

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

FACETOFACE BIOMETRICS, INC.,
Patent Owner.

IPR2023-00833
Patent 11,042,623 B2

Before HYUN J. JUNG, SCOTT A. DANIELS, and
CYNTHIA L. MURPHY, *Administrative Patent Judges*.

MURPHY, *Administrative Patent Judge*.

DECISION

Granting Institution of *Inter Partes* Review

35 U.S.C. § 314, 37 C.F.R. § 42.4 / 37 C.F.R. § 42.108

I. INTRODUCTION

Apple Inc. (“Petitioner”) filed a petition to institute *inter partes* review of claims 1–20 of U.S. Patent No. 11,042,623 B1 (Ex. 1001, the “Challenged Patent”). Paper 1 (“Pet.”). FaceToFace Biometrics, Inc. (“Patent Owner”) did not file a Preliminary Response.¹

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.” 35 U.S.C. § 314(a). Here, Petitioner demonstrates a reasonable likelihood that it would prevail in establishing the unpatentability of at least independent claim 1 of the Challenged Patent.

II. RELATED MATTERS

The parties identify a district court action (*FaceToFace Biometrics, Inc. v. Apple Inc.*, 4:22-cv-00429 (E.D. Mo)) and its appeal to the Federal Circuit (*FaceToFace Biometrics, Inc. v. Apple Inc.*, 2023-1792 (Fed. Cir.)) as related matters. *See* Pet. 69; Paper 3, 2.² In the district court action, summary judgement was granted to Petitioner on the basis that the asserted claims were not drawn to patent-eligible subject matter under 35 U.S.C. § 101. *See* Ex. 1014, 1, 11, 24. In the Federal Circuit case, Patent Owner appeals this grant of summary judgement. *See* Ex. 1018, 1.

¹ The parties identify themselves as real parties-in-interest. Pet. 69; Paper 3, 2.

² Patent Owner is the plaintiff/appellant, Petitioner is the defendant/appellee, and the Challenged Patent is the patent at issue in the above-identified actions. (*See* Exs. 1014, 1018, *see also* Ex. 1002, 352.)

III. OVERVIEW OF THE CHALLENGED PATENT

The Patent discloses the use of “sensors in end-user devices to monitor and profile an end-user” (Ex. 1001, 2:49–51) and this profiling can involve “expression recognition” (*id.* at 2:51–55). For example, a messaging application can use expression recognition “to add context to conversations between users” of a messaging system. *Id.* at 5:4–6. In particular, a recognized expression of a user “can be added as an emoticon to a message” and “the recognized expression of a viewer user can be fed back to the sender.” *Id.* at 5:6–10.

IV. INDEPENDENT CLAIM 1

1. A computer device comprising at least one processor in communication with at least one memory device, wherein the at least one processor is programmed to:

receive a selection of an emoticon;

monitor a sensor feed provided by one or more sensors of the computer device to detect a plurality of human facial expression states;

automatically generate a dynamic emoticon that simulates the detected plurality of human facial expression states on the selected emoticon based on the sensor feed of the plurality of human facial expression states; and

route a message with the dynamic emoticon to a second computer device.

V. CLAIM CONSTRUCTION

In interpreting independent claim 1 of the Challenged Patent, we use “the same claim construction standard that would be used to construe the claim[s] in a civil action under 35 U.S.C. [§] 282(b).” *See* 37 C.F.R. § 42.100(b) (2020). This claim construction standard requires us to construe

claims in accordance with the ordinary and customary meaning of such claims as would have been understood by one of ordinary skill in the art³ and the prosecution history pertaining to the patent. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (*en banc*).

Independent claim 1 sets forth limitations involving a “dynamic emoticon.” Ex. 1001, 12:1, 12:5, 12:9. Petitioner proposes a claim construction in which a “dynamic emoticon” includes “graphics, symbols, characters, emojis, videos, avatars, or the like, that reflect the expression a sender uses to help explain the context of the message.” Pet. 10–11. As Patent Owner did not file a Preliminary Response, Patent Owner does not offer a contrary construction.

Petitioner’s proposed claim construction is aligned with the Challenged Patent’s specification (*see* Ex. 1001, 5:6–8, 8:60–64), the Challenged Patent’s prosecution history (*see e.g.*, Ex. 1002, 192–193, 317–318), and Patent Owner’s position in the district court action (*see* Ex. 1007, 4–5). We therefore adopt Petitioner’s proposed construction. Insofar as a party believes that supplemental claim construction would be beneficial, this can be addressed during development of the record for trial.

³ Petitioner contends that “[a] person of ordinary skill in the art (“PHOSITA”) at the time of the ’623 Patent would have had a bachelor’s degree in computer engineering, computer science, electrical engineering, or a related field, with at least two years of experience in the fields of image processing and graphical user interfaces.” Pet. 4–5, *see also* Ex. 1003 ¶ 35. For the purposes of institution, we adopt this description.

VI. ASSERTED GROUNDS OF UNPATENTABILITY⁴

Ground	Basis 35 U.S.C. §	References	Challenged Claims
One	102	Corazza ⁵	1, 4–6, 8, 11, 14–20
Two	103	Corazza, Brown ⁶	1, 2, 4–8, 11, 12, 14–20
Three	103	Corazza, Brown, Gates ⁷	3, 9, 10, 13

VII. OVERVIEW OF CORAZZA

Corazza discloses an “animated message application” that configures (i.e., programs) a “processor” to perform certain steps involving the detection of “human facial expressions” and a corresponding “animation of [a] 3D character model.” Ex. 1004, Abstract; *see also* ¶¶ 40–42, 82, Figs. 8A–8C.

More particularly, Corazza discloses programming the processor to “capture a video sequence,” “detect a human face” within the video sequence, “track changes in human facial expression” of the detected human

⁴ The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011) (“AIA”), amended 35 U.S.C. §§ 102, 103. The ‘623 Patent “claims the benefit” of three U.S. provisional applications, the earliest of which was filed on March 10, 2014. Exhibit 1001 1:14–22. Because this date is after the effective date of the applicable AIA amendment (March 16, 2013), we refer to the AIA versions of §§ 102, 103.

⁵ US 2013/0235045 A1, filed March 6, 2013, published Sept. 12, 2013. Ex. 1004.

⁶ US 8,620,850 B2, filed September 7, 2010, issued December 31, 2013. Ex 1005.

⁷ US 9,256,748 B1, filed March 14, 2013, issued February 9, 2016. Ex. 1006.

face, and “map tracked changes in human expression to motion data.”
Ex. 1004, Abstract. The motion data is applied “to animate the 3D character model.” *Id.* The animation of the 3D character model is rendered “into a file as encoded video,” and the encoded video is transmitted to a “remote device.” *Id.*

VIII. GROUND ONE

Petitioner asserts that independent claim 1 is anticipated by Corazza. (Pet. 6.) A claim is anticipated under 35 U.S.C. § 102 only if “each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co.*, 814 F.2d 628, 631 (Fed. Cir. 1987).

A. CLAIM 1

Petitioner demonstrates a reasonable likelihood that it will prevail in establishing that Corazza (Ex. 1004) discloses each and every element in independent claim 1. *See* Pet. 7–16.

i. a computer device comprising at least one processor

Independent claim 1 sets forth “[a] computer device comprising at least one processor.” Ex. 1001 11:65–67. Corazza discloses a “networked communication device” and a “processor” that is “resident upon [the] networked communication device.” Ex. 1004 ¶ 53; *see also* Ex. 1003 ¶ 62; Pet. 7–8.

ii. in communication with at least one memory device

Independent claim 1 requires the processor to be “in communication with at least one memory device.” Ex. 1001 11:65–67. Corazza discloses

“storage containing an animated message application” and Corazza discloses that “the animated message application configures the processor.” Ex. 1004 ¶ 21. Thus, Corazza’s processor is in communication with a memory device (i.e., storage) in which the animated message application is contained. *See id.* Abstract, ¶¶ 6, 27, 53—55; *see also* Ex. 1003 ¶ 62; Pet. 7–8.

iii. receive a selection of an emoticon

Independent claim 1 sets forth that the processor is programmed to “receive a selection of an emoticon.” Ex. 1001, 12:1. Corazza discloses that “the process of generating an animated message includes selecting a character from a library of multiple characters.” Ex. 1004 ¶ 48; *see also id.* Abstract, ¶¶ 47, 56; Ex. 1003 ¶ 63; Pet. 8.

iv. monitor a sensor feed provided by one or more sensors of the computer device to detect a plurality of human facial expression states

Independent claim 1 sets forth that the processor is programmed to “monitor a sensor feed provided by one or more sensors of the computer device to detect a plurality of human facial expression states.” Ex. 1001 12:2–4. Corazza discloses that the animated message application “configures the processor” to “capture a sequence of video frames using [a] video camera,”⁸ “detect a human face within a sequence of video frames,” and “track changes in human facial expression of a human face detected within a sequence of video frames.” Ex. 1004 ¶ 21; *see also* Ex. 1003 ¶ 66, Pet. 8–9. Corazza provides three examples (i.e., a plurality) of detected

⁸ The camera “can be integrated with” the networked computing device. Ex. 1004 ¶ 61.

human expression states capture by its video camera, namely “a surprised human facial expression,” “an angry human facial expression,” and “a neutral facial expression.” *Id.* ¶ 82, *see also id.* Figs. 8A–8C; Ex. 1003 ¶ 66, Pet. 10.

v. automatically generate a dynamic emoticon that simulates the detected plurality of human facial expression states on the selected emoticon based on the sensor feed of the plurality of human facial expression states

Independent claim 1 sets forth that the processor is programmed to “automatically generate a dynamic emoticon that simulates the detected plurality of human facial expression states on the selected emoticon based on the sensor feed of the plurality of human facial expression states.” Ex. 1001, 12:5–8. Corazza discloses that its processor is configured to “map tracked changes in human facial expression to motion data” and that “the motion data is generated to animate the 3D character model.” Ex. 1004 ¶ 21; *see also* Ex. 1003 ¶¶ 67–68; Pet. 10–15.

vi. route a message with the dynamic emoticon to a second computer device

Independent claim 1 sets forth that the processor is programmed to “route a message with the dynamic emoticon to a second computer device.” Ex. 1001, 12:9–10. Corazza discloses that its processor is configured (i.e., programmed) to “render an animation of the 3D character into a file as an encoded video” (Ex. 1004 ¶ 28) and to “transmit the encoded video to a remote device via a network interface” (*id.* ¶ 29). *See also* Ex. 1003 ¶ 69; Pet. 15–16.

i. Summary

Considering the record now before us, we find persuasive Petitioner’s evidence and mapping of Corazza’s disclosure to the elements of claim 1. *See* Pet. 7–16. Consequently, Petitioner establishes a reasonable likelihood that it will prevail in showing that Corazza discloses each and every element set forth in the claim 1.

IX. OTHER CLAIMS AND OTHER GROUNDS

Petitioner also asserts that claims 4–6, 8, 11, and 14–20 are anticipated by Corazza (Ground One), that claims 1, 2, 4–8, 11, 12, and 14–20 are obvious over Corazza and Brown (Ground Two), and that claims 3, 9, 10, and 13 are obvious over Corazza, Brown, and Gates (Ground Three).

In a decision to institute under 35 U.S.C. § 314(b), we may not institute review on less than all claims challenged in the petition. *SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1355–56 (2018). In other words, the statute requires “a simple yes-or-no institution choice respecting a petition, embracing all challenges included in the petition.” *PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018). Thus, “[w]hen instituting *inter partes* review,” we “authorize the review to proceed on all of the challenged claims and on all grounds of unpatentability asserted for each claim.” 37 C.F.R. § 42.108(a) (2020).

As we preliminarily conclude that Petitioner demonstrates a reasonable likelihood of prevailing with respect to its anticipation challenge to independent claim 1, we institute review on all challenged claims on all grounds set forth in the Petition.

X. CLOSING

Our determinations at this stage of the proceeding are based on the evidentiary record currently before us. This decision to institute trial is not a final decision as to patentability of any claim for which we have instituted an *inter partes* review. See *TriVascular, Inc. v. Samuels*, 812 F.3d 1056, 1068 (Fed. Cir. 2016) (noting that “there is a significant difference between a petitioner’s burden to establish a ‘reasonable likelihood of success’ at institution, and actually proving invalidity by a preponderance of the evidence at trial”). We will base any final decision on the full record developed during trial.

XI. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), an *inter partes* review is instituted for claims 1–20 of the Challenged Patent patent on all the unpatentability grounds asserted in the Petition; and

FURTHER ORDERED that pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4, notice is hereby given of the institution of a trial, which commences on the entry date of this decision.

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