NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

PLOTAGRAPH, INC., TROY PLOTA, SASCHA CONNELLY,
Plaintiffs-Appellants

v.

LIGHTRICKS, LTD.,
Defendant-Appellee

2023-1048

Appeal from the United States District Court for the Southern District of Texas in No. 4:21-cv-03873, Judge Lee H. Rosenthal.

Decided: January 22, 2024

DAVID ARTHUR WALKER, Schneider Wallace Cottrell Konecky LLP, Houston, TX, argued for plaintiffs-appellants. Also represented by SHAWN HUNTER; RAYMOND R. FERRERA, Adams and Reese LLP, Houston, TX.

ROBERT L. GREESON, Norton Rose Fulbright US LLP, Dallas, TX, argued for defendant-appellee. Also represented by STEPHANIE DEBROW, PETER MIFFLIN HILLEGAS, Austin, TX.

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Before DYK, SCHALL, and REYNA, *Circuit Judges.*

SCHALL, *Circuit Judge.*

DECISION

Plotagraph, Inc., Troy Plota, and Sascha Connelly (collectively, "Plotagraph") sued Lightricks, Ltd. ("Lightricks") in the United States District Court for the Southern District of Texas for infringement of five patents related to automated pixel shifting in digital photos or videos. The court dismissed the suit under Federal Rule of Civil Procedure 12(b)(6) for failure to state a claim, concluding that the patents claimed subject matter ineligible for patenting under 35 U.S.C. § 101. *Plotagraph, Inc. v. Lightricks Ltd.*, 620 F. Supp. 3d 591, 602 (S.D. Tex. 2022). Because we agree that the patent claims are directed to an abstract idea and lack an inventive concept, we *affirm*.

DISCUSSION

I

Plotagraph owns U.S. Patent No. 10,346,017 ("the '017 patent"), U.S. Patent No. 10,558,342 ("the '342 patent"), U.S. Patent No. 10,621,469 ("the '469 patent"), U.S. Patent No. 11,182,641 ("the '641 patent"), and U.S. Patent No. 11,301,119 ("the '119 patent") (collectively, the "Asserted Patents"). As Plotagraph explained in its Amended Complaint, the Asserted Patents are directed to "technology [that] allows users to animate portions of a digital still photo or a frame of a video file" by "select[ing] a set of pixels within the photo or video file," which are then "shifted" to "simulat[e] motion." J.A. 265–66 ¶¶ 6–7. "For example, a still photo showing an individual standing before a waterfall could be animated to have the waterfall in the still photo appear to be flowing." *Id.* at 265 ¶ 6.

The independent claims of the Asserted Patents all generally recite: (1) a preamble identifying a computer system, computer program product, method, or computer-readable media, for automating the shifting of pixels; (2) a series of preparatory steps or features initiated by a user; and (3) a final pixel-shifting step. Like the district court, we deem claim 12 of the '641 patent to be representative.[1] It recites:

> 12.   A computer program product comprising one or more non-transitory computer storage media having stored thereon computer-executable instructions that, when transmitted to a remote computer system for execution at a processor, cause the remote computer system to perform a method for automating a shifting of pixels within an image file, the method comprising:
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> > receiving a first indication of a first starting point through a user interface, wherein the first starting point is received through

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[1]   On appeal, Plotagraph analyzes claims other than claim 12 of the '641 patent. *See* Appellants' Br. 6–8 (quoting claim 1 of the '017 patent); Oral arg. at 1:25–2:20, 20:10–22:00, https://oralarguments.cafc.uscourts.gov/default.aspx?fl=23-1048_12052023.mp3 (Dec. 5, 2023) (discussing claim 7 of the '342 patent). Plotagraph did not, however, dispute the district court's reliance on claim 12 of the '641 patent as representative for purposes of determining patent eligibility, nor does Plotagraph meaningfully do so on appeal. *Plotagraph,* 620 F. Supp. 3d at 597; *see also* J.A. 507–08 (counsel for Plotagraph acknowledging at the hearing pertaining to Lightricks' Rule 12(b)(6) motion that Plotagraph "didn't respond to" Lightricks' argument that claim 12 of the '641 patent is representative).

> a user selection of a first portion of a first image frame;
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> receiving, through the user interface, a first direction associated with the first starting point;
>
> creating a first digital link extending in the first direction from the first starting point;
>
> selecting a first set of pixels that are along the first digital link and extend in the first direction away from the first starting point; and
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> shifting the first set of pixels, in the first image frame, in the first direction.

'641 patent col. 17 ll. 25–44.

II

After Plotagraph filed suit, Lightricks moved to dismiss Plotagraph's complaint under Rule 12(b)(6) for failure to state a claim. Lightricks argued that Plotagraph cannot state a claim for infringement because the claims of the Asserted Patents are patent ineligible under § 101. J.A. 201–05. After briefing and a hearing on the issue, the district court granted Lightricks' motion. The court observed that "[s]hifting pixels to create the illusion of movement within an image is a digital version of animation, which is an abstract idea." *Plotagraph*, 620 F. Supp. 3d at 600. The court concluded that the claims are directed to the abstract idea of "shifting pixels to create the illusion of movement within an image," and do not provide an inventive concept rendering the claims patent-eligible. *Id.* at 601–02.

III

We review a district court's decision to grant a motion to dismiss under the law of the regional circuit. *Trinity Info Media, LLC v. Covalent, Inc.*, 72 F.4th 1355, 1360

(Fed. Cir. 2023). The Fifth Circuit reviews Rule 12(b)(6) dismissals for failure to state a claim de novo, accepting all well-pleaded factual allegations in the complaint as true and viewing those facts in the light most favorable to the non-moving party. *Meador v. Apple, Inc.*, 911 F.3d 260, 264 (5th Cir. 2018).

"Patent eligibility is a question of law that may involve underlying questions of fact, but not every § 101 determination contains genuine disputes over the underlying facts material to the § 101 inquiry." *Trinity Info Media*, 72 F.4th at 1360 (quoting *PersonalWeb Techs. LLC v. Google LLC*, 8 F.4th 1310, 1314 (Fed. Cir. 2021)) (internal quotation marks and brackets omitted). We review a district court's ultimate conclusion on patent eligibility de novo. *Id.* Section 101 disputes 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. *Uniloc USA, Inc. v. LG Elecs., USA, Inc.*, 957 F.3d 1303, 1306 (Fed. Cir. 2020).

Section 101 defines patent-eligible subject matter as "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." 35 U.S.C. § 101. The Supreme Court established a two-step test for examining patent eligibility under § 101 in *Alice Corp. v. CLS Bank International*, 573 U.S. 208 (2014). The first step of the *Alice* analysis is to determine whether the claims at issue are directed to a patent-ineligible concept such as a law of nature, a natural phenomenon, or an abstract idea. *Id.* at 217. If so, *Alice*'s second step is to consider whether the claim nonetheless includes an "inventive concept" sufficient to "transform the nature of the claim into a patent-eligible application." *Id.* (internal quotation marks and citation omitted). This inventive concept must do more than simply recite "well-understood, routine, conventional activity." *Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc.*, 566 U.S. 66, 73 (2012).

IV

On appeal, Plotagraph argues that the district court erred with respect to both steps of the *Alice* test. We address each argument in turn.

A

Plotagraph first objects to the district court's *Alice* step one analysis. According to Plotagraph, the court overgeneralized the claims of the Asserted Patents as being directed to the concept of "animation." Plotagraph contends that this determination was "untethered from the actual claim language" and improperly incorporated limitations from the specification into the claims. Appellant's Br. 27–28; Oral arg. at 20:10–22:08 ("[N]owhere in this claim does it say this exact abstract idea. . . . [E]xamine all of [the independent claims']. It nowhere says 'shifting pixels to create the illusion of movement.'"), 20:50–22:10 (similar). In addition, Plotagraph appears to take issue with the district court's reliance on cases in which our court has held claims reciting the automation of manual processes using generic computers to be abstract because Plotagraph contends that pixel-shifting cannot be done by hand. *Id.* at 16, 21–23, 27–28; *see also id.* at 28–29 (discussing an amendment made during the prosecution of the first patent, the '017 patent, to add the word "automatically" before the pixel-shifting step "specifically to disclaim manual and mental 'shifting' of pixels and the abstract idea of shifting pixels"). Similarly, Plotagraph asserts that the court erroneously overgeneralized the claimed invention to a degree that it encompassed mental processes. Appellant's Br. 16, 27–34, 37–38. In making these arguments, Plotagraph primarily relies on *Enfish LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016), *Research Corp. Technologies v. Microsoft Corp.*, 627 F.3d 859, 868 (Fed. Cir. 2010), and *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1376 (Fed. Cir. 2011). Appellants' Br. 30–31, 33–34.

We agree with the district court that the claims are directed to an abstract idea. It is immaterial that the claims do not include any form of the word "animation," or the phrase "illusion of movement" and it was not improper for the court to consider the specification. The first step of the *Alice* test looks at the focus of the claimed advance over the prior art to determine if a claim's character as a whole is directed to excluded subject matter. *In re Killian*, 45 F.4th 1373, 1382 (Fed. Cir. 2022). In conducting that inquiry, we must read the claims as a whole and consider them in light of the specification. *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1011 (Fed. Cir. 2018); *see Yu v. Apple Inc.*, 1 F.4th 1040, 1043 (Fed. Cir. 2021). As noted, the claims of the Asserted Patents recite a series of preparatory steps in which a user selects features within the digital image that will shift and in what direction they will shift before reciting a step of shifting the corresponding pixels. The Asserted Patents' specifications consistently and unambiguously describe pixel-shifting as a way to create the illusion of movement. For example, the patents state:

> Accordingly, disclosed embodiments provide novel and innovative technical methods for automatically shifting pixels within a digital image. *The shifted pixels may give a digital image the perception of movement.* At least one disclosed embodiment requires only a single digital image *to create a perception of movement* within the digital image.

'017 patent col. 11 ll. 38–44 (emphasis added);[2] *see also id.* at col. 1 ll. 50–52 (discussing the desirability of a tool to incorporate movement in a digital image), col. 3 ll. 32–39 ("[D]isclosed embodiments automate the shifting of pixels

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[2]   The Asserted Patents largely share a common specification. For simplicity, we cite only to the '017 patent, the first of the Asserted Patents to issue.

within a digital photograph of water such that the water appears to be flowing"), col. 8 ll. 64–68 (noting that continuous pixel shifting "results in the impression of motion"). Indeed, the specifications equate pixel-shifting with providing the illusion of motion, i.e., animation:

> Once a user is satisfied with their work on an image, a preview output screen 210e allows a user to view the image *while the pixels are being shifted. Such a view may give the impression that at least a portion of the static image is animated.* In contrast, a user is also given a static preview option 220d that allows the user to view the un-animated image.

Id. at col. 9 ll. 18–24 (emphasis added); *see also* col. 4 ll. 36–37 (noting that a user can "adjust[ ] animation duration"), col. 7 ll. 36–39 ("In various embodiments, a user is provided with an animation duration and FPS rate option 220b for determining the step size within the shift and/or the speed at which the shift occurs."). Indeed, in its Amended Complaint, Plotagraph itself characterized the Asserted Patents as being directed to animation. *See* J.A. 265–66 ¶ 6 ("The Patents-in-Suit relate to novel computer systems and methods for automatically shifting pixels in still digital photos or video files. This technology allows users to animate portions of a digital still photo or a frame of video file."); *see also id.* at ¶ 7.[3]

As the district court recognized, considered as a whole and in the context of the specification, the claims of the Asserted Patents are directed to changing the position of

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[3]   In addition, at oral argument, counsel for Plotagraph acknowledged that the patents are directed to "the method of how you perform getting to the result that is a digital photo with the perception of movement within it." Oral arg. 11:30–49.

components in an image to create the appearance of movement, i.e., animation, which is clearly an abstract idea that is directly tethered to the claim language. *See Solutran, Inc. v. Elavon, Inc.*, 931 F.3d 1161, 1167–68 (Fed. Cir. 2019). Performing animation in the realm of computers, i.e., digital animation, where the components that are moved are pixels, does not render the claims any less abstract.[4] *See Univ. of Fla. Res. Found., Inc. v. Gen. Elec. Co.*, 916 F.3d 1363, 1367 (Fed. Cir. 2019) (concluding that automating "pen and paper methodologies" using a computer, even if "laudable, . . . does not render it any less abstract").

Enfish and *Research Corp.* do not help Plotagraph. In *Enfish*, claims directed to a "self-referential table for a computer database," were not abstract because the table "improve[d] the way a computer stores and retrieves data in memory." *Enfish*, 822 F.3d at 1336–39. Similarly, in *Research Corp.*, the claimed processes provided the technological advance of "produc[ing] higher quality halftone images while using less processor power and memory space." 627 F.3d at 865. No such technological advance or improvement to computer functionality is evident here. Rather, the claims merely employ generic computers to perform animation—*i.e.,* the computer simply performs more efficiently what could otherwise be accomplished manually. *See Bancorp Servs. LLC v. Sun Life Assur. Co. of Canada*, 687 F.3d 1266, 1279 (Fed. Cir. 2012). This case is thus also distinguishable from *McRO, Inc. v. Bandai Namco Games America*, 837 F.3d 1299, 1306, 1314–16 (Fed. Cir. 2016), where the claims incorporated an in-depth, extensive set of rules that enabled computers to automate phenomes in 3-D

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[4]   There is no dispute that the claimed pixel-shifting is performed using a generic computer. Oral arg. at 1:00–1:40 (counsel for Plotagraph answering "using the computer" and "computer code" when asked how the claimed pixel-shifting was accomplished).

animation, eliminating the previous need for human-intermediated judgment and steps.

CyberSource also does not help Plotagraph. In that case, we held claims ineligible that attempted to capture "unpatentable mental processes." 654 F.3d at 1376–77. The claims held to be ineligible in *CyberSource* recited components corresponding to computer implementation, but this did not preclude our court from finding that the claims were directed to a mental process. *Id.* at 1373–74. Plotagraph, though, points to our observation in *CyberSource* that the claimed method in *Research Corp.*, which "required the manipulation of computer data structures (e.g., the pixels of a digital image and a two-dimensional array known as a mask)," could not be performed mentally. Appellants' Br. 33–34 (quoting *CyberSource*, 654 F.3d at 1376). The claims at issue in *Research Corp.*, however, not only required the use of a computer but, as discussed above, also provided a technological advance. *See Bancorp*, 687 F.3d at 1279. Plotagraph's attempt to use our discussion of *Research Corp.* in *CyberSource* thus fails.

B

Having determined that the claims of the Asserted Patents are directed to the abstract idea of digital animation, we turn now to the second step of the *Alice* test. Plotagraph points to four features of the patents it alleges supply an inventive concept: (a) "the use of paths or digital links and starting and ending points to provide directions for automatic shifting"; (b) "non-linear paths"; (c) "masks which prevent shifting"; and (d) "edges/anchor points for creation of masks." Appellants' Br. 23–25 (citing J.A. 266–67 ¶ 9). Pointing to these features, Plotagraph asserts that the inventive concept issue cannot be resolved at the Rule 12(b)(6) stage. *Id.* at 27.

Although patentees who adequately allege their claims contain inventive concepts can survive a § 101 eligibility analysis under Rule 12(b)(6), dismissal is appropriate

where the factual allegations are not plausible, are refuted by the record, or are conclusory. *See Aatrix Software v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018); *Simio, LLC v. FlexSim Software Prods., Inc.*, 983 F.3d 1353, 1365 (Fed. Cir. 2020) (quoting *Aatrix*, 882 F.3d at 1125). Here, none of the four features Plotagraph points to provides an inventive concept. "An inventive concept that transforms the abstract idea into a patent-eligible invention must be significantly more than the abstract idea itself . . . ." *Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1349 (Fed. Cir. 2016). Each of the four features appears to be a feature inherent in non-automated computer animation. Each is a parameter defined by a user through conventional user-interface tools[5] "specified at a high level of generality." *Alice*, 573 U.S. at 222 (quoting *Mayo*, 566 U.S. at 82). This is "not enough to supply an inventive concept." *Id.* (citations and internal quotation marks omitted). And, although Plotagraph's Amended Complaint contended that "[t]hese features were not previously used with image editing, were not generic computer software or hardware, and were not well-understood, routine, or conventional at the time of invention," J.A. 266–67 ¶ 9, as the district court correctly observed, such conclusory statements may be disregarded when evaluating a complaint under Rule 12(b)(6) if the complaint and record do not support that conclusion. *See Simio*, 983 F.3d at 1365; *Plotagraph*, 620 F. Supp. 3d at 602. That is the case here. The Amended Complaint's allegations therefore

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[5]   *See, e.g.*, '017 patent col. 5 ll. 1–11, col. 6 ll. 1–16, 19–36, col. 12 ll. 41–50, col. 14 ll. 9–12, 16–19; *id.* at col. 9 ll. 1–12; *id.* at col. 3, ll. 45–47, col. 4 ll. 40–50, col. 16 ll. 18–25, col. 18 ll. 5–9; *id.* at col. 5 ll. 1–14, col. 16 ll. 18–29; Oral arg. at 2:39–2:55, 8:00–9:00 (discussing that a user chooses the pertinent parameters).

do not prevent resolving the eligibility question as a matter of law. *Aatrix*, 882 F.3d at 1125; *Simio*, 983 F.3d at 1365.

CONCLUSION

We have considered Plotagraph's remaining arguments and find them unpersuasive. For the reasons given above, we affirm the court's decision.

AFFIRMED

COSTS

No costs.