

NOTE: This disposition is nonprecedential.

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

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**ANGEL TECHNOLOGIES GROUP, LLC,**  
*Plaintiff-Appellant*

v.

**META PLATFORMS, INC., FKA FACEBOOK, INC.,  
INSTAGRAM, LLC,**  
*Defendants-Appellees*

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2022-2100

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Appeal from the United States District Court for the  
Central District of California in No. 2:21-cv-08459-CBM-  
JPR, Senior Judge Consuelo Bland Marshall.

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Decided: September 17, 2024

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Before TARANTO, CHEN, and CUNNINGHAM, *Circuit Judges*.  
CUNNINGHAM, *Circuit Judge*.

Angel Technologies Group, LLC (“Angel”) sued Meta Platforms, Inc. (formerly Facebook, Inc.), and Instagram, LLC (collectively, “Meta”) for infringement of certain patent claims relating to digitally tagging images. The United States District Court for the Central District of California granted Meta’s motion to dismiss, concluding that the asserted patents do not claim patent-eligible subject matter under 35 U.S.C. § 101. *Angel Techs. Grp. LLC v. Facebook Inc.*, No. 21-cv-8459, 2022 WL 3093232 (C.D. Cal. June 30, 2022) (“*Decision*”). Also before this court is Meta’s unopposed motion to partially dismiss the appeal for mootness. ECF No. 58. For the reasons below, we *dismiss-in-part* the appeal and *affirm-in-part* the district court’s judgment.

## I. BACKGROUND

In October 2021, Angel sued Meta in the Central District of California, alleging infringement of U.S. Patent Nos. 9,959,291; 8,954,432; 10,417,275; and 10,628,480 (collectively, “the asserted patents”).<sup>1</sup> *Decision* at \*1 & n.1; J.A. 110. The asserted patents are part of the same patent family and share a common specification.<sup>2</sup> For the reasons

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<sup>1</sup> Angel asserted the ’291, ’432, and ’480 patents against Meta Platforms, Inc., and Instagram, LLC; Angel asserted the ’275 patent against only Meta Platforms, Inc. *Decision* at \*1.

<sup>2</sup> The asserted patents all trace their priority date to U.S. Provisional Patent Application No. 60/248,994, filed

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explained below, the only claim still relevant to this appeal is claim 15 of the '291 patent.

The asserted patents relate to digitally tagging images. *See* '291 patent col. 1 ll. 20–24. The specification describes permitting users to identify “objects” (for example, persons) and the location of the objects in images, then storing that information for later use. *Id.* col. 1 ll. 20–25, col. 9 l. 52 to col. 10 l. 7. The specification also describes related functions, such as providing information about users, images, and relationships between them. *See id.* col. 7 ll. 17–57.

Claim 15 of the '291 patent directly depends from claim 5 and indirectly depends from claim 1 of the '291 patent. Together, these claims recite:

1. A method implemented within a computer system including a plurality of computing devices connected via a communications network, the method associating users of the computer system with digital media accessible to one or more of the plurality of computing devices, the method comprising:

identifying a plurality of users of the computer system, one or more of the plurality of users having a unique user identifier stored in memory accessible to one or more of the plurality of computing devices, the plurality of users including a first user and a second user, the first user being different from the second user;

determining, from memory accessible to one or more of the plurality of computing devices, associations between descriptive

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on November 15, 2000. '291 patent col. 1 ll. 13–15; '432 patent col. 1 ll. 4–6; '275 patent col. 1 ll. 8–15; '480 patent col. 1 ll. 6–15.

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information about one or more of the plurality of users and unique user identifiers of the users, the associations including an association between descriptive information previously provided by the first user and a unique user identifier of the first user;

determining, from memory accessible to one or more of the plurality of computing devices, associations between the plurality of users, the associations including an association between the first user and the second user;

determining, from a plurality of digital media accessible to one or more of the plurality of computing devices, a unique digital media identifier corresponding to a digital media selection input by the second user;

providing, via one or more of the plurality of computing devices, a graphical user interface for presentation to the second user, the graphical user interface operative to receive one or more inputs from the second user indicating a selection of one or more of the plurality of users from descriptive information associated with unique user identifiers of the one or more of the plurality of users, the graphical user interface configured to display descriptive information associated with unique user identifiers of one or more of the plurality of users with a determined association with the second user;

receiving, via the communications network, an input initiated by the second user via the graphical user interface, the

received input indicating a selection of the first user from descriptive information associated with the unique user identifier of the first user;

determining the unique user identifier of the first user from the received input initiated by the second user indicating the selection of the first user; and

in response to receiving the input initiated by the second user indicating the selection of the first user and to determining the unique user identifier of the first user, storing in memory accessible to one or more of the plurality of computing devices an association between the unique user identifier of the first user and the unique digital media identifier corresponding to the digital media selection input by the second user.

5. The method of claim 1, wherein the digital media corresponding to the digital media selection input by the second user includes image data from a digital image.

15. The method of claim 5, further comprising:

determining a photo album associated with the first user, the photo album including a collection of digital images;

in response to receiving the input initiated by the second user indicating the selection of the first user and to determining the photo album associated with the first user, adding the image data from the digital image to the photo album associated with the first user.

*Id.* col. 22 ll. 4–60, col. 23 ll. 14–16, col. 24 ll. 14–22.

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On January 18, 2022, Meta filed a motion to dismiss under Fed. R. Civ. P. 12(b)(6), arguing that the claims of the asserted patents are ineligible for patent protection under 35 U.S.C. § 101. J.A. 192; *see also Decision* at \*1. The court granted Meta’s motion, dismissing the case with prejudice. *Decision* at \*5.

Angel appealed. After this court heard oral argument, in parallel *inter partes* review (“IPR”) proceedings, the Patent Trial and Appeal Board found all but one of the asserted patents’ claims unpatentable under 35 U.S.C. § 103.<sup>3</sup>

We have statutory jurisdiction under 28 U.S.C. § 1295(a)(1).

## II. STANDARD OF REVIEW

“We review a district court’s dismissal for failure to state a claim under the law of the regional circuit”—here,

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<sup>3</sup> The only claim of the asserted patents that the Board did not find unpatentable is claim 15 of the ’291 patent. *See Meta Platforms, Inc. v. Angel Techs. Grp. LLC*, No. IPR2023-00058, 2024 WL 2034278, at \*21–22 (P.T.A.B. May 7, 2024) (“’291 Final Written Decision”) (finding claims 1–14 and 16–26 of the ’291 patent unpatentable as obvious); *Meta Platforms, Inc. v. Angel Techs. Grp. LLC*, No. IPR2023-00057, 2024 WL 2032842, at \*16 (P.T.A.B. May 7, 2024) (“’432 Final Written Decision”) (finding claims 1–8 of the ’432 patent unpatentable as obvious); *Meta Platforms, Inc. v. Angel Techs. Grp. LLC*, No. IPR2023-00059, 2024 WL 1859833, at \*15 (P.T.A.B. Apr. 29, 2024) (“’275 Final Written Decision”) (finding claims 1–12 of the ’275 patent unpatentable as obvious); *Meta Platforms, Inc. v. Angel Techs. Grp. LLC*, No. IPR2023-00060, 2024 WL 1957370, at \*22 (P.T.A.B. May 3, 2024) (“’480 Final Written Decision”) (finding claims 1–30 of the ’480 patent unpatentable as obvious).

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the Ninth Circuit. *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1347 (Fed. Cir. 2016). “The Ninth Circuit reviews the grant of a 12(b)(6) motion to dismiss de novo, accepting all factual allegations in the complaint as true and construing the pleadings in the light most favorable to the nonmovant.” *Trinity Info Media, LLC v. Covalent, Inc.*, 72 F.4th 1355, 1360 (Fed. Cir. 2023).

“We review the district court’s ultimate patent-eligibility conclusion de novo.” *PersonalWeb Techs. LLC v. Google LLC*, 8 F.4th 1310, 1315 (Fed. Cir. 2021). “Patent eligibility is a question of law that may involve underlying questions of fact.” *Id.* at 1314. “[T]his question may be, and frequently has been, resolved on a Rule 12(b)(6) or (c) motion where the undisputed facts, considered under the standards required by that Rule, require a holding of ineligibility under the substantive standards of law.” *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1166 (Fed. Cir. 2018) (collecting cases).

### III. DISCUSSION

#### A.

Before addressing Angel’s arguments on the merits, we first address Meta’s unopposed motion to partially dismiss Angel’s appeal as moot because all claims have been found unpatentable in parallel IPR proceedings except claim 15 of the ’291 patent. ECF No. 58.

We grant Meta’s motion. “Article III of the Constitution limits federal courts to deciding ‘Cases’ and ‘Controversies,’ and ‘an actual controversy must exist not only at the time the complaint is filed, but through all stages of the litigation.” *Kingdomware Techs., Inc. v. United States*, 579 U.S. 162, 169 (2016) (quoting *Already, LLC v. Nike, Inc.*, 568 U.S. 85, 90–91 (2013)). The Patent Trial and Appeal Board concluded that the IPR petitioner (Meta Platforms, Inc.) had shown by a preponderance of the evidence that all claims of the asserted patents are unpatentable except

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claim 15 of the '291 patent. '291 *Final Written Decision* at \*21–22; '432 *Final Written Decision* at \*16; '275 *Final Written Decision* at \*15; '480 *Final Written Decision* at \*22. Because these claims have been found unpatentable and the time to appeal the Final Written Decisions has expired, there is no longer a case or controversy as to those claims. *See Koss Corp. v. Bose Corp.*, 107 F.4th 1363, 1367–68 (Fed. Cir. 2024) (dismissing as moot appeal of unpatentability rulings where claims at issue were found invalid in prior district court litigation). Accordingly, we dismiss as moot Angel's appeal regarding all claims except claim 15 of the '291 patent.

B.

In this appeal, only claim 15 of the '291 patent remains at issue. Angel's remaining arguments on appeal are that: (1) the district court erred in granting Meta's motion to dismiss and finding claim 15 of the '291 patent ineligible for patent protection under 35 U.S.C. § 101, Appellant's Br. 40–45; and (2) the district court abused its discretion by dismissing Angel's complaint with prejudice. *Id.* at 59. We disagree.

i.

First, we address Angel's contention that the district court erred at *Alice/Mayo* step one by treating claim 6 of the '432 patent as representative of all other claims at issue. Appellant's Br. 45–48. We need not decide whether the district court erred in treating claim 6 as representative, because even if the district court so erred, such error was harmless. The district court held that “even if [claim 6 of the '432 patent] were not representative[,] the [c]ourt reached the same conclusion on its independent review of the claims.” *Decision* at \*3. Reviewing claim 15 of the '291 patent independently, we also conclude that the claim is patent ineligible under § 101.

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At *Alice/Mayo* step one, we determine whether the claim at issue is “directed to a patent-ineligible concept, such as an abstract idea.” *Trinity*, 72 F.4th at 1361; see also *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 217 (2014). As explained below, we hold that claim 15 of the ’291 patent is directed to an abstract idea, and we find Angel’s arguments to the contrary unpersuasive.

To determine whether a claim is “directed to” a patent-ineligible concept, “we evaluate ‘the focus of the claimed advance over the prior art’ to determine if the claim’s ‘character as a whole’ is directed to excluded subject matter.” *PersonalWeb*, 8 F.4th at 1315 (quoting *Intell. Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1325 (Fed. Cir. 2017)) (cleaned up). “In the context of software-based inventions, *Alice/Mayo* step one ‘often turns on whether the claims focus on the specific asserted improvement in computer capabilities or, instead, on a process that qualifies as an abstract idea for which computers are invoked merely as a tool.’” *Trinity*, 72 F.4th at 1362–63 (quoting *In re Killian*, 45 F.4th 1373, 1382 (Fed. Cir. 2022)) (cleaned up). A “telltale sign of abstraction” is when the claimed “functions are mental processes that ‘can be performed in the human mind’ or ‘using a pencil and paper.’” *PersonalWeb*, 8 F.4th at 1316 (quoting *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1371–72 (Fed. Cir. 2011)).

Here, we start with independent claim 1 of the ’291 patent from which claim 15 indirectly depends. Claim 1 of the ’291 patent is directed to well-known activities that humans have long performed in identifying people in photos. Namely, it is directed to the abstract idea of identifying users in photos (e.g., tagging); determining associations between the users, photos, and other descriptive information; and storing an association between a user identifier and a photo identifier. Claim 1 of the ’291 patent recites eight basic steps: (1) identifying a first user and a second user, each having unique identifiers stored in memory; (2) determining an association between descriptive information

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provided by the first user and a unique user identifier of the first user; (3) determining an association between the first user and the second user; (4) determining a unique digital media identifier corresponding to a digital media selection input by the second user; (5) providing a graphical user interface for presentation to the second user; (6) receiving an input from the second user indicating a selection of the first user; (7) determining the unique user identifier of the first user from the received input; and (8) storing in memory an association between the unique user identifier of the first user and the unique digital media identifier corresponding to the digital media selection input by the second user. '291 patent col. 22 ll. 4–60. The claim essentially recites steps for tagging a user in a photo. Except for providing “a graphical user interface,” the recited steps are well-known activities that can be performed in the human mind or with pencil and paper, a “telltale sign of abstraction.” *PersonalWeb*, 8 F.4th at 1316.

Claim 1 of the '291 patent allows a “second user” to “initiate[]” from a “graphical user interface” an “input indicating a selection of [a] first user,” linked to a “unique user identifier,” when tagging persons within digital images. '291 patent col. 22 ll. 4–60. But allowing a user to choose an identifier from a list of identifiers is also an abstract idea. Choosing an item from a list of items is a mental process that has been performed by humans for ages. Merely adding another abstract idea to the claim does not make the claim less abstract. *See RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (“Adding one abstract idea . . . to another abstract idea . . . does not render the claim non-abstract.”).

Claim 15 of the '291 patent, which directly depends from claim 5 and indirectly depends from claim 1, relates to inserting a specific digital image into an identified user's photo album. '291 patent col. 23 ll. 14–16; *id.* col. 24 ll. 14–22. But collecting photos in a photo album is a patent-ineligible idea and sending information in response to an

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input (i.e., “adding . . . image data from the digital image to the photo album” “in response to receiving [an] input”) does not make the idea less abstract. Such functionality merely invokes computers as a tool; the claim is not directed to a “specific improvement to the way computers operate.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1336 (Fed. Cir. 2016).

In sum, we conclude claim 15 is directed to an abstract idea and proceed to step two of the *Alice/Mayo* inquiry.

ii.

At *Alice/Mayo* step two, we conclude claim 15 of the '291 patent does not contain additional elements that “transform the nature of the claim into a patent-eligible application.” *Alice*, 573 U.S. at 217 (internal quotation marks and citation omitted). “[W]e undertake ‘a 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.’” *PersonalWeb*, 8 F.4th at 1318 (quoting *Alice*, 573 U.S. at 217–18). “If a claim’s only ‘inventive concept’ is the application of an abstract idea using conventional and well-understood techniques, the claim has not been transformed into a patent-eligible application of an abstract idea.” *BSG Tech LLC v. Buyseasons, Inc.*, 899 F.3d 1281, 1290–91 (Fed. Cir. 2018).

Angel argues its claims “were anything but well-understood, routine, or conventional,” that the claimed improvements to computer-network functionality “were previously unknown to the industry,” and that “the results were groundbreaking,” as shown by industry praise. Appellant’s Br. 14, 52–56. We disagree.

Claim 15 of the '291 patent refers to nothing more than well-understood, routine, and conventional technology components and does not add significantly more to the abstract idea it recites. Claim 15 and the claims from which

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it depends require only generic computer components that perform generic computer functions, such as a “computer system,” “computing devices,” “a communications network,” and “memory.” ’291 patent col. 22 ll. 4–60; *id.* col. 23 ll. 14–16; *id.* col. 24 ll. 14–22; *see Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1355 (Fed. Cir. 2016) (“Nothing in the claims, understood in light of the specification, requires anything other than off-the-shelf, conventional computer, network, and display technology for gathering, sending, and presenting the desired information.”). The generic nature of these components is further shown by the specification, which explains that the purported invention can be implemented using “any computational device,” commercially available “personal or laptop computers,” a “communications network,” “any display output,” data storage methodology, and “any software coding mechanism for implementing the functionality.” *See* ’291 patent col. 5 l. 38 to col. 6 l. 10, col. 4 ll. 15–17, col. 13 ll. 10–17, col. 15 ll. 8–12. Angel has identified nothing “significantly more” than the application of abstract ideas using generic computer components, which is not sufficient to transform the nature of the claim into a patent-eligible application of the abstract idea. *Alice*, 573 U.S. at 225–26 (citation omitted). And providing a “graphical user interface” to implement the abstract idea is similarly not sufficient to make the claim patent eligible. *See FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1096 (Fed. Cir. 2016).

Angel is also incorrect that the purported “industry praise” it references shows an inventive concept. *See* Appellant’s Br. 53–54. In the complaint, Angel cites portions of articles that generally praise the benefits of tagging photos, which is the abstract idea itself, not any specific technological improvement that Angel made or claimed. *See*

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Appellant’s Br. 55; *see also, e.g.*, J.A. 120 (Sacko.com<sup>4</sup> “touts a unique feature that allows you to label the people who are in your pictures by name. After you’ve done so, you can immediately find every picture of that individual.”). For the reasons explained above, claim 15 of the ’291 patent does not recite any patent-eligible technological improvement, nor has Angel provided any convincing support for its argument that industry praise demonstrates an inventive concept in the § 101 patent eligibility context. Accordingly, we conclude that the district court did not err in its determination that the claims lack an inventive concept. *Decision* at \*4.

Angel’s arguments that the specification and file histories show an inventive concept are similarly unavailing. *See* Appellant’s Br. 57. Angel’s arguments focus on how the claims were distinguishable from prior art, *see* Appellant’s Br. 57, which is relevant for novelty and obviousness inquiries but in this case does not undermine the reasons for patent ineligibility under § 101. *See, e.g., Intell. Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1315 (Fed. Cir. 2016) (explaining that “jury’s general finding that Symantec did not prove by clear and convincing evidence that three particular prior art references do not disclose all the limitations of or render obvious the asserted claims does not resolve the question of whether the claims embody an inventive concept at the second step of *Mayo/Alice*.”).

We agree with the district court that claim 15 fails at step two of the *Alice/Mayo* inquiry.

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<sup>4</sup> Sacko.com is a photo sharing website launched in 2001 by Angel founder and inventor of the asserted patents, Mark Frigon, that Angel alleges practices the asserted patents’ claims. *Decision* at \*1; J.A. 118; Appellant’s Br. 55.

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C.

The district court did not err by dismissing Angel’s complaint with prejudice. *See Decision* at \*5. We agree with the district court’s conclusion that leave to amend would be futile. *Id.* at \*4. For example, Angel did not identify with specificity any additional factual allegations or claim constructions that would cure the deficiency of the single remaining claim. *Flowers v. First Hawaiian Bank*, 295 F.3d 966, 976 (9th Cir. 2002) (“A district court, however, does not abuse its discretion in denying leave to amend where amendment would be futile.”); *see also Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1317 (Fed. Cir. 2019) (requiring “plausible and specific factual allegations that aspects of the claims are inventive” to defeat a motion to dismiss).

IV. CONCLUSION

We have considered Angel’s remaining arguments and find them unpersuasive. For the reasons discussed above, we *affirm* the district court’s judgment as to claim 15 of the ’291 patent. We grant Meta’s motion and *dismiss* as moot Angel’s appeal as to all other claims at issue.

**AFFIRMED-IN-PART AND DISMISSED-IN-PART**

COSTS

Costs to Appellees.