

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GOOGLE LLC,
Petitioner,

v.

138 EAST LCD ADVANCEMENTS LIMITED,
Patent Owner.

IPR2024-00960
Patent 7,486,807 B2

Before KRISTEN L. DROESCH, GEORGE R. HOSKINS, and
KEVIN C. TROCK, *Administrative Patent Judges*.

DROESCH, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. Background

Google LLC (“Petitioner”) filed a Petition requesting *inter partes* review of claims 1–14 of U.S. Patent No. 7,486,807 B2 (Ex. 1001, “‘807 patent”). Paper 1 (“Pet.”). Petitioner filed a Declaration of Robert Stevenson, Ph.D., with its Petition. Ex. 1003. 138 East LCD Advancements Limited (“Patent Owner”) timely filed a Preliminary Response. Paper 6 (“Prelim. Resp.”). With our authorization, Petitioner filed a Preliminary Reply to the Preliminary Response (Paper 7, “Prelim. Reply”), and Patent Owner filed a Sur-reply to the Preliminary Reply (Paper 8, “Prelim. Sur-reply”).

We have authority to determine whether to institute review under 35 U.S.C. § 314 and 37 C.F.R. § 42.4(a). An *inter partes* review may not be instituted unless it is determined that “the information presented in the petition filed under section 311 and any response filed under section 313 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).

For the reasons provided below, we determine, based on the record before us, there is a reasonable likelihood Petitioner would prevail in showing at least one of the challenged claims is unpatentable.

B. Real Parties-In-Interest

Petitioner indicates that Google LLC is the real party-in-interest. Pet. 76. Patent Owner indicates that 138 East LCD Advancements Limited and Longitude Licensing Limited are the real parties-in-interest. Paper 4, 1.

C. Related Matters

The parties indicate that the '807 patent was involved in the following district court litigation: *Longitude Licensing Ltd. v. Google LLC*, 3:23-cv-03046 (N.D. Cal.). Pet. 76; Paper 4, 1.

Petitioner has filed six other IPR challenges to patents owned by Patent Owner. They are IPR2024-00955 (U.S. Patent No. 7,668,365 B2); IPR2024-00956 (U.S. Patent No. 8,355,574 B2); IPR2024-00957 (U.S. Patent No. 7,454,056 B2); IPR2024-00958 (U.S. Patent No. 8,482,638 B2); IPR2024-00959 (U.S. Patent No. 7,428,082 B2); and IPR2024-00961 (U.S. Patent No. 7,945,109 B2).

D. The '807 Patent (Ex. 1001)

The '807 patent is directed to “an image retrieving device for classifying and retrieving a digital image, a method for adding keywords in the image retrieving device, and a computer program therefor[e].” Ex. 1001, 1:13–16. The described invention makes it “possible to add keywords to the image efficiently by detecting an object (for example, a human) in the image during retrieving and classifying the image.” *Id.* at 1:20–22.

Fig. 1 of the '807 Patent is reproduced below.

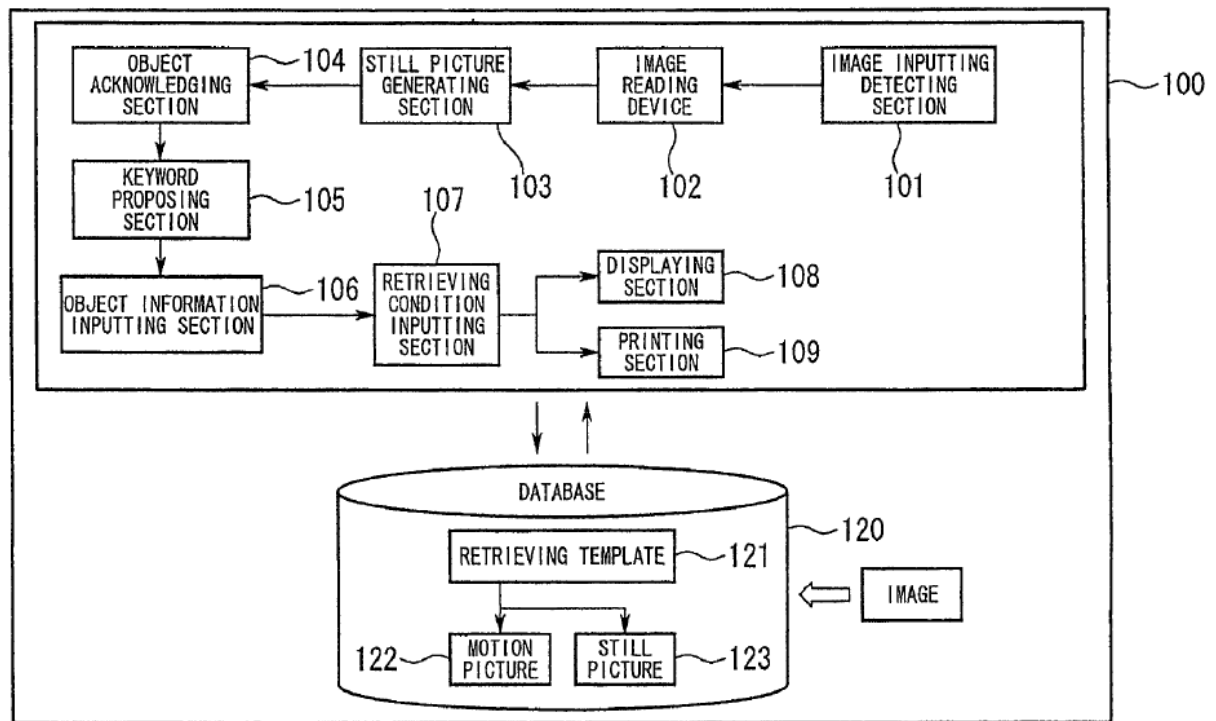


Figure 1 depicts a block diagram of the structure within an image retrieving device. *See* Ex. 1001, 6:18–20, 7:12–14. As shown in Figure 1, the image retrieving device may include image inputting detecting section 101 for detecting a new image. *See id.* at 7:18–21. Image reading device 102 may read pixel values that form the image, and still picture generating section 103 may generate a still picture if the image is part of a motion picture. *See id.* at 7:22–28. “[O]bject acknowledging section 104 acknowledges whether o[r] not a specific object is contained in the image by analyzing the image.” *Id.* at 7:29–33. “[K]eyword proposing section 105 extracts a keyword which relates to an object by referring to a database when the object is detected so as to propose the keywords to the user.” *Id.* at 7:34–37. “[O]bject information inputting section 106 serves for a user to select an object information among the proposed keywords or to input/update the keywords.” *Id.* at 7:40–43. “[R]etrieving condition

inputting section 107 serves for inputting a retrieving condition for the image which is supposed to be retrieved.” *Id.* at 7:46–49. A retrieved result may be displayed or printed via displaying section 108 or printing section 109. *See id.* at 7:53–56.

The ’807 patent provides that although “explanations are made for an example in which a keyword is added under condition[s] that the object which is supposed to be classified in the image is a face image (human),” “the present invention is not limited to such an example; that is, it is possible to add keywords by detecting the object such as a car and an animal which are supposed to be classified.” Ex. 1001, 13:13–20.

E. Illustrative Claim

Claims 1, 7, and 8 are independent, and claims 2–6 and 9–14 depend directly or indirectly therefrom. *See* Ex. 1001, 13:32–16:7. Claim 1 is illustrative and reproduced below:

1. An image retrieving device for classifying and retrieving an image by detecting an object in the image and adding a keyword, the image retrieving device comprising:

an image storing section for storing the image which is supposed to be classified and retrieved together with the keyword in a database and an object of the image being previously contained in the database;

an image inputting detecting section that detects an inputted image that is newly inputted to the image retrieving device;

an object acknowledging section for acknowledging an inputted object in the inputted image that has been detected by the image inputting detecting section;

a keyword proposing section for proposing the keyword on a display, the keyword which relates to the inputted object

which is acknowledged by the object acknowledging section;
and

an object information inputting section for confirming by the user, adding, and correcting the keyword which is proposed by the keyword proposing section when the inputted object acknowledged by the object acknowledging section is similar to the object of the image previously contained in the database.

Ex. 1001, 13:32–13:54 (including corrections from Certificate of Correction).

F. Asserted Challenges to Patentability and Asserted Prior Art

Petitioner asserts that claims 1–14 would have been unpatentable based on the following grounds (Pet. 1):

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–14	102/103(a) ¹	Stubler ²
2–4 ³ , 9–12	103(a)	Stubler, Wang ⁴

II. ANALYSIS

A. Claim Construction

In an *inter partes* review proceeding, the Board applies the same claim construction standard as that applied in federal courts in a civil action

¹ The Leahy-Smith America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011), amended 35 U.S.C. §§ 102 and 103 effective March 16, 2013. Because the '807 patent claims an effective filing date prior to the effective date of the applicable AIA amendment, we refer to the pre-AIA versions of §§ 102 and 103.

² US 2002/0188602 A1, published December 12, 2002 (Ex. 1005, “Stubler”).

³ The grounds of unpatentability identified on page 1 of the Petition include claim 5. The substance of this patentability challenge, however, does not include claim 5. *See* Pet. 59–73.

⁴ US 6,038,333, issued March 14, 2000 (Ex. 1006, “Wang”).

under 35 U.S.C. § 282(b), which is generally referred to as the *Phillips* standard. *See* 37 C.F.R. § 42.100(b); *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). Under the *Phillips* standard, “words of a claim ‘are generally given their ordinary and customary meaning.’” *Phillips*, 415 F.3d at 1312.

Petitioner asserts that “[n]o terms need construction to resolve the unpatentability issues in this Petition.” Pet. 5. In the Preliminary Response, Patent Owner concurs. *See* Prelim. Resp. 6.

In the Preliminary Reply, however, Petitioner asserts that despite Patent Owner stating no term requires express construction, the Preliminary Response “arguments hinge on [Patent Owner’s] position that ‘objects [of the image] are face images or representations of face images.’” Prelim. Reply 1 (quoting Prelim. Resp. 16) (footnote omitted). In other words, according to Petitioner, the Preliminary Response “seems to require that the ‘object’ be the face image itself,” which is contrary to the ’807 Patent because it “explain[s] that the ‘stored’ ‘objects’ can be data characterizing, describing, or otherwise identifying the object shown in the image (e.g., a face in the image).” *Id.* at 1–2 (citing Prelim. Resp. 14–16; Ex. 1001, 2:22–33, 6:47–8:9, 8:25–28, 11:35–38, 11:59–67).

In the Preliminary Sur-reply, Patent Owner asserts that it “did not limit the object to a face,” but rather “assert[ed] that the ‘object’ must be either the image of the object itself *or a representation of the object*” in the image. Prelim. Sur-reply 1 (citing Prelim. Resp. 16). According to Patent Owner, “a representation of an object encompasses the ‘patterns,’ ‘written datum,’ and ‘face area mosaic characteristics datum’ described in the specification.” *Id.* (citing Ex. 1001, 2:25–27). Patent Owner argues that

“there is no inconsistency between Patent Owner’s arguments regarding what the ‘object’ is and what the ’807 patent teaches.” *Id.* at 2 (citing Ex. 1001, 8:60–8:67).

We address this claim construction issue below in the context of our consideration of the prior art at issue. In the end, however, we determine that for the purpose of institution we need not explicitly construe any claim terms. *See, e.g., Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 868 F.3d 1013, 1017 (Fed. Cir. 2017) (“[W]e need only construe terms ‘that are in controversy, and only to the extent necessary to resolve the controversy.’” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))).

B. Level of Ordinary Skill in the Art

Petitioner asserts that “a person of ordinary skill in the art (‘POSITA’) in the field of the ’807 patent would have had at least a bachelor’s degree in electrical engineering, computer science, or related discipline, and two years of experience in digital image analysis,” and that “[r]elevant work experience can substitute for formal education and additional education could substitute for work experience.” Pet. 4 (citing Ex. 1003 ¶ 49).

Patent Owner does not dispute Petitioner’s proposed definition of a person of ordinary skill in the art for the purpose of institution. *See* Prelim. Resp. *generally*.

For the purpose of institution, we adopt Petitioner’s definition of a person of ordinary skill in the art because it is consistent with the level of skill reflected by the ’807 Patent Specification and the asserted prior art.

C. Principles of Law

“Under 35 U.S.C. § 102 a claim is anticipated ‘if each and every limitation is found either expressly or inherently in a single prior art reference.’” *King Pharm., Inc. v. Eon Labs, Inc.*, 616 F.3d 1267, 1274 (Fed. Cir. 2010) (quoting *Celeritas Techs. Ltd. v. Rockwell Int’l Corp.*, 150 F.3d 1354, 1360 (Fed. Cir. 1998)). “Anticipation requires the presence in a single prior art disclosure of all elements of a claimed invention arranged as in the claim.” *Therasense, Inc. v. Becton, Dickinson & Co.*, 593 F.3d 1325, 1332 (Fed. Cir. 2010) (quoting *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983)).

A claim is unpatentable 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 skill in the art; and (4) if in evidence, so-called secondary considerations. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966).⁵

D. Challenge to Claims 1–14 over Stubler

1. Overview of Stubler (Ex. 1005)

Stubler is directed to “[a] method of generating captions or semantic labels for an acquired image[, which] is based upon similarity between the

⁵ At this stage, the parties do not present evidence or arguments addressing secondary considerations.

acquired image and one or more stored images that are maintained in an image database environment, where the stored images have preexisting captions or labels associated with them.” Ex. 1005, code (57). More specifically, Stubler discloses the following steps:

a) acquiring an image for evaluation with respect to the stored images; b) automatically extracting metadata from the acquired image without requiring user interaction in the image database environment; c) automatically selecting one or more stored images having metadata similar to the extracted metadata, thereby providing one or more selected stored images with metadata similar to the acquired image; and d) generating one or more captions or labels for the acquired image from one or more preexisting captions or labels associated with the selected stored images.

Id. ¶ 9.

Figure 3 is reproduced below.

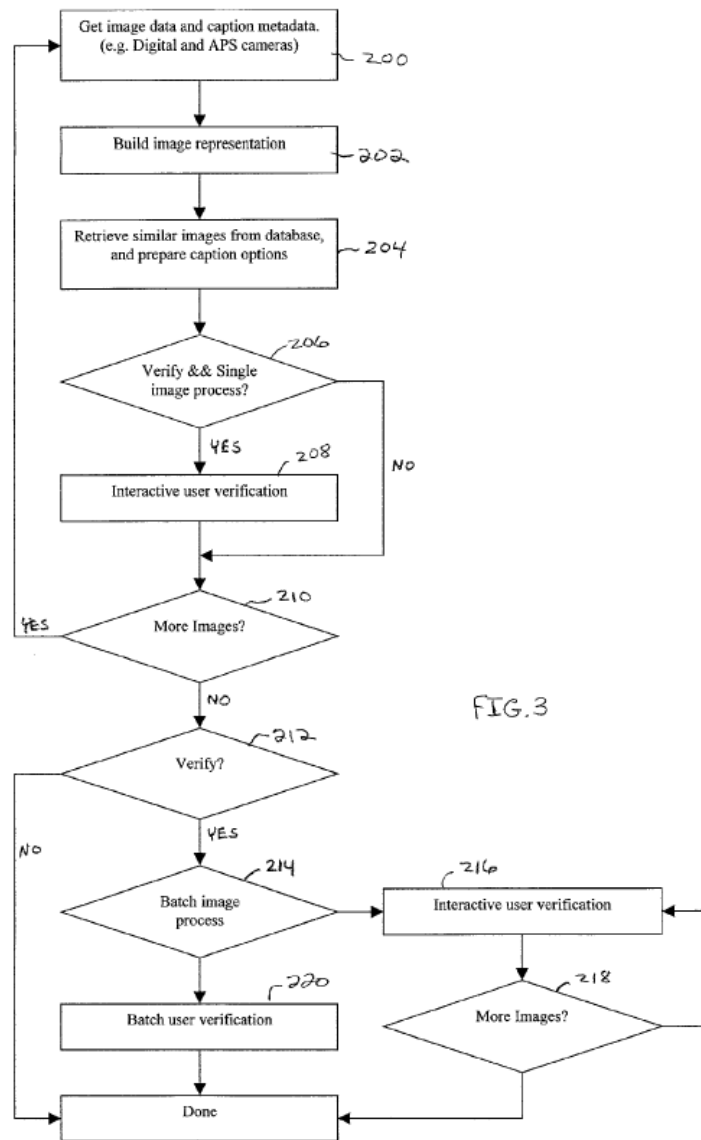


Figure 3 depicts a flow chart of a preferred embodiment. *See* Ex. 1005 ¶ 16. As shown in Figure 3, after acquiring image data and extracting metadata in step 200, and after building an image representation in step 202, Stubler’s method involves, in step 204, searching a database for similar images and preparing “a set of caption or semantic label options.” *Id.* ¶ 37. The caption or semantic label preparation may include searching either “caption metadata

(e.g., time/date, GPS, user defined events),” “global metadata (based on color histograms, texture, etc.),” or “region metadata (e.g., face, sky, grass, skin, open space, etc.) similar to that of the acquired images.” *Id.* ¶¶ 39–40. If verification is desired as indicated in step 206, an interactive user verification in step 208 allows a user to select or edit the captions or labels. *See id.* ¶¶ 37, 41.

2. Analysis of Claim 1

For the reasons that follow, we are persuaded that Petitioner establishes sufficiently for the purpose of institution that Stubler discloses, teaches, or suggests all of the limitations recited in claim 1.

a. [preamble] An image retrieving device for classifying and retrieving an image by detecting an object in the image and adding a keyword, the image retrieving device comprising:

Petitioner asserts that Stubler discloses the preamble recitation based on Stubler’s disclosure of a computer for clustering an image by detecting and extracting regional features or regional metadata in the image and adding captions or semantic labels to the image. *See* Pet. 9–15 (reproducing Ex. 1005, Figs. 2–3 (with Petitioner’s added annotations); citing Ex. 1003 ¶¶ 69–71; Ex. 1005 ¶¶ 2, 9, 11, 12, 21, 23, 30, 35, 37, 39–41, Figs. 2–5).

Patent Owner does not address Petitioner’s showing for the preamble. *See* Prelim. Resp. 10–18. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). At this stage of the proceeding, we need not determine whether the preamble is limiting because we determine Petitioner shows sufficiently for the purpose of institution that the preamble is satisfied by Stubler.

b. [1a] an image storing section for storing the image which is supposed to be classified and retrieved together with a keyword in a database and an object of the image being previously contained in the database;

Petitioner asserts that Stubler discloses this limitation based on Stubler's disclosure of a software program for storing in a database the acquired image and preexisting captions or labels associated with the selected stored images and where the one or more stored images have metadata similar to the extracted metadata, which Petitioner equates to "an object of the image being previously contained in the database." *See* Pet. 15 (citing Ex. 1003 ¶ 76; Ex. 1005 ¶¶ 9, 12, 21, 24, 35, 39–41). Petitioner explains that "Stubler further discloses storing the newly acquired image with a previously contained/previously acquired object of the image because . . . the newly acquired images are stored and classified with previously [ob]tained images containing the same 'regional metadata' (object)." Pet. 20 (citing Ex. 1003 ¶ 81; Ex. 1005 ¶¶ 35, 41). Petitioner points to an example in Stubler's disclosure of searching the database for any images with region metadata (e.g., face, sky, grass, open space, etc.) similar to the acquired images. *See* Pet. 20–21 (citing Ex. 1003 ¶ 81; Ex. 1005 ¶ 40, Fig. 5, claim 25).

Patent Owner asserts that Stubler does not disclose "an object of the image being previously [stored] in the database" because Stubler discloses only metadata about an image. Prelim. Resp. 11. According to Patent Owner, "[t]he plain reading of this [claim] language is that the object itself is stored together with the image." *Id.* at 14 (citing Ex. 1001, claim 1); *see id.* at 15 (citing Ex. 1001, claim 2), 15–16 (citing Ex. 1001, 10:1–3, 10:19–22, Fig. 8). Patent Owner contends that Stubler's metadata can be categorized into three classes of information, one of which is regional metadata, which

includes regional features such as face, skin, sky, grass, open space, and background vs. foreground. *See id.* at 11 (citing Ex. 1005 ¶¶ 29, 30).

According to Patent Owner, “Stubler’s regional metadata is simply a textual ***description*** of a feature in a particular area of the acquired image. The regional metadata is ***not*** the object of the image, itself, as recited in the [c]hallenged [c]laims.” *Id.* at 12; *see id.* at 11–12 (citing Ex. 1005 ¶ 22), 14; *see also id.* at 16 (“In Stubler, the regional metadata consists of nothing more than a *location* or a *description* of an object, but it does not disclose the object itself being saved,” citing Ex. 1005 ¶ 30). Patent Owner asserts that “[t]his understanding (that the object itself is never actually stored) is consistent with the examples that Stubler provides (and that the Petition refers to) of regional metadata detection.” *Id.* at 12. Patent Owner points to Stubler’s identification of the disclosures of Sung (Ex. 1007), Luo (Ex. 1008) and Yang (Ex. 1009), and contends that these references do not disclose detecting and saving the object itself. *See* Prelim. Resp. 12–13.

Despite Patent Owner’s arguments that the claimed “object of the image” must be the object itself, Patent Owner concedes that “the ‘object’ must be either the image of the object itself ***or a representation of the object.***” Prelim. Sur-reply 1 (citing Prelim. Resp. 16). Patent Owner contends that the Petition “fails in its attempts to extend Stubler’s ‘regional metadata’ (*e.g.*, the location or a textual description of an object) to fit . . . the ’807 patent’s claimed ‘object.’” *Id.* at 2. According to Patent Owner, “[t]he ’807 patent achieves this [goal of identifying the same object across multiple images] by saving either an image of the object or a representation of the object through, for example, an accurate representation of extracted

characteristics of the object, which allows the system to identify such similarities.” *Id.* Patent Owner asserts that

Stubler provides only limited textual information about a detected object, such as its location or color, and provides only high-level identifying information such as “grass” or “sky.” Neither the Petition nor Stubler explain how such high-level textual information can be used to identify *the same object* across multiple images, as recited in the ’807 patent.

Prelim. Sur-reply 2; *see id.* at 3 (similar argument that Stubler’s disclosure of metadata is a high-level description of the category or object in the image, such as whether an image includes a face, but lacks sufficient information to determine which face is included in the image, citing Ex. 1005 ¶ 40).

We do not agree with Patent Owner’s arguments because they are not commensurate in scope with the limitations of claim 1. Patent Owner’s arguments are premised on an “object of an image” as interpreted by Patent Owner as including “a representation of the object” must further be an accurate representation of extracted characteristics of the object which allow the system to identify similarities of the extracted characteristics across multiple images. Claim 1 does not recite or require Patent Owner’s specific proposed added limitations. Claim 1 merely recites generic similarity as follows: “when the inputted object . . . is similar to the object of the image previously contained in the database.” Ex. 1001, 13:51–54. For this reason, we are not persuaded by Patent Owner’s argument that Stubler’s regional metadata does not disclose “an object of an image.”

In any event, Petitioner points out that Stubler discloses that region features or regional metadata are extracted in order to build a region representation of, for example, a face, which is stored in a database and later used to determine facial similarity between a later-acquired image and stored

regional features. *See* Prelim. Reply 3 (citing Ex. 1003 ¶¶ 81–82, 116–118, 170–173; Ex. 1005 ¶¶ 30, 34, 37, 38, 40). In response, Patent Owner asserts that Petitioner’s description of Stubler is misleading because Petitioner omits Stubler’s statement that the region metadata may need to be processed for similarity. *See id.* at 3 (citing Ex. 1005 ¶ 34). We fail to appreciate why Petitioner’s arguments are misleading. Stubler discloses, in paragraph 34 cited by Patent Owner, that region metadata “may need to be processed for similarity by known algorithms,” and provides an example of a known algorithm for a determination of facial similarity described by Turk (Ex. 1010). *See* Ex. 1005 ¶ 34.

Accordingly, at this stage of the proceeding, we determine Petitioner shows sufficiently that Stubler discloses this limitation of claim 1.

c. [1b] an image inputting detecting section that detects an inputted image that is newly inputted to the image retrieving device;

Petitioner contends that Stubler discloses this limitation based on Stubler’s disclosure of its software program that detects a newly inputted image when the image is loaded for the first time from an external device or when the images have not yet been annotated or are unlabeled. *See* Pet. 22–24 (citing Ex. 1003 ¶¶ 83, 85; Ex. 1005 ¶¶ 6, 12, 21–23, 26, 28, 29, 35, Fig. 2, claims 5–6).

Patent Owner does not address Petitioner’s showing for this limitation of claim 1. *See* Prelim. Resp. 10–18. In any event, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378. At this stage of the proceeding, we determine Petitioner shows sufficiently that Stubler discloses this limitation of claim 1.

d. [1c] an object acknowledging section for acknowledging an inputted object in the inputted image that has been detected by the image inputting detecting section;

Petitioner asserts that Stubler discloses this limitation based on Stubler's disclosure of its software program that detects regional features such as face, skin, sky, grass, open space, background vs. foreground, etc., in the newly acquired image using various well-known techniques. *See* Pet. 26 (citing Ex. 1003 ¶¶ 91–93, 85; Ex. 1005 ¶¶ 11, 21, 30). Petitioner further asserts that Stubler's program can use algorithms to detect objects such as a human face in the newly acquired image including the algorithms described in Sung (Ex. 1007), Luo (Ex. 1008), Yang (Ex. 1009), as well as histogram analysis to detect skin color in a chromatic space corresponding to a face contained in the inputted image. *See* Pet. 26–27 (citing Ex. 1005 ¶ 30). Petitioner points out that these well-known techniques are incorporated by reference in Stubler's disclosure. *See* Pet. 27.

Patent Owner does not address Petitioner's showing for this limitation of claim 1. *See* Prelim. Resp. 10–18. In any event, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378. At this stage of the proceeding, we determine Petitioner shows sufficiently that Stubler discloses this limitation of claim 1.

e. [1d] a keyword proposing section for proposing the keyword on a display, the keyword which relates to the inputted object which is acknowledged by the object acknowledging section;

Petitioner asserts that Stubler discloses this limitation based on Stubler's disclosure of its software program that proposes captions or semantic labels to the objects identified by the detection of the regional features or region metadata as well as classification are presented to the user for verification using a display device. *See* Pet. 27–32 (reproducing

Ex. 1005, Figs. 5, 6 (with Petitioner’s added annotations); citing Ex. 1003 ¶¶ 94–99; Ex. 1005 ¶¶ 12, 21, 24, 27, 31, 35, 36, 40, 41).

Patent Owner does not address Petitioner’s showing for this limitation of claim 1. *See* Prelim. Resp. 10–18. Nonetheless, the burden remains on Petitioner to demonstrate unpatentability. *See Dynamic Drinkware*, 800 F.3d at 1378. At this stage of the proceeding, we determine Petitioner shows sufficiently that Stubler discloses this limitation of claim 1.

f. [1e] an object information inputting section for confirming by the user, adding, and correcting the keyword which is proposed by the keyword proposing section when the inputted object acknowledged by the object acknowledging section is similar to the object of the image previously contained in the database.

Petitioner asserts that Stubler discloses this limitation based on Stubler’s disclosure of an interactive user verification software program that allows the user to verify the proposed caption or semantic label associated with the acquired image when the region metadata in the image is similar to one previously contained in the database. *See* Pet. 32–36 (reproducing Ex. 1005, Figs. 5, 6 (with Petitioner’s added annotations); citing Ex. 1003 ¶¶ 100–105; Ex. 1005 ¶¶ 25, 36, 37, 40, Figs. 3, 4, claim 30).

Patent Owner’s arguments addressing this limitation repeat many of Patent Owner’s arguments that Stubler stores regional metadata and does not store the object itself. *See* Prelim. Resp. 17–18. We do not agree with Patent Owner’s arguments because, as explained above in Section II.D.2.b., Patent Owner concedes that the scope of “an object of the image” is not limited to the object itself but includes “a representation of the object.” *See* Prelim. Sur-reply 1 (citing Prelim. Resp. 16).

Accordingly, at this stage of the proceeding, we determine Petitioner shows sufficiently that Stubler discloses this limitation of claim 1.

g. Summary

For all of the foregoing reasons, for the purpose of institution and based on the record before us, Petitioner establishes sufficiently that claim 1 is anticipated by Stubler and/or the subject matter of claim 1 would have been obvious over Stubler.

3. Analysis of Independent Claims 7 and 8

Independent claims 7 and 8 recite limitations similar in scope to claim 1, but are directed to a method and computer readable medium, respectively, instead of the device of claim 1. *Compare* Ex. 1001, 14:17–59, *with* Ex. 1001, 13:32–54. Aside from addressing “a method” and “a computer readable medium,” the substance of Petitioner’s analysis addressing claims 7 and 8 incorporates by reference Petitioner’s analysis addressing claim 1. *Compare* Pet. 53–57, *with* Pet. 9–38.

Patent Owner contends the Petition fails to demonstrate a reasonable likelihood that independent claims 7 and 8 are unpatentable for the same reasons as claim 1. *See* Prelim. Resp. 18.

For the purpose of institution and based on the record before us, for the same reasons as those explained above addressing claim 1, Petitioner establishes sufficiently that claims 7 and 8 are anticipated by Stubler and/or the subject matter of claims 7 and 8 would have been obvious over Stubler.

4. Analysis of Dependent Claims 2–6 and 9–14

Claims 2–6 and 9–12 ultimately depend from claim 1, claim 13 depends from independent claim 7, and claim 14 depends from independent claim 8. *See* Ex. 1001, 13:55–14:16, 14:60–16:7. We have reviewed Petitioner’s contentions and cited supporting evidence addressing how

Stubler discloses, teaches, or suggests each of the limitations recited in claims 2–6 and 9–14. *See* Pet. 39–53, 57–59.

Patent Owner contends the Petition fails to demonstrate a reasonable likelihood that the dependent claims are unpatentable for the same reasons as claims 1 and 8. *See* Prelim. Resp. 18–19.

For the purpose of institution and based on the record before us, including the reasons explained above addressing claim 1, Petitioner establishes sufficiently that dependent claims 2–6 and 9–14 are anticipated by Stubler and/or the subject matter of claims 2–6 and 9–14 would have been obvious over Stubler.

5. Summary

For all of the foregoing reasons and based on the record before us, we determine there is a reasonable likelihood Petitioner would prevail in showing that claims 1–14 are anticipated under 35 U.S.C. § 102 by Stubler and/or unpatentable under 35 U.S.C. § 103 over Stubler.

E. Challenge to Claims 2–4 and 9–12 over Stubler and Wang

1. Overview of Wang (Ex. 1006)

Wang is directed “to a person identifier and management system that can retrieve person-identifying information from a database based on an input face such that the input face can be identified.” Ex. 1006, 1:8–12. Wang discloses that an analysis system within the person identifier and management system may include face detection and feature extraction system 43, which receives an input face image from user interface 41 and “detects if the input face image contains any face.” *Id.* at 6:14–38. System 43 uses eye location data to compute face feature data and, in one embodiment, “uses neural network-based face detection technology to detect

the face in the input face image.” *Id.* at 6:38–45. Search engine 42 uses extracted face feature data “to find and locate any face feature data stored in the profile database 13 that matches or is similar to the extracted face feature data.” *Id.* at 7:29–35. “[S]earch engine 42 then retrieves the person-identifying data associated with the matching face feature data (i.e., the similar faces) from the profile database 13.” *Id.* at 7:50–52.

2. Analysis

Petitioner combines the teachings of Wang with the teachings of Stubler to address the possibility that Patent Owner would argue or the Board would find that Stubler does not disclose or render obvious the limitations of claim 2 as well as the “personal information” recited in claim 3. *See* Pet. 61, 68.

Patent Owner contends that the Petition fails to demonstrate a reasonable likelihood that dependent claims 2–4 and 9–12 are unpatentable for the same reasons as claim 1. *See* Prelim. Resp. 19. At this stage of the proceeding Patent Owner does not dispute Petitioner’s assertions that the limitations of dependent claims 2 and 3 are taught by Stubler. *See id.* at 18–19.

As set forth in the detailed analysis in Section II.D.2, we determine there is a reasonable likelihood Petitioner would prevail in showing that claims 1–14 are anticipated under 35 U.S.C. § 102 by Stubler and/or are unpatentable under 35 U.S.C. § 103 as obvious over Stubler. *See* 35 U.S.C. § 314; 37 C.F.R. § 42.4(a). Accordingly, we institute an *inter partes* review of all of the challenged claims on all of the grounds articulated in the Petition, including the patentability challenges to claims 2–4 and 9–12 based on Stubler and Wang. *See SAS Inst. Inc. v. Iancu*, 584 U.S. 357 (2018).

III. CONCLUSION

For the foregoing reasons, we determine there is a reasonable likelihood that Petitioner would prevail in showing at least one of the challenged claims of the '807 Patent is unpatentable.

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 1–14 of the '807 Patent 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 the '807 Patent shall commence on the entry date of this Order, and notice is hereby given of the institution of a trial.

IPR2024-00960
Patent 7,486,807 B2

PETITIONER:

Erika Harmon Arner
Daniel C. Cooley
Kevin D. Rodkey
Robert K. High
Alissa E. Green
Safiya Aguilar
Grace K. Mills
FINNEGAN, HENDERSON, FARABOW,
GARRETT & DUNNER, LLP
erika.arner@finnegan.com
daniel.cooley@finnegan.com
kevin.rodkey@finnegan.com
robert.high@finnegan.com
alissa.green@finnegan.com
safiya.aguilar@finnegan.com
gracie.mills@finnegan.com
Google-Longitude-IPRs@finnegan.com

PATENT OWNER:

Cyrus A. Morton
Samuel J. LaRoque
Robins Kaplan LLP
CMorton@RobinsKaplan.com
SLaRoque@RobinsKaplan.com