

**United States Court of Appeals
for the Federal Circuit**

MOBILE ACUITY LTD.,
Plaintiff-Appellant

v.

**BLIPPAR LTD., BLIPPAR AR LTD., BLIPPAR
GROUP LTD., BLIPBUILDER LTD., BLIPPAR USA
LLC,**
Defendants-Appellees

**07446749 LTD., FKA BLIPPAR.COM LTD, BLIPPAR
LLC,**
Defendants

2022-2216

Appeal from the United States District Court for the
Central District of California in No. 2:21-cv-06926-GW-PD,
Judge George H. Wu.

Decided: August 6, 2024

GUY RUTTENBERG, Rутtenberg IP Law, PC, Los Angeles, CA, argued for plaintiff-appellant. Also represented by BRUCE DONOVAN KUYPER.

MARTIN BADER, Sheppard Mullin Richter & Hampton

LLP, San Diego, CA, argued for defendants-appellees. Also represented by PAUL W. GARRITY, New York, NY.

Before LOURIE, BRYSON, and STARK, *Circuit Judges*.

STARK, *Circuit Judge*.

Mobile Acuity Ltd. (“Mobile Acuity”) appeals from a judgment entered by the United States District Court for the Central District of California (“Central District”) dismissing its patent infringement action for failure to state a claim on the basis that the asserted patents claim ineligible subject matter under 35 U.S.C. § 101. We affirm.

I

Mobile Acuity owns U.S. Patent Nos. 10,445,618 (“’618 patent”) and 10,776,658 (“’658 patent”) (collectively, the “Asserted Patents”). The Asserted Patents are both entitled “Storing Information for Access Using a Captured Image” and share a substantially identical specification. In general, the patents disclose methods and devices relating to “storing information so that it can be accessed using a captured image.” ’618 patent at 1:15-17. In particular, the Asserted Patents describe methods and devices that “associate[] first information and at least a first portion of a first image, and use[] a second image that includes a portion corresponding to at least the first portion of the first image to access the associated first information.” *Id.* Abstract. According to the Asserted Patents, in the prior art the desire to “attach information to locations in the real world” was “achieved by using barcodes or RFID tags attached to real world objects or by associating information with absolute positions in the world.” *Id.* at 1:21-25.

The Asserted Patents purport to provide “an alternative mechanism by which information can be associated with real world locations and objects,” involving an originating user using “a mobile imaging device . . . to capture an image of a location,” and then “upload[ing] [the captured

image] . . . to the server.” *Id.* at 1:26-28, 4:28-29, 50-51. The originating user defines a “target region” in the image, which is “then processed at the server . . . to create a model user image key for that location.” *Id.* at 4:54-56. The originating user also “defines digital content that is to be associated with the target region of the captured image.” *Id.* at 4:56-58. The same originating user or a different user “can subsequently obtain the digital content associated with a location (if any) by capturing an image of the location, using their respective imaging device . . . , and by sending the image to the server.” *Id.* at 4:62-66. The server then creates “a scene user image key for the image received” and “then searches its database . . . to see if the scene user image key corresponds to a model user image key stored in the database.” *Id.* at 4:67-5:4. “[I]f there is correspondence, the digital data linked by the database . . . to the corresponding model user image key is obtained.” *Id.* at 5:4-6.

On August 27, 2021, Mobile Acuity filed a complaint in the Central District, alleging several Blippar entities (collectively, “Blippar”)¹ directly and indirectly infringed “one or more claims” of the ’618 and the ’658 patents. J.A. 103 ¶ 70; J.A. 106 ¶ 90. On January 7, 2022, Blippar sent Mobile Acuity a letter expressing its view that “all claims” of the Asserted Patents were invalid under § 101. J.A. 696. The district court then issued a scheduling order, under which the parties were “free to amend pleadings under Fed. R. Civ. P. 15 up to January 31, 2022.” J.A. 152. The deadline for amending pleadings without the need to seek leave was later extended to April 4, 2022.

On February 14, 2022, Mobile Acuity filed a first amended complaint, alleging Blippar directly and

¹ The Blippar entities include Blippar Ltd., Blippar AR Ltd., Blippar Group Ltd., BlipBuilder Ltd., Blippar USA LLC, 07446749 Ltd. (f/k/a Blippar.com Ltd.), and Blippar LLC.

indirectly infringed “at least claim 9” of the ’618 patent and “one or more claims” of the ’658 patent. J.A. 171 ¶ 80; J.A. 175 ¶ 106. Mobile Acuity also added allegations relating to the purported inventiveness of its technology, which it alleged “enables the use of the object or location itself as the marker for image searching, providing a seamless user experience rather than relying on a conventional visible cue,” “eliminates the need for the manufacturing step that adds a visual cue,” and allows companies to “measure campaign effectiveness and return-on-investment based on the object itself.” J.A. 163-64 ¶¶ 26-28.

On February 28, 2022, Blippar filed a motion to dismiss the first amended complaint under Federal Rule of Civil Procedure 12(b)(6). As part of its motion, Blippar contended that claim 9 of the ’618 patent and claim 9 of the ’658 patent “are representative of the entire claim set in each respective Asserted Patent.” J.A. 194. The motions went on to argue that “each of the Asserted Patents is invalid under 35 U.S.C. § 101.” J.A. 216. Rather than respond to the motion to dismiss, Mobile Acuity filed a second amended complaint, which is the operative complaint at issue in this appeal.

In the second amended complaint, Mobile Acuity continued to allege that Blippar directly and indirectly infringed “at least claim 9” of the ’618 patent and “one or more claims” of the ’658 patent. J.A. 230 ¶ 83; J.A. 236 ¶ 120. Mobile Acuity also specifically alleged infringement of claims 11 and 16 of the ’618 patent and claims 9, 11, and 16 of the ’658 patent.² See J.A. 234-35 ¶¶ 105, 106, 108;

² In the second amended complaint, Mobile Acuity referred to “the use of interest points in the manner specified in claim 11” of the ’658 patent. J.A. 240 ¶ 140. However, claim 11 of the ’658 patent does not recite any use of interest points. Mobile Acuity also referred to “a server

J.A. 240 ¶¶ 139-42. Independent claim 9 of the '618 patent recites:

A method of storing user-defined information for future access by multiple parties comprising, at a server controlled by a third party:

receiving from a first originating party user-defined information that is defined by the first originating party and is for access by multiple parties; and

associating the user-defined information received from the first originating party and at least a first portion of a first image in a database, wherein the user-defined information augments first user-defined information already associated at the server with at least the first portion of the first image in the database; and

providing access by a second party to the user-defined information and the first user-defined information, when a second image, captured by the second party, includes a portion corresponding to at least the first portion of the first image.

that contains a processor, memory and computer program code configured to infringe claim 16” of the '658 patent. *Id.* at ¶ 142. Claim 16 of the '658 patent does not recite a server, a processor, memory, or computer program code. Mobile Acuity may have intended to allege infringement of claims 14 and 19 of the '658 patent, respectively. Even if so, this would not affect our analysis or the outcome of the appeal, because the limitations of claims 14 and 19 of the '658 patent largely parallel those of claims 11 and 16 of the '618 patent.

'618 patent at 13:58-14:7 (as corrected). Claim 11 of the '618 patent depends from claim 9 and recites:

A method as claimed in claim 9, further comprising:

extracting interest points from the portion of the second image;

extracting interest points from the first image;

providing access by a second party to the user-defined information, when the interest points extracted from the portion of the second image matches the interest points extracted from the first image.

Id. at 14:14-21. Independent claim 16 of the '618 patent recites a server that contains a processor, memory, and computer program code configured to perform the method of claim 9:

A server for control by a third party comprising:

a processor; and a memory including computer program code,

wherein the memory, computer program code and processor are configured:

to receive user-defined information from a first user different to the third party for access by multiple parties; and

to associate the received user-defined information and at least a first portion of a first image in a database, wherein the user-defined information augments first user-defined information already associated at the server with at least the first portion of the first image in the database; and

to provide access by a remote second user to the user-defined information and the first user-defined information when a second image, captured by the remote second user, includes a portion corresponding to at least the first portion of the first image.

Id. at 14:43-60 (as corrected).

Independent claim 9 of the '658 patent is substantially identical to claim 9 of the '618 patent, except for the last (“providing access”) limitation:

A method comprising, at a server controlled by a third party:

receiving from a first originating party user-defined information that is defined by the first originating party and is for access by multiple parties; and

associating the user-defined information received from the first originating party and at least a first portion of a first image in a database, wherein the user-defined information augments first user-defined information already associated at the server with at least the first portion of the first image in the database; and

providing access by a second party to the user-defined information and the first user-defined information, in dependence upon the first portion of the first image and a second image, captured by the second party, and also a location at which the second image is captured.

'658 patent at 13:66-14:14 (as corrected).

On March 28, 2022, Blippar filed a motion to dismiss the second amended complaint pursuant to Rule 12(b)(6). Blippar continued to argue, among other things, that claim

9 of the '618 patent and claim 9 of the '658 patent “are representative of the entire claim set in each respective Asserted Patent” and that “each of the Asserted Patents is invalid under 35 U.S.C. § 101.” J.A. 258, 279.

Rather than amending its complaint a third time, which Mobile Acuity could have done without leave of court under the governing scheduling order until April 4, 2022, Mobile Acuity filed an opposition to Blippar’s motion to dismiss. In it, Mobile Acuity stated that “[t]o the extent the Court grants any aspect of Blippar’s motion, Plaintiff respectfully requests an opportunity to cure any defects through amendment.” J.A. 561. Mobile Acuity did not provide a proposed amended complaint with its opposition.

Prior to hearing argument on Blippar’s motion to dismiss, the district court issued a tentative ruling, which later became its final order, indicating that the claims of the Asserted Patents were directed to patent ineligible subject matter under § 101. The district court noted: “Plaintiff alleges that Defendants infringe at least Claims 9, 11, and 16 of the '618 Patent and Claims 9, 11, and 16 of the '658 Patent.” J.A. 5. The court’s opinion and order went on to address these six “Asserted Claims.”³

³ As we further explain, *see infra* III.B, because the “Asserted Claims” are representative of all claims of the '618 and '658 patents, and because all claims of these two patents were challenged in the motion to dismiss, *see* J.A. 279 (“each of the Asserted Patents is invalid under 35 U.S.C. § 101”), the district court’s order extended to all of those claims. Mobile Acuity did not, at any point, narrow the claims it was asserting. To the contrary, the operative complaint maintained that Mobile Acuity might allege infringement of potentially all claims of both patents, *see* J.A. 230 ¶ 83 (complaint alleging infringement of “at least claim

The trial court concluded that the “Asserted Claims are directed to abstract ideas.” J.A. 7. It held that the “independent claims of the Asserted Patents are directed to the abstract idea of leaving information at a location or object for one’s future use or reference,” *id.* (internal quotation marks omitted), and, further, that the dependent claims identified in the operative complaint “do not add enough to transform the claims from abstract to concrete,” J.A. 9. The court also determined that the Asserted Claims “do not recite an inventive concept” because the “alleged inventive concept and the described advancement over the prior art” were nothing more than the abstract idea itself, and “the remainder of Plaintiff’s inventive concept analysis focuses on general descriptions in the specification and of the commercial embodiments.” J.A. 10-11. The district court added that Mobile Acuity failed to “refer the Court to any limitations in the claims” that “would change the Court’s analysis,” making the Asserted Claims “representative of the claims of the Asserted Patents.” J.A. 11. The district court concluded by stating it did not “at this point see a way in which the Plaintiff could amend the complaint to avoid

9” of ’618 patent); J.A. 234 ¶ 105 (alleging “discovery will confirm that Blippar also infringes other claims of the ’618 Patent”); J.A. 236 ¶ 120 (alleging infringement of “one or more claims” of ’658 patent), and its opposition to the motion included argument about claims not expressly briefed by Blippar, *see, e.g.*, J.A. 546 (countering motion by discussing, among others, claim 14 of ’618 and ’658 patents, despite not being expressly asserted as “Asserted Claim”), 553 (same). Under these circumstances, the district court had jurisdiction over all claims of the two patents-in-suit, as do we. *Cf. Miller Mendel, Inc. v. City of Anna, Tex.*, ___ F.4th ___, 2024 WL 3448673 (Fed. Cir. July 18, 2024) (explaining that district court “had no jurisdiction over the unasserted claims” when plaintiff “narrowed the scope of claims at issue”).

the above cited problems.” *Id.* After oral argument, the district court adopted its tentative ruling as its final decision and granted Blippar’s motion to dismiss with prejudice.

Mobile Acuity then filed a motion to alter or amend the judgment and for leave to file a third amended complaint. Mobile Acuity argued its requested relief was necessary because the district court had “made assumptions concerning the meaning of certain limitations, without any record to do so” and had “manifestly erred” in finding a lack of inventive concept. J.A. 663. Mobile Acuity also contended that the court erred in “treat[ing] claims 9 of the ’618 and ’658 Patents as representative of the Asserted Patents” and by failing to consider Mobile Acuity’s argument that “invalidity under § 101 is an affirmative defense.” J.A. 665-66. Mobile Acuity insisted that its proposed third amended complaint would “further clarify that the Asserted Patents are not invalid.” J.A. 667.

Prior to the hearing on the motion, the district court issued a tentative order, which later became its final order, denying Mobile Acuity’s requests. The court explained that Mobile Acuity “simply reiterate[d] the same arguments the Court previously rejected,” the additional limitations in other claims of the Asserted Patents did not “prevent the Court from treating Claim 9 of the Asserted Patents as representative,” and the proposed amendments to the complaint did not “cure the defects in [Mobile Acuity’s] second amended complaint.” J.A. 17, 19, 20.

Mobile Acuity timely appealed. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

II

We review a district court’s decisions on motions to dismiss and motions for leave to amend according to applicable regional circuit law. *See Hawk Tech. Sys., LLC v. Castle*

Retail, LLC, 60 F.4th 1349, 1356 (Fed. Cir. 2023) (motions to dismiss); *Bot M8 LLC v. Sony Corp. of Am.*, 4 F.4th 1342, 1357 (Fed. Cir. 2021) (motions for leave to amend).

The Ninth Circuit reviews a district court's grant of a motion to dismiss for failure to state a claim under Rule 12(b)(6) *de novo*. See *Holt v. Cnty. of Orange*, 91 F.4th 1013, 1017 (9th Cir. 2024). In doing so, the court "accepts the factual allegations of the complaint as true and construes them in the light most favorable to the plaintiff." *Ryan S. v. UnitedHealth Grp., Inc.*, 98 F.4th 965, 970 (9th Cir. 2024) (internal quotation marks and brackets omitted). To survive a motion to dismiss for failure to state a claim, a complaint must allege "enough facts to state a claim to relief that is plausible on its face." *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007).

The Ninth Circuit reviews a district court's denial of leave to amend a complaint for abuse of discretion. See *Lund v. Cowan*, 5 F.4th 964, 968 (9th Cir. 2021). The question of futility of amendment, however, is reviewed *de novo*. See *United States v. United Healthcare Ins. Co.*, 848 F.3d 1161, 1172 (9th Cir. 2016). "A determination of futility contemplates whether, upon *de novo* review, the amendment could present a viable claim on the merits for which relief could be granted." *Murray v. Schriro*, 745 F.3d 984, 1015 (9th Cir. 2014).

Under 35 U.S.C. § 101, patents may be granted for "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." This provision, however, "contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable." *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014). The Supreme Court set forth a two-step framework for "distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Id.* at 217. At step one, we ask "whether the claims at issue are directed

to one of those patent-ineligible concepts.” *Id.* If so, we proceed to step two, where we “search for an inventive concept – *i.e.*, an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself.” *Id.* at 217-18 (internal quotation marks and brackets omitted).

“Patent eligibility under 35 U.S.C. § 101 is ultimately an issue of law we review *de novo*.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018). The patent eligibility inquiry, however, “may contain underlying issues of fact.” *Id.* “Whether the claim elements or the claimed combination are well-understood, routine, or conventional is a question of fact.” *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018).

III

Mobile Acuity asserts that the district court committed the following errors: (1) failing to recognize that Blippar’s nonpatentable subject matter contention is an affirmative defense and must be evaluated as such at the pleading stage; (2) treating claim 9 of each of the Asserted Patents as representative of all claims; (3) finding that the Asserted Patents are invalid for claiming patent ineligible subject matter; and (4) denying Mobile Acuity’s request for leave to file a third amended complaint. We address each issue in turn.

A

Mobile Acuity first argues that the district court erred in holding that a challenge under § 101 is not an affirmative defense. We agree with Mobile Acuity that a challenge to patent eligibility on § 101 grounds is an affirmative defense to a claim of patent infringement. *See, e.g., Intell. Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1324 (Fed. Cir. 2017) (describing “patent-eligibility under § 101” as example of “an affirmative defense directed to the patent in question”). Hence, the district court misspoke when it

stated during oral argument “[w]e are not talking about an affirmative defense.” J.A. 88. But this error in word choice was harmless because the district court applied the correct legal standard for evaluating an affirmative defense at the motion to dismiss stage.

Mobile Acuity wrongly contends that the district court required it to “anticipate [the] defendant’s affirmative defense in its complaint.” Appellant’s Br. at 19. The district court did not grant Blippar’s motion to dismiss on the grounds that Mobile Acuity failed to address patentable subject matter in its complaints. Rather, the district court correctly applied Ninth Circuit law, which provides that a complaint may be dismissed based on an affirmative defense that “clearly appears on the face of the pleading.” *Boquist v. Courtney*, 32 F.4th 764, 774 (9th Cir. 2022). Here, the district court’s analysis was directed to precisely this question: is the lack of patentable subject matter apparent on the face of the complaint, which alleged infringement of the Asserted Patents, which are themselves attached as exhibits to the complaint? *See Plaskett v. Wormuth*, 18 F.4th 1072, 1083 (9th Cir. 2021) (court considers on motion to dismiss “allegations contained in the pleadings, exhibits attached to the complaint, and matters properly subject to judicial notice”). Accordingly, as we have repeatedly recognized, “it is possible and proper to determine patent eligibility under 35 U.S.C. § 101 on a Rule 12(b)(6) motion.” *Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1373 (Fed. Cir. 2016); *see also, e.g., AI Visualize, Inc. v. Nuance Commc’ns, Inc.*, 97 F.4th 1371, 1381 (Fed. Cir. 2024) (affirming grant of Rule 12(b)(6) motion).

Mobile Acuity relatedly argues that the district court failed to accept the factual allegations pleaded in the complaint. We disagree. As we explain in more detail below, *see infra* III.C and III.D, Mobile Acuity’s alleged facts, even taken as true, demonstrate that the claims of the Asserted Patents are not patent eligible. *See Universal Secure Registry LLC v. Apple Inc.*, 10 F.4th 1342, 1346 (Fed. Cir. 2021)

("[P]atent eligibility can be determined at the Rule 12(b)(6) stage when there are no factual allegations that, taken as true, prevent resolving the eligibility question as a matter of law.") (internal quotation marks omitted). Thus, we see no error in the district court's treatment of the factual allegations in Mobile Acuity's operative complaint.

B

Mobile Acuity next contends that the district court erred in treating claim 9 of each of the Asserted Patents as representative of all claims. We are not persuaded.

Limiting the analysis of a § 101 challenge to representative claims is proper when the claims at issue are "substantially similar and linked to the same" ineligible concept. *Cleveland Clinic Found. v. True Health Diagnostics LLC*, 859 F.3d 1352, 1360 (Fed. Cir. 2017) (internal quotation marks omitted); see also *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1348 (Fed. Cir. 2014). Thus, a district court "may treat a claim as representative in certain situations, such as if the patentee does not present any meaningful argument for the distinctive significance of any claim limitations not found in the representative claim or if the parties agree to treat a claim as representative." *Berkheimer*, 881 F.3d at 1365.

"District courts have discretion to *require* parties litigating Section 101 motions to identify representative claims and to articulate why (or why not) claims are representative." *Sanderling Mgmt. Ltd. v. Snap Inc.*, 65 F.4th 698, 701 n.1 (Fed. Cir. 2023) (emphasis added). The patent challenger who identifies a claim as representative of a group of claims bears the initial burden to make a prima facie showing that the group of claims are "substantially similar and linked to the same" ineligible concept. *Cleveland Clinic*, 859 F.3d at 1360; see also *Content Extraction*, 776 F.3d at 1348. Once this occurs, the burden shifts to the patent owner to present non-frivolous arguments as to why

the eligibility of the identified representative claim cannot fairly be treated as decisive of the eligibility of all claims in the group. The patent owner may, for example, articulate why a claim limitation not found in the representative claim has “distinctive significance” that would have a material impact on the eligibility analysis. *Berkheimer*, 881 F.3d at 1365; *see also Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1352 (Fed. Cir. 2016). If the patent owner fails to meet its obligation to make non-frivolous arguments in opposition to the representative claim contention, it forfeits its right to argue that the claims in the group identified by the movant are patent eligible even if the representative claim is ultimately found to be ineligible. *See generally WhitServe LLC v. Dropbox, Inc.*, 854 F. App’x 367, 368 n.1 (Fed. Cir. 2021) (nonprecedential); *Brit. Telecomms. PLC v. IAC/InterActiveCorp*, 813 F. App’x 584, 587-88 (Fed. Cir. 2020) (nonprecedential).

The burden to prove the ineligibility of any patent claim stays with the patent challenger at all times. *See Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1319 (Fed. Cir. 2019) (holding that patents are presumed valid and alleged infringer must prove patents do not satisfy prerequisites, including § 101, before patents lose presumption). In the context of a dispute over the representativeness of a claim, this burden means that if the patent owner presents a non-frivolous argument that the eligibility of the purported representative claim does not fairly represent all claims in the group for purposes of eligibility,⁴ the patent

⁴ Mobile Acuity argues that treating claims as representative is “particularly troubling at the pleading stage, since additional asserted claims may be identified during discovery.” Appellant’s Br. at 45. A patent owner cannot defeat a representative claim contention by conclusorily asserting it needs discovery, for the patent owner must “present [a] meaningful argument for the distinctive

challenger bears the burden to prove either that (i) the representative claim is, in fact, representative, in that any differences among the claims are not material to the eligibility analysis (i.e., the claims are substantially similar and are linked to the same ineligible concept); or (ii) each separate claim (i.e., those not fairly represented by the purported representative claim) is ineligible for patenting. This approach is mandated by the longstanding principle that “[e]ach claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims.” 35 U.S.C. § 282; *see also Intell. Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1316 n.9 (Fed. Cir. 2016) (“Addressing each of the asserted claims is unnecessary when all the claims are substantially similar and linked to the same abstract idea.”) (internal quotation marks omitted).

Because the eligibility findings with respect to representative claims only extend to claims for which they are representative, and correspondingly do *not* extend to claims they do *not* represent, it is important for courts to resolve any disputes over representativeness and clearly state which claims are, and are not, adequately represented by others.

Here, Blippar argued in its opening brief supporting its motion to dismiss that claim 9 of the ’618 patent and claim 9 of the ’658 patent “are representative of the entire claim set in each respective Asserted Patent.” J.A. 258. Blippar explained how the other claims in the Asserted Patents are substantially similar to the representative claims –

significance of any claim limitations not found in the representative claim[s].” *Berkheimer*, 881 F.3d at 1365. Still, a patent owner may potentially point to a need for discovery as part of its non-frivolous argument against a representative claim contention.

because the other claims' additional limitations only "tack on generic computer components . . . or introduce conventional computer activities" – and are all directed to the same abstract idea: leaving information at a location or object for future access and use. J.A. 258, 260. In response, Mobile Acuity failed, as the district court put it, to "refer the Court to any limitations in the claims that Plaintiff does not currently assert that would change the Court's analysis." J.A. 11. While Mobile Acuity pointed to claims 11 and 16 of both the '618 and '658 patents, these claims did "not prevent the Court from treating Claim 9 of the Asserted Patents as representative," J.A. 19, because Mobile Acuity did not present a non-frivolous argument that the eligibility of the purported representative claim does not fairly represent all claims of the Asserted Patents. Hence, the district court would have been free to treat just these two claims (claim 9 of the '618 patent and claim 9 of the '658 patent) as representative and limit its explicit analysis to these two. In fact, however, the court did more, separately analyzing all six claims Mobile Acuity specifically identified in the operative complaint – claims 9, 11, and 16 of both the '618 and '658 patents – exercising its discretion to treat this broader group of claims as "representative of the claims of the Asserted Patents." J.A. 11.

On appeal, Mobile Acuity contends that claim 14 of the '618 patent and claim 14 of the '658 patent add elements that were ignored by the district court. This argument is unavailing because the district court also expressly addressed the eligibility of those two claims, finding that they did not contain any further elements affecting the eligibility analysis. J.A. 19. In any event, even before us Mobile Acuity has failed to identify any limitations in any of its claims that are materially different – for purposes of a patentable subject matter analysis – from the claims the district court treated as representative.

We agree with the district court that the six claims it treated as representative of all claims of the two Asserted

Patents are, in fact, representative. Therefore, we, like the district court, need only analyze the patent eligibility of these representative claims.⁵

C

1

We turn next to the district court’s finding that the claims of the Asserted Patents are directed to patent ineligible subject matter. We agree with the district court that the claims it considered – which are representative of all claims of the Asserted Patents – are directed to an abstract idea, although we articulate the abstract idea slightly (and not materially) differently than the district court.⁶ Specifically, Mobile Acuity’s claims are directed to the abstract idea of receiving information, associating information with images, comparing the images, and presenting information based on that comparison.

Taking claim 9 of the ’618 patent and claim 9 of the ’658 patent as examples, the claims recite the steps of “receiving

⁵ It follows that our ruling, like that of the district court, therefore applies to all claims of both Asserted Patents. That is, each such claim is ineligible for patenting.

⁶ The district court found that: (1) the independent claims of the Asserted Patents are directed to “leaving’ information at a location or object for one’s future use or reference,” J.A. 8; (2) claim 11 of the ’618 patent and claim 14 of the ’658 patent are directed to “collecting information, analyzing it, and displaying certain results of the collection and analysis,” *id.* (internal quotation marks omitted); and (3) claim 14 of the ’618 patent is directed to “comparing data and displaying information based on that comparison,” *id.* These immaterially different formulations indicate that the district court found, correctly, that the claims at issue are all linked to the same ineligible concept.

... user-defined information,” “associating” that information with an image in a database, and “providing access” to that information either “when a second image . . . includes a portion corresponding to at least the first portion of the first image,” ’618 patent at 13:58-14:7, or “in dependence upon the first portion of the first image and a second image . . . and also a location at which the second image is captured,” ’658 patent at 14:11-14. These claims consist solely of result-orientated, functional language and omit any specific requirements as to how these steps of information manipulation are performed. As we have by now frequently held, claims reciting generalized steps of collecting, analyzing, and presenting information, using nothing other than the conventional operations of generic computer components, are directed to abstract ideas. *See, e.g., AI Visualize*, 97 F.4th at 1378 (“We have explained that the steps of obtaining, manipulating, and displaying data, particularly when claimed at a high level of generality, are abstract concepts.”); *Elec. Power Grp.*, 830 F.3d at 1353-54 (finding challenged claim directed to abstract idea of “collecting information, analyzing it, and displaying certain results of the collection and analysis”); *Berkheimer*, 881 F.3d at 1366-67 (same for “parsing, comparing, storing, and editing data”). In particular, the requirement in claim 9 of the ’618 patent that a portion of the second image be “corresponding” with a portion of the first image does not, contrary to Mobile Acuity’s insistence, “invoke[] a specific method for comparing the images.” Appellant’s Br. at 27-28. The claim provides no details as to how the “corresponding” portions of images are determined.

The other representative claims of the ’618 and ’658 patents add nothing of significance to the eligibility analysis. Mobile Acuity argues that claim 11 of the ’618 patent (as well as claim 14 of the ’658 patent) recites extracting and matching “interest points” from the first and second images to perform the correspondence between images. The claims, however, provide no specificity as to how the “interest points” are determined or used in image comparison.

Mobile Acuity directs us to the specification, which purportedly “teaches one of ordinary skill in the art how to match and compare the user-uploaded image through the use of correspondence and interest points.” Appellant’s Br. at 28. Even assuming this “teaching” can be found, it is not included in the claims, yet it is the claims that must supply the non-abstract idea. *See Am. Axle & Mfg., Inc. v. Neapco Holdings LLC*, 967 F.3d 1285, 1293 (Fed. Cir. 2020) (“[F]eatures that are not claimed are irrelevant as to step 1 or step 2 of the *Mayo/Alice* analysis.”); *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1149 (Fed. Cir. 2016) (“The § 101 inquiry must focus on the language of the Asserted Claims themselves.”).

The district court found that the additional limitations of claim 16 of the ’618 patent “only provide the generic computer environment to carry out the abstract idea.” J.A. 8. The district court also found that the additional limitations of claims 11 and 16 of the ’658 patent “do not add enough to transform the claims from abstract to concrete.” J.A. 9. Mobile Acuity does not challenge these findings on appeal and we see no basis to disagree with them.

We can quickly dispose of several other of Mobile Acuity’s remaining arguments. It suggests that claim construction (of the terms “corresponding” and “interest points”) was necessary as a prerequisite to deciding the motion to dismiss, but Mobile Acuity failed to identify a claim construction dispute before the district court and failed even to propose a construction it contended would make a difference to the § 101 analysis. J.A. 17.⁷ To defeat a

⁷ Mobile Acuity insists that it “identified claim constructions, including for ‘correspondence’ and ‘interest points.’” Appellant’s Br. at 23 (citing J.A. 604-05). In support, it cites several paragraphs of its proposed third amended complaint, but these contain no proposed

motion to dismiss based on the purported need for claim construction, a “patentee must propose a specific claim construction . . . and explain why [any dispute] . . . must be resolved before the scope of the claims can be understood for § 101 purposes.” *Trinity Info Media, LLC v. Covalent, Inc.*, 72 F.4th 1355, 1361 (Fed. Cir. 2023); *see also Cleveland Clinic*, 859 F.3d at 1360 (collecting cases affirming patentability decisions at pleading stage without claim construction). Finally, Mobile Acuity suggests that the claimed invention describes “a nonabstract computer-functionality improvement,” specifically an improvement in “computer vision capabilities.” Appellant’s Br. at 32-33. Instead, we agree with the district court (*see* J.A. 11) that the claims, at best, “improv[e] a user’s experience while using a computer application,” which “is not, without more, sufficient to render the claims directed to an improvement in computer functionality.” *Customedia Techs., LLC v. Dish Network Corp.*, 951 F.3d 1359, 1365 (Fed. Cir. 2020).

Thus, we agree with the district court that the claims of the Asserted Patents are directed to an abstract idea at step one of *Alice*.

2

Turning to step two of the *Alice* test, we again agree with the district court. The claims of the Asserted Patents do not recite an inventive concept.

As an initial matter, Mobile Acuity makes no attempt on appeal to argue that there are material differences (for purposes of the patentability analysis) among the six representative claims, except for the recitation of “interest points” in claim 11 of the ’618 patent. Thus, in our discussion we do not need to delineate among the representative

construction nor any analysis of how any particular construction would impact the issue of patentability.

claims other than to specifically address Mobile Acuity's arguments regarding the "interest points."

Mobile Acuity argues that the "inventive concept" in its claims is "using the object (or location) itself as the trigger for leaving information to be collected in the future." Appellant's Br. at 38. That purported "inventive concept" is part of the abstract idea of comparing images and displaying information based on the comparison. But the abstract idea "cannot supply the inventive concept that renders the invention 'significantly more' than that abstract idea at step two." *Simio, LLC v. FlexSim Software Prod., Inc.*, 983 F.3d 1353, 1364 (Fed. Cir. 2020) (internal quotation marks and brackets omitted); *see also Intell. Ventures I LLC v. Cap. One Bank (USA)*, 792 F.3d 1363, 1368 (Fed. Cir. 2015) ("Instructing one to 'apply' an abstract idea and reciting no more than generic computer elements performing generic computer tasks does not make an abstract idea patent-eligible."). To the extent Mobile Acuity is suggesting that its alleged "inventive concept" is not found in the prior art, that contention is unavailing at step two, as "a claim for a new abstract idea is still an abstract idea." *Synopsys*, 839 F.3d at 1151; *see also SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1163 (Fed. Cir. 2018) ("We may assume that the techniques claimed are groundbreaking, innovative, or even brilliant, but that is not enough for eligibility.") (internal quotation marks and brackets omitted).

Mobile Acuity further argues that the inventive concept is found in the claim limitations requiring use of "interest points" for image comparison, which purportedly "provides users an innovative way to retrieve information." Appellant's Br. at 40. Methods of mapping interest points to compare images is expressly described in the

specification as existing in the prior art.⁸ Even assuming the specification leaves room for Mobile Acuity to plausibly allege that the use of “interest points” is nonetheless an inventive concept, it has failed to do so. *See Weisner v. Google LLC*, 51 F.4th 1073, 1083 (Fed. Cir. 2022) (explaining that “district court[s] [may] appropriately rel[y] on statements in the specification . . . to conclude that the claims rely on the use of existing technology”) (internal quotation marks omitted).

For the foregoing reasons, we agree with the district court that the claims of the Asserted Patents are directed to ineligible subject matter.

D

Finally, we turn to Mobile Acuity’s contention that the district court erred in denying its motion for leave to amend. Because the district court held that any amendment would be futile, as it would fail to cure the defects in the operative complaint, we review the district court’s decision de novo. *See United Healthcare*, 848 F.3d at 1172.

We agree with the district court that Mobile Acuity’s proposed third amended complaint does not fix the problems plaguing the operative complaint. Mobile Acuity argues that its amendments make clear that the concepts of

⁸ *See, e.g.*, ’618 patent at 6:47-57 (“Various methods can be used to determine interest points. For example, *Hartley and Zisserman* . . . use interest points defined by regions of minima in the image auto-correlation function. Interest points may also be defined using Scale invariant Feature Transform (SIFT) features as described in [a publication by] David G. Lowe.”); *id.* at 8:9-16 (“It is possible but not necessary for the scene image to contain all of the target region of the model image. . . . A suitable process . . . uses the Random Sample Consensus (RANSAC) algorithm which is described in *Hartley and Zisserman*.”).

“corresponding” and “interest points” are “concrete” and “refer to specific features.” Appellant’s Br. at 47. Even the inclusion in the claims of some specific concepts about image comparison does not alter the abstract character of the claims as a whole. *See Simio*, 983 F.3d at 1362; *Cellspin*, 927 F.3d at 1316.

Mobile Acuity also contends that the allegations in the proposed third amended complaint “more clearly sets forth the inventive concept” of using physical objects as the “trigger” for searching and providing access to data. Appellant’s Br. at 48. Its purported “inventive concept,” including “put[ting] the control into the hands of the users to define information linked to a photograph on a database,” Appellant’s Br. at 49 (citing J.A. 632-33 ¶¶ 31, 38), are nothing more than the implementation of an abstract idea with conventional computer operations, and are not “significantly more” than the abstract idea itself, as required to survive step two of the *Alice* test. *See Synopsys*, 839 F.3d at 1151; *SAP Am.*, 898 F.3d at 1163.

For these reasons, the district court did not err in finding that Mobile Acuity’s proposed third amended complaint would be futile. Accordingly, the district court did not err in denying Mobile Acuity’s motion for leave to amend.

IV

We have considered Mobile Acuity’s remaining arguments and find them unpersuasive. For the foregoing reasons, we affirm the district court’s grant of Blippar’s motion to dismiss and denial of Mobile Acuity’s motion for leave to amend.

AFFIRMED