable expectation of success in making the proposed combination.

Pet. 23–24 (citing Ex. 1003 ¶ 80; Ex. 1005, code (57), ¶¶ 48–50, 53, 75–98, Fig. 3a; Ex. 1006 ¶¶ 124, 222–229, 236, 249, 368, 368).

b) Petitioner Shows a Reasonable Likelihood of Prevailing

Based on the present record, Petitioner shows a reasonable likelihood of prevailing in its challenge to claim 1 as unpatentable over Mathiassen and Ryan.

E. Remaining Challenges

Petitioner argues with citations to the record that Mathiassen teaches or suggests the additional limitations of claims 2, 3, 5, 6, and 23 and that Mathiassen and Ryan teach or suggest the additional limitations of claims 4, 21, 22, and 24. Pet. 55–82. Petitioner also argues with citations to the record that Mathiassen, Ryan, and Lim would have rendered obvious claims 1–6 and 21–24. *Id.* at 83, 85–91. Petitioner relies on Lim to further teach or suggest “transaction security software resident within and executing on said at least one processor,” as recited by claim 1, and “transaction security software resident within and executing on said processor,” as recited by claim 21. *Id.* at 88–91.

For the reasons discussed above, we preliminarily determine that Petitioner demonstrates a reasonable likelihood of prevailing with respect to its challenge to independent claim 1 based on Mathiassen and Ryan. We, therefore, institute review on all challenged claims on all grounds set forth in the Petition. 37 C.F.R. § 42.108(a); *see also SAS*, 138 S. Ct. at 1354.

III. CONCLUSION

After considering the evidence and arguments presented in the Petition and the cited evidence, we determine that Petitioner has demonstrated a reasonable likelihood of prevailing in proving that at least

one of claims 1–6 and 21–24 of the ’637 patent is unpatentable, and thus, we institute an *inter partes* review of all challenged claims on all presented challenges. 37 C.F.R. § 42.108(a).

At this stage of the proceeding, the Board has not made a final determination as to the patentability of any challenged claim or any underlying factual and legal issues.

In view of Patent Owner’s failure to file its mandatory notices, Patent Owner is cautioned that an “[a]bandonment of the contest” can be construed as a request for adverse judgment. 37 C.F.R. § 42.72(b)(4).

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review of claims 1–6 and 21–24 of U.S. Patent No. 7,480,637 B2 is instituted with respect to all grounds set forth in the Petition; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4(b), *inter partes* review of U.S. Patent No. 7,480,637 B2 shall commence on the entry date of this Order, and notice is hereby given of the institution of a trial.

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