United States District Court
Northern District of California

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

YANBIN YU, et al., Plaintiffs, v. APPLE INC., Defendant.	Case No. 3:18-cv-06181-JD **ORDER RE MOTION TO DISMISS AMENDED COMPLAINT** Re: Dkt. No. 68
YANBIN YU, et al., Plaintiffs, v. SAMSUNG ELECTRONICS CO., LTD, et al. Defendants.	Case No. 3:18-cv-06339-JD Re: Dkt. No. 64

In these related actions, Yanbin Yu and Zhongxuan Zhang ("Yu") allege Apple and Samsung cell phones with dual-lens cameras infringe U.S. Patent No. 6,611,289, "Digital Cameras Using Multiple Sensors with Multiple Lenses" (the "'289 patent").[1] The Court dismissed the original complaints under 35 U.S.C. § 101 ("Section 101") and *Alice Corp. Pty. Ltd. v. CLS Bank International*, 573 U.S. 208 (2014). *Yu v. Apple Inc.*, 392 F. Supp. 3d 1096 (N.D. Cal. 2019). Yu filed first amended complaints ("FACs"). Dkt. No. 66 in Case No. 18-cv-06181; Dkt. No. 61 in

[1] Unless otherwise noted, all docket references are to *Yu v. Apple*, Case No. 18-cv-6181. The motions and arguments in the two cases are virtually identical.

Case No. 18-cv-6339. Apple and Samsung filed a joint motion to dismiss for lack of patentability. Dkt. No. 68 in Case No. 18-cv-6181; Dkt. No. 64 in Case No. 18-cv-6339. Samsung also seeks to dismiss Yu's willful and induced infringement claims. Dkt. No. 63 in Case No. 18-cv-6339.

The Court finds the motion suitable for decision on the papers pursuant to Civil Local Rule 7-1(b). The FACs are dismissed, and all remaining motions, including Samsung's separate motion to dismiss, are terminated as moot.

BACKGROUND

Before turning to the merits, an observation is warranted. Yu characterizes the prior dismissal order as making no less than 21 distinct "factual findings" and not properly crediting the allegations in the complaints. Dkt. No. 64 at 3-8. Yu appears to believe that every allegation in a complaint must be taken as true, and that any departure from this purported rule is in effect a finding of fact. That is not the law. On a motion to dismiss, "the tenet that a court must accept as true all of the allegations contained in a complaint is inapplicable to legal conclusions." *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (citing *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 555 (2007)). And specifically in a patent case, "a court need not accept as true allegations that contradict matters properly subject to judicial notice or by exhibit, such as the claims and the patent specification." *Secured Mail Sols. LLC v. Universal Wilde*, 873 F.3d 905, 913 (Fed. Cir. 2017) (internal quotation and citation omitted). Yu's original complaint failed under the application of these well-established principles, as informed by the Court's "judicial experience and common sense." *Iqbal*, 556 U.S. at 679. To suggest otherwise, as Yu does, is to fundamentally misunderstand the Court's order and our federal motion to dismiss practice.

Yu's comments about the prior order are also at odds with the rule "that patent eligibility can be determined at the Rule 12(b)(6) stage." *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018); *see also Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1373-74 (Fed. Cir. 2016) (same). Yu is perfectly free to try to establish a material issue of fact that might forestall a motion to dismiss, but he cannot simply declare that such disputes exist without any support in the record, or make them up out of whole cloth in a motion brief.

With respect to the merits, the salient facts are not meaningfully disputed and are detailed in the prior dismissal order. In summary, the '289 patent was issued to Yu on August 26, 2003, and expired on January 15, 2019. Dkt. No. 66-1. Yu alleges Apple and Samsung have infringed "at least Claims 1, 2, and 4" of the '289 patent. Dkt. No. 66 ¶¶ 38, 49 in Case No. 18-cv-6181; Dkt. No. 61 ¶¶ 36, 47 in Case No. 18-cv-6339. No other claims are asserted.

Neither party has disagreed with treating claim 1 as the representative independent claim, as the Court did in the prior order, or suggested another approach. *Yu*, 392 F. Supp. 3d at 1101 (citing *Elec. Power Grp. v. Alstom S.A.*, 830 F.3d 1350, 1352 (Fed. Cir. 2016)); *see also Berkheimer v. HP Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018). The Court will again use claim 1 as representative.

Claim 1 recites:

> 1. An improved digital camera comprising:
>
> a first and a second image sensor closely positioned with respect to a common plane, said second image sensor sensitive to a full region of visible color spectrum;
>
> two lenses, each being mounted in front of one of said two image sensors;
>
> said first image sensor producing a first image and said second image sensor producing a second image;
>
> an analog-to-digital converting circuitry coupled to said first and said second image sensor and digitizing said first and said second intensity images to produce correspondingly a first digital image and a second digital image;
>
> an image memory, coupled to said analog-to-digital converting circuitry, for storing said first digital image and said second digital image; and
>
> a digital image processor, coupled to said image memory and receiving said first digital image and said second digital image, producing a resultant digital image from said first digital image enhanced with said second digital image.

Dkt. No. 66-1 at 10:38-58. Claims 2 and 4 are dependent on claim 1. *Id.* at 10:59-11:6.

The parties have not called for claim construction as part of the eligibility inquiry, and as with the prior motion to dismiss, no material construction disagreements were identified in the

briefs. *Aatrix*, 882 F.3d at 1125 (citing *Genetic Techs.*, 818 F.3d at 1373). Yu makes a cursory reference to the Federal Circuit's decision in *ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 767 (Fed. Cir. 2019), for the proposition that the *Alice* inquiry "may require claim construction," Dkt. No. 70 at 10, but makes no effort to show how that might apply here. Consequently, the Court need not wait on claim construction for resolution of the Section 101 inquiry.

DISCUSSION

I. LEGAL STANDARDS

The prior dismissal order discussed in detail the standards governing review of a Rule 12(b)(6) motion and patentability under Section 101. *Yu*, 392 F. Supp. 3d at 1101-04. The parties do not challenge that discussion, or point to any intervening change in law that might warrant a different approach here.

To recap, Rule 8(a)(2) of the Federal Rules of Civil Procedure requires a complaint to provide "a short and plain statement of the claim showing that the pleader is entitled to relief." A plaintiff must allege "enough facts to state a claim to relief that is plausible on its face." *Twombly*, 550 U.S. at 570. This calls for enough "factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged." *Iqbal*, 556 U.S. at 678 (citing *Twombly*, 550 U.S. at 556).

A patentee cannot avoid dismissal of ineligible claims purely on the basis of conclusory or generalized factual allegations. *See id*. In addition, allegations about inventiveness that are "wholly divorced from the claims or the specification" will not defeat a motion to dismiss on Section 101 grounds. *Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1317 (Fed. Cir. 2019).

The scope of patentable subject matter includes "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." 35 U.S.C. § 101. The "laws of nature, physical phenomena, and abstract ideas" are "specific exceptions to § 101's broad patent-eligibility principles." *Bilski v. Kappos*, 561 U.S. 593, 601 (2010) (citation omitted).

In *Alice*, the Supreme Court set out the now-familiar test of patent-eligibility under Section 101. First, the Court "determine[s] whether the claims at issue are directed to a patent-ineligible concept" such as an abstract idea. *Id.* at 218. The "purely functional nature of the claim confirms [whether it] is directed to an abstract idea, not to a concrete embodiment of that idea." *Affinity Labs of Tex., LLC v. Amazon.com, Inc.*, 838 F.3d 1266, 1269 (Fed. Cir. 2016). "For an application of an abstract idea to satisfy step one, the claim's focus must be something other than the abstract idea itself." *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1287 (Fed. Cir. 2018). Oversimplifying the claims should be avoided because "[a]t some level, 'all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas.'" *Alice*, 573 U.S. at 217 (second alteration in original) (citation omitted).

If a patent is directed to an ineligible subject matter, the second step in *Alice* is to look 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 (alteration in original) (internal quotation and citation omitted). This step asks, "[w]hat else is there in the claims before us?" *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 78 (2012). As in step 1, the answer must include something "significantly more" than the abstract idea itself. *BSG Tech*, 899 F.3d at 1290. It is also "well-settled that mere recitation of concrete, tangible components is insufficient to confer patent eligibility to an otherwise abstract idea. Rather, the components must involve more than performance of 'well-understood, routine, conventional activit[ies] previously known to the industry.'" *In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 613 (Fed. Cir. 2016) (alteration in original) (quoting *Alice*, 573 U.S. at 225).

II. THE CLAIMED INVENTION IS NOT PATENTABLE

A. Claim 1 Is Directed to an Abstract Idea

Courts "have crafted various tools to analyze whether a claim is 'directed to' ineligible subject matter." *ChargePoint*, 920 F.3d at 766. The patent specification may be considered in this inquiry, but "reliance on the specification must always yield to the claim language in identifying" the claim's focus. *Id.*

The plain language of claim 1 of the '289 patent establishes that it is directed to a patent-ineligible concept, namely the abstract idea of taking two pictures and using those pictures to enhance each other in some way. It claims "[a]n improved digital camera" with elements like "image sensor[s]," "lenses," "analog-to-digital converting circuitry," "image memory," and "a digital image processor." Dkt. No. 66-1 at 10:38-58. These components are described as performing their normal functions. Each lens is "mounted in front of" an image sensor. The image sensors "produc[e]" images. The analog-to-digital converting circuitry "digitize[es]" the images. Image memory "stor[es]" those digital images. The digital image processor "produc[es]" an "enhanced" final digital image.

In effect, claim 1 claims a digital camera with basic digital camera parts, performing their basic functions, except that the final digital image is produced "from said first digital image enhanced with said second digital image." *Id.* at 10:57-58. The whole point of the claim is to provide two digital images so that a generic "digital image processor" can enhance one with the other. That is an abstract idea.

While this is enough to answer step 1 under *Alice*, a useful cross-check is to look for "fundamental [and] long prevalent" implementations or practices of the same basic concept. *See Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1314 (Fed. Cir. 2016) (quoting *Alice*, 573 U.S. at 219). The Court's prior order noted that photographers had been using multiple pictures to enhance each other for over a century and concluded claim 1 was directed to that abstract idea. *Yu*, 392 F. Supp. 3d at 1104-05. Plaintiffs do not challenge that comparison in any way here. Dkt. No. 70 at 3-4, 11. They try to sidestep it as an unwarranted factual conclusion, but the Federal Circuit has expressly determined that "taking note of fundamental . . . concepts" on a motion to dismiss is not the equivalent of "making factual findings." *Affinity Labs*, 838 F.3d at 1270.

Yu suggests that the patent is not directed to an abstract idea because claim 1 recites camera architecture elements. The point is not well taken. In the similar context of a patent for "taking, transmitting, and organizing digital images" on cell phones, the Federal Circuit held that the presence of "concrete, tangible components such as 'a telephone unit' and a 'server'" did not

disturb the conclusion that the claim at issue was "drawn to the concept of classifying an image and storing the image based on its classification." *In re TLI Commc'ns LLC Patent Litigation*, 823 F.3d at 609, 611. So too, here.

Yu also says that the architecture in claim 1 is a specific improvement to a technical problem, and so not an abstract idea under step 1. Dkt. No. 66 ¶ 15. But Yu presents this point only as a conclusory allegation, with no facts alleged in support. In addition, the critical question is "whether the focus of the claims is 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." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335-36 (Fed. Cir. 2016). The answer goes against Yu. The FAC says that the "problems that are described in the specification, and that were addressed by the '289 Patent, demonstrate that the focus of the claimed invention is an improvement in the functionality of digital cameras." Dkt. No. 66 ¶ 14. But the specification makes clear that the focus of the patent is on "improving image qualities." Dkt. No. 66-1 at 2:31-35. While this goal may be shaped by a desire to avoid "incurring substantial costs" in digital cameras, *id.*, "the need [for better images] is not a unique technical problem." *Cellspin*, 927 F.3d at 1316.

The "essentially result-focused functional character of claim language" amply establishes that claim 1 does not propose a specific solution to a technical problem. *Am. Axle & Mfg., Inc. v. Neapco Holdings LLC*, 939 F.3d 1355, 1365 (Fed. Cir. 2019) (citation omitted). "To be patent-eligible, the claims must recite a specific means or method that solves a problem in an existing technological process." *Koninklijke KPN N.V. v. Gemalto M2M GmbH*, 942 F.3d 1143, 1150 (Fed. Cir. 2019). The '289 patent expressly disclaims such specificity in favor of "a generic solution that makes digital cameras capable of producing high resolution images." Dkt. No. 66-1 at 2:4-5. No particular or special equipment is required. *Id.* at 4:67-5:4. The "analog-to-digital converting circuitry" digitizes, the "image memory" stores, and the "digital image processor" produces images. There is no description of how the claimed invention achieves these results, and this wide-open space leaves room to claim "all solutions for achieving a desired result" of the enhancement of digital images. *Am. Axle & Mfg.*, 939 F.3d at 1365 (citation omitted).

A "look at the focus of the claimed advance over the prior art" also shows that "the claim's character as a whole is directed to excluded subject matter." *Koninklijke*, 942 F.3d at 1150 (citation omitted). All the claimed advances in the patent are attributable to the use of "an additional image sensor . . . to modify image qualities of the original image sensor." Dkt. No. 66-1 at 7:41-43; *see also id.* at 9:19-27; *id.* at 10:1-5. This further demonstrates that claim 1 is not directed to an improvement in computer functionality, as was true for the digital image patent in *In re TLI*. *See* 823 F.3d at 611-13.

Other allegations in the FAC buttress this conclusion. The only arguably special component Yu identifies for the Apple or Samsung cameras is the processor required "to perform the complex computations necessary to take advantage of the dual-lens camera." Dkt. No. 66 ¶¶ 26-31 in Case No. 18-cv-6181; Dkt. No. 61 ¶¶ 27-29 in Case No. 18-cv-6339. As in *SAP America, Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1169-70 (Fed. Cir. 2018), "it is clear, from the claims themselves and the specification, that [the] limitations require no improved computer resources [Yu] claims to have invented, just already available computers, with their already available basic functions, to use as tools in executing the claimed process."

"[T]he extent to which the claim would preempt building blocks of science and technology" is properly considered at *Alice* step 1. *ChargePoint*, 920 F.3d at 768. Yu says that, because the patent does "not cover a system that includes only red, green, and blue monochromatic image sensors," Dkt. No. 70 at 13, preemption is not a concern. But the Federal Circuit has rejected similar efforts to evaluate preemption in such all-or-nothing terms. "While preemption may signal patent-ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility. [Plaintiffs'] attempt to limit the breadth of the claims by showing alternative[s] . . . outside of the scope of the claims does not change the conclusion that the claims are directed to patent ineligible subject matter." *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015).

Yu himself takes a very broad reading of the scope of the '289 patent. The specification describes how the claimed invention increases the resolution of photographs from digital cameras and extends their dynamic range, Dkt. No. 66-1 at 1:66-2:16, among other enhancements, *id.*

at 7:3-7. But Yu has sued Apple and Samsung for cell phone cameras with a better zoom and portrait mode, neither of which were actually mentioned in the patent. Dkt. No. 66 ¶ 25 in Case No. 18-cv-6181; Dkt. No. 61 ¶¶ 22-23 in Case No. 18-cv-6339.

B. Claim 1 Lacks an Inventive Concept

Under the second step of *Alice*, Yu has not shown that claim 1 embodies an "'inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible invention." *Alice*, 573 U.S. at 221 (quoting *Mayo*, 566 U.S. at 72-73). The presence of an inventive concept ensures a patent contains "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 217-218 (quoting *Mayo*, 566 U.S. at 72-73). The "inventive concept must be evident in the claims" themselves. *RecogniCorp, LLC v. Nintendo Co., Ltd.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017).

No individual "additional elements transform the nature of the claim into a patent-eligible application." *Alice*, 573 U.S. at 217. The FACs focus on the patent's use of "at least one image sensor that is sensitive to a full region of visible color spectrum" and "making the image sensors closely positioned with respect to a common plane." Dkt. No. 66 ¶ 10. But Yu offers no evidence or good argument that these elements individually were not "well-understood, routine, conventional activities previously known to the industry." *Alice*, 573 U.S. at 225. In any event, the question is readily "answered adversely to the patentee based on the sources properly considered on a motion to dismiss, such as the complaint, the patent, and materials subject to judicial notice." *Aatrix*, 882 F.3d at 1128. The whole purpose of the patent was to create better images without "incurring the cost of photosensitive chips with multimillion photocells." Dkt. No. 66-1 at 2:6-7. There is no suggestion by Yu that image sensors "sensitive to a full region of visible color spectrum" were not well-known.

The allegations in the FACs also undermine any claim that close positioning of image sensors was unconventional. Both prior art patents discussed in the FACs exhibited that feature, and one placed sensors "closely positioned with respect to a common plane." Dkt. No. 66 ¶ 17. While the "mere fact something is disclosed in a piece of prior art . . . does not mean it was well-

understood, routine, and conventional," *Berkheimer*, 881 F.3d at 1369, in the complete absence of any facts showing that these elements were not well-known, routine, and conventional, the close positioning of image sensors cannot supply the necessary inventive concept in this case.

Nor does an inventive concept emerge from viewing the elements as an ordered combination. Yu has not demonstrated that the application of the abstract idea of taking two pictures and using those pictures to enhance each other in some way might be unconventional. The decision in *Cellspin* highlights this deficiency. *Cellspin* involved a series of patents for "connecting a data capture device, *e.g.*, a digital camera, to a mobile device so that a user can automatically publish content from the data capture device to a website." *Cellspin*, 927 F.3d at 1309. The Federal Circuit reversed a dismissal on *Alice* grounds because "Cellspin's allegations identify several ways in which its application of capturing, transferring, and publishing data was unconventional." *Id.* at 1316. "Cellspin alleged that it was unconventional to separate the steps of capturing and publishing data so that each step would be performed by a different device linked via a wireless, paired connection. This two-step, two-device structure is discussed throughout the shared specification. Cellspin also alleged that this structure provided various benefits over prior art systems." *Id.* at 1316-17.

Yu did not make similar allegations here, and has not otherwise shown that the '289 patent entails an unconventional application of any sort. The patent requires only a generic "digital image processor . . . producing a resultant digital image from said first digital image enhanced with said second digital image." Dkt. No. 66-1 at 10:54-58. The specification recognizes that image sensors being closely positioned does not fundamentally transform this process, noting that images "from image sensors even very closed [*sic*] positioned, are not in registration" and that "[t]he pixel registration process based on each pixel is very computationally extensive and therefore preferably carried in predefined blocks. Pixels in registered blocks are then further registered in pixel bases using linear interpolation that is known in mathematical books." *Id.* at 7:67-8:1; 8:50-55. The FACs' allegation that prior art registration issues were resolved by lenses being "closely positioned with respect to a common plane" Dkt. No. 66-1 ¶ 10, is undermined by the patent itself, which attributes the solution to that problem to "linear

interpolation that is known in mathematical books." Yu has not plausibly alleged that the use of closely positioned sensors "is a technical improvement over prior art," and so that cannot help claim 1 pass step 2 under *Alice*. *See BASCOM Glob. Internet Servs., Inc v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016).

So too for the use of an image sensor "sensitive to a full region of visible color spectrum," which also does not provide the necessary inventive concept. According to the specification, it is not a particular image sensor, but rather the use of "images independently [obtained] from multiple sensors with multiple lenses . . . [that makes] complementary expansions of the respective dynamic ranges become possible." Dkt. No. 66-1 at 9:49-51. The patent describes how images from only limited-range "color sensors" can be combined to increase dynamic range if each is "separately controlled with different exposure time and other system parameters." *Id.* at 9:44-45. The specification notes that "images from a single image sensor with a single lens can be hardly enhanced for a larger dynamic range without sacrificing one end or the other of the dynamic range." *Id.* at 9:46-49. This makes clear that it is the use of multiple images, not that one image sensor is sensitive to the full color spectrum, which provides for the benefits of the claimed invention, like increased dynamic range. *See also id.* at 9:53-10:5 (same for increased resolution).

Consequently, "the alleged 'inventive concept' that solves problems identified in the field is that [digital images are combined]. But [combining images] is the abstract idea itself, and a claimed invention's use of the ineligible concept to which it is directed cannot supply the inventive concept that renders the invention 'significantly more' than that ineligible concept." *ChargePoint*, 920 F.3d at 774.

The allegations in the FACs from the '289 patent's prosecution history do not lead to a different conclusion. The FACs say that the "prosecution history of the '289 Patent makes clear that the United States Patent and Trademark Office ("USPTO") considered the claimed invention to include an unconventional camera architecture." Dkt. No. 66 ¶ 17. But for step 2, "[t]he appropriate question is not whether the entire claim as a whole was well-understood, routine and conventional to a skilled artisan (*i.e.*, whether it lacks novelty)." *Chamberlain Grp., Inc. v. Techtronic Indus. Co.*, 935 F.3d 1341, 1348-49 (Fed. Cir. 2019). The prosecution history

demonstrates only that the patent examiner found the use of "image sensors being sensitive to a full visible color spectrum in combination with other limitations" had not been disclosed in the prior art and was patentable for that reason. Dkt No. 66 ¶ 17. That is not the "inventiveness" required under *Alice* at step 2.

Plaintiffs try to make a final stand against dismissal on the contention that defendants' motions are "disingenuous in view of their own attempts to patent very similar technology." Dkt. No. 70 at 14. How this argument fits into the Section 101 inquiry is not at all clear, and Yu makes no effort to explain that. It is no bar to the motions.

CONCLUSION

The FACs against Apple in Case No. 18-cv-6181 and Samsung in Case No. 18-cv-6339 are dismissed. In the prior dismissal order, the Court expressed doubt that plaintiffs could amend around *Alice* "[i]n light of the plain language of the claims in the patent." *Yu*, 392 F. Supp. 3d at 1108. The FACs did not succeed in that effort, and the Court's "discretion to deny leave to amend is particularly broad where the plaintiff has previously amended the complaint." *S.F. Herring Assoc. v. Dep't of the Interior*, 946 F.3d 564, 582 (9th Cir. 2019). Consequently, the cases are dismissed with prejudice. All other pending motions are terminated.

IT IS SO ORDERED.

Dated: March 24, 2020

JAMES DONATO
United States District Judge