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3 **UNITED STATES DISTRICT COURT**

4 **NORTHERN DISTRICT OF CALIFORNIA**

5 **SAN JOSE DIVISION**

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7 SKILLZ PLATFORM INC.,   Case No. 21-cv-02436-BLF

8   Plaintiff,

9   v.   **ORDER GRANTING IN PART AND
                                                                         DENYING IN PART MOTION TO
                                                                         DISMISS**
10 AVIAGAMES INC.,

11   Defendant.   [Re: ECF No. 25]

12

13   Before the Court is Defendant AviaGames Inc.'s ("AviaGames") Motion to Dismiss Plaintiff

14 Skillz Platform Inc.'s ("Skillz") initial Complaint under Federal Rule of Civil Procedure 12(b)(6)

15 for failure to state a claim for patent infringement based on a lack of patent eligible subject matter

16 under 35 U.S.C. § 101 for its two asserted patents—U.S. Patent Nos. 9,649,564 (the "'564 Patent")

17 and 9,479,602 (the "'602 Patent") (collectively, the "Asserted Patents").

18   Based on the below reasoning, the Court (1) DENIES AviaGames' Motion as to the '564

19 Patent and (2) GRANTS AviaGames' Motion WITHOUT LEAVE TO AMEND as to the '602

20 Patent.

21 **I.   BACKGROUND**

22   Skillz is a Delaware corporation with its principal place of business in Oregon. *See*

23 Complaint, ECF No. 1 ¶ 12. Skillz owns the Asserted Patents. *See id.* ¶¶ 60, 82. Further, Skillz

24 maintains a mobile gaming platform, and it enables third-party game developers to make games

25 available on the platform through a Software Development Kit ("SDK"). *See id.* ¶¶ 2, 12, 22–27,

26 32–44. AviaGames is a Delaware corporation with its principal place of business in California. *See*

27 *id.* ¶ 13. Skillz alleges that AviaGames maintains a competing mobile gaming platform—

28 Pocket7Games—which AviaGames developed using Skillz's intellectual property that it gleaned

1   while developing games for Skillz's platform. *See id.* ¶¶ 4–11, 45–56.

2   Skillz asserts two patents against AviaGames—the '602 Patent and the '564 Patent—related

3   to mobile gaming. Skillz alleges that AviaGames' Pocket7Games application and standalone game

4   applications, including "Bingo Clash," "Solitaire Clash," "21 Gold," "Explodocube," and "Tile

5   Blitz," infringe the Asserted Patents. *See id.* ¶¶ 71–96.

6   **A.   The '564 Patent**

7   Skillz owns the '564 Patent, which is entitled "Peer-to-Peer Wagering Platform." The '564

8   Patent was filed on December 21, 2015 and granted on May 16, 2017, although it belongs to a long

9   line of continuation and continuation-in-part applications leading back to an application filed on

10   August 8, 2012. *See* '564 Patent at 1.

11   Claim 1 of the '564 Patent provides the following:

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13   1. A method comprising:

14   receiving, at a client including an executable game instance, a stream
             of pseudo random number seeds characterized by a unique match
             identifier for an online digital gaming competition, the client enrolled

15   in the online competition;

16   receiving, at the client and from a game server, game data for
             executing the game instance, the game instance requiring one or more

17   random numbers to complete execution of the game instance;

18   generating, using the stream of pseudo-random number seeds, a
             plurality of pseudo-random numbers; and

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20   executing the game instance by the client and using the plurality of
             pseudo-random numbers to provide the online competition to a player
             such that a beginning of gameplay experience is common between the

21   game instance and a second game instance executing on a second
             client enrolled in the online digital gaming competition;

22

23   wherein at least one of receiving, generating, and executing is
             implemented by at least one data processor forming part of at least
             one computing system.

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25   '564 Patent, Claim 1. Claim 11 of the '564 Patent is substantially the same as claim 1, but it claims

26   a "non-transitory computer program product storing instructions." And claim 18 of the '564 Patent

27   is substantially the same, but it is a system claim. The dependent claims provide that the game

28   instance is a game of skill (claims 2, 12, 19); the game instance is a game of skill having random

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1   elements (claims 3, 13, 20); the game instance initializes associated random elements to a common

2   pseudo-random value (claims 4, 14, 21); generating the plurality of pseudo-random numbers

3   includes generating a stream of pseudo-random numbers (claims 5, 15); the second game instance

4   is executed by a second client using the plurality of pseudo-random numbers (claims 6, 16); the

5   stream of random numbers is received from a remote transactional server independent of the game

6   server (claims 7, 17); the client includes a wagering module (claim 8); the client, game server, and

7   transactional server are separate and remote (claim 9); and the client is a mobile device (claim 10).

8   The '564 Patent relates to ensuring that competitors in a mobile online gaming tournament

9   played over client devices communicating with remote servers have (1) common gameplay within

10 a single tournament that (2) varies randomly between tournaments. The '564 Patent explains that

11 "random numbers are typically used in gameplay engines to decide game elements and properties

12 (e.g., what obstacles are present can be decided based on the value that a random number generator

13 returns)[.]" '564 Patent, 14:51–55. The '564 Patent further explains that "the use of common

14 random numbers can provide a common gameplay experience to a subset of users (e.g., the players

15 involved in a third party game tournament) . . . to standardize (or level the playing field) for a game

16 of skill that still has random elements." *Id.*, 14:55–60. The alleged innovation of the '564 Patent is

17 to use a "tournament identification number as a seed to generate pseudo-random numbers, thus

18 causing gameplay to be different between tournaments, but not between game instances involved in

19 a given tournament." *Id.*, 15:3–7.

20   During prosecution of the '564 Patent, the first set of claims considered by the examiner

21 were substantially the same as the resulting claims, with the only difference being that the phrase

22 "pseudo random number seeds *characterized by* a unique match identifier" in the final independent

23 claims was replaced with "pseudo random number seeds *associated with* a unique match identifier"

24 in the preliminary claims. *See* January 26, 2016 Amendment at 2–5 (emphasis added). On

25 August 23, 2016, the examiner issued a Non-Final Rejection of the preliminary claims. *See*

26 Sacksteder Decl., ECF No. 25-1, Ex. E, August 23, 2016 Non-Final Rejection. The examiner stated

27 that the claims were valid under § 101 because they were "necessarily rooted in computer

28 technology and thus not drawn to an abstract idea." *See id.* ¶ 7. Further, the examiner stated that

"the claimed invention does not merely take an abstract idea (i.e. a generic game) and 'apply' it using only conventional components. Rather, . . . the presence of a randomized number generation seeding system is rooted in particularized computing elements. Thus, the claimed invention aligns with the facts of the Federal Circuit decision in *Enfish*." *Id.* However, the examiner issued a non-final rejection of all but final Claim 8 as invalid in light of U.S. Patent Application No. 2010/0022307 ("Steuer") and U.S. Patent Application No. 2010/0311496 ("Taylor"), and final Claim 8 as invalid in light of Steuer, Taylor, and U.S. Patent Application No. 2005/0090307 ("Walker"). *See id.* ¶¶ 12–23. The examiner found that Steuer anticipated all elements of the claims, other than the fact that the stream of pseudo-random number seeds was "associated with a unique match identifier." *See id.* ¶ 16. However, the examiner found that this element was obvious in light of the Taylor reference, since it discloses using a seed combined with a current date and time to produce a unique input value for a game. *See id.* ¶ 16. Further, the examiner found the three independent claims invalid based on the doctrine of nonstatutory double patenting over claims 1, 8, and 15 of U.S. Patent No. 9,240,101. *See id.* ¶¶ 24–27.

In response, the applicants amended the claims to their final form (replacing "associated with" with "characterized by" in the independent claims) and filed a terminal disclaimer over U.S. Patent No. 9,240,101. *See* November 22, 2016 Amendment at 3–6, 8. The examiner granted the patent as amended. *See* January 18, 2017 Notice of Allowance.

B. The '602 Patent

Skillz also owns the '602 Patent, which is entitled "Event Platform for Peer-to-Peer Digital Gaming Competition." The '602 Patent was filed on May 20, 2015 and granted on October 25, 2016. Claim 1 of the '602 Patent recites the following:

> 1. A method for implementation by at least one data processor forming part of at least one computing system, the method comprising:
>
> receiving, by at least one data processor, data identifying a peer-to-peer gaming event and comprising a request to register for the peer-to-peer gaming event, the request originating from peer-to-peer gaming platform software stored in memory of a client and executing on the client, the client being remote from the data least one data

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processor, the peer-to-peer event being a geographically restricted peer-to-peer gaming competition having a plurality of participants each playing a skill-based digital game;

associating, using the at least one data processor, the client with the peer-to-peer gaming event;

receiving data characterizing a location of the client according to a geolocation system of the client, wherein the geolocation system of the client is a global positioning system (GPS) service or a local positioning system (LPS) utilizing beacons; and

comparing the location of the client to a predefined geolocation of the peer-to-peer event to determine, using the at least one data processor, that the client satisfies a geographical location requirement of the peer-to-peer gaming event; and

causing, using the at least one data processor, provision of the skill-based digital game to the client during the peer-to-peer gaming event, the skill-based digital game exchanging game data with a game server remote from the at least one data processor and the client.

'602 Patent, Claim 1. Claim 10 recites substantially the same limitations as claim 1 in the context of a claim directed to "[a] non-transitory computer program product storing instructions," and claim 19 recites substantially the same limitations in the context of a system claim. Claims 2, 11, and 20 recite that the skill-based game is a single player or multiplayer game. Claims 3–5, 12–14, and 21–23 pertain to a video feed recording in-game actions that can be shared with other users. Claims 6, 15, and 24 pertain to presenting users with targeted advertisements during the course of game events. Claims 7 and 16 disclose a method for transmitting monetary prizes for games. Claims 8 and 17 recite that the "gaming platform software executing on the client provides a random number seed to an operating system independent random number generator so that an initial state of the skill-based digital game is consistent for the plurality of participants." And claims 9 and 18 recite that the skill-based game is concurrently played by the plurality of participants.

The '602 Patent specification discusses a platform for mobile gaming tournaments. The '602 Patent discloses that fans of electronic sports or "eSports" have community organized gatherings in bars and restaurants to watch video streams of each other's gameplay while enjoying food and socializing. *See* '602 Patent, 1:11–19. Bars catering to these events, called "eSports bars" have arisen. *See id.*, 1:20–26. But outside of eSports bars, "eSporting events are generally organized

1   in an ad-hoc manner." *Id.*, 1:27–31. Further, venues often lack sufficient hardware for hosting these

2   events. *See id.*, 1:31–38.

3   The '602 Patent generally relates to a platform for hosting gaming events with geographic

4   restrictions. *See* '602 Patent, Abstract. The platform consists of a client device and a data processor

5   remote from the client device. *See, e.g., id.* 1:47–52. After associating a client device with the

6   gaming event, the processor receives location data from the client based on the client's geolocation

7   system, which is either a global positioning system (GPS) or a local positioning system (LPS)

8   utilizing beacons. *See id.* Then, the processor determines if the client's location satisfies a

9   geographical location requirement of the gaming event by comparing the client's location to a

10   predefined location of the gaming event. *See id.* If the client satisfies the location criteria, the

11   processor provides game content to the client. *See id.*, 9:29–43. The specification indicates that an

12   advantage of the geographic restrictions of the alleged invention is that they can ensure that

13   participants in a live event are located in the same place, thereby ensuring "[s]ocial aspects of live

14   events." *See* '602 Patent, 4:13–17, 4:62–5:2, 3:1–15, 3:64–4:11, 4:62–5:2. The '602 Patent further

15   relates to techniques for managing gaming events and ensuring fair play amongst event participants,

16   including (1) a random number seed provided to an operating system independent random number

17   generator so that each player has a consistent initial state of the game, *see id.*, Claims 8, 17, and

18   (2) broadcasting a video feed of one user's game display to other users participating in the same

19   gaming event, *see id.*, Claims 3–5, 12–14, 21–23.

20   During prosecution of the '602 Patent, the examiner issued a non-final rejection of

21   preliminary claims on the basis that they were directed to an abstract idea and they failed to identify

22   a particular use or application that qualified as an improvement to a particular technology or

23   technical field. *See* Sacksteder Decl., ECF No. 25-1, Ex. A at 3–5. Further, the examiner found

24   that the dependent claims "fail[ed] to establish that the claim(s) is/are not directed to an abstract

25   idea." *Id.* at 3. In response, applicant added limitations to the independent claims (1) specifying

26   that the peer-to-peer gaming platform software was stored in the memory of a client and (2)

27   indicating that the client's location was determined based on GPS or LPS information the server

28   received from the client. *See* Sacksteder Decl., ECF No. 25-1, Ex. B at 2–9. The examiner allowed

the amended claims. *See id.*, Exs. C–D.

II. LEGAL STANDARD

A. Motion to Dismiss Under Fed. R. Civ. Proc. 12(b)(6)

"A motion to dismiss under Federal Rule of Civil Procedure 12(b)(6) for failure to state a claim upon which relief can be granted 'tests the legal sufficiency of a claim.'" *Conservation Force v. Salazar*, 646 F.3d 1240, 1241–42 (9th Cir. 2011) (quoting *Navarro v. Block*, 250 F.3d 729, 732 (9th Cir. 2001)). When determining whether a plaintiff has stated a claim, the Court accepts as true all well-pled factual allegations and construes them in the light most favorable to the plaintiff. *Reese v. BP Exploration (Alaska) Inc.*, 643 F.3d 681, 690 (9th Cir. 2011). However, the Court need not "accept as true allegations that contradict matters properly subject to judicial notice" or "allegations that are merely conclusory, unwarranted deductions of fact, or unreasonable inferences." *In re Gilead Scis. Sec. Litig.*, 536 F.3d 1049, 1055 (9th Cir. 2008) (internal quotation marks and citations omitted). While a complaint need not contain detailed factual allegations, it "must contain sufficient factual matter, accepted as true, to 'state a claim to relief that is plausible on its face.'" *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009) (quoting *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007)). A claim is facially plausible when it "allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged." *Id.* On a motion to dismiss, the Court's review is limited to the face of the complaint and matters judicially noticeable. *MGIC Indem. Corp. v. Weisman*, 803 F.2d 500, 504 (9th Cir. 1986); *N. Star Int'l v. Ariz. Corp. Comm'n*, 720 F.2d 578, 581 (9th Cir. 1983).

B. Leave to Amend

In deciding whether to grant leave to amend, the Court must consider the factors set forth by the Supreme Court in *Foman v. Davis*, 371 U.S. 178 (1962), and discussed at length by the Ninth Circuit in *Eminence Capital, LLC v. Aspeon, Inc.*, 316 F.3d 1048 (9th Cir. 2003). A district court ordinarily must grant leave to amend unless one or more of the *Foman* factors is present: (1) undue delay, (2) bad faith or dilatory motive, (3) repeated failure to cure deficiencies by amendment, (4) undue prejudice to the opposing party, or (5) futility of amendment. *Eminence Capital*, 316 F.3d at 1052. "[I]t is the consideration of prejudice to the opposing party that carries the

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1 greatest weight." *Id.* However, a strong showing with respect to one of the other factors may

2 warrant denial of leave to amend. *Id.*

3   Courts in this District differ as to whether leave to amend is appropriate upon a finding that

4 claims are directed to patent ineligible subject matter. *See Papst Licensing GmbH & Co. KG v.*

5 *Xilinx Inc.*, 193 F.Supp.3d 1069, 1095 (N.D. Cal. 2016) (dismissing patent infringement claims with

6 prejudice where "the asserted claims are directed to patent-ineligible subject matter, a defect which

7 cannot be cured through amendment of a complaint."); *Internet Patents Corp. v. General*

8 *Automobile Ins. Servs., Inc.*, 29 F.Supp.3d 1264, 1270 (N.D. Cal. 2013) ("[I]t is the duty of the court

9 to dismiss a patent infringement suit whenever it affirmatively appears that the patent is invalid.")

10 (citation omitted); *but see RingCentral, Inc. v. Dialpad, Inc.*, 372 F.Supp.3d 988, 1005 (N.D. Cal.

11 2019) ("Although the Court doubts whether the identified deficiencies can be cured by amendment,

12 the Court will nonetheless grant leave to amend solely to allow RingCentral an opportunity to

13 attempt to plead patent eligibility.") (citing *Aatrix*, 882 F.3d at 1126–28); *Yu v. Apple*, 392

14 F.Supp.3d 1096, 1008 (N.D. Cal. 2019) ("In light of the plain language of the claims in the patent,

15 the Court has substantial doubt that Yu can amend around this problem. Even so, the Court cannot

16 say that any amendment would necessarily be futile, and so plaintiffs may file amended

17 complaints[.]").

18   **C.   Patent Validity Challenges Under 35 U.S.C. § 101**

19   A patent can be obtained for "any new and useful process, machine, manufacture, or

20 composition of matter, or any new and useful improvement thereof[.]" 35 U.S.C. § 101. However,

21 "this provision contains an important implicit exception: Laws of nature, natural phenomena, and

22 abstract ideas are not patentable." *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*,

23 569 U.S. 576, 589 (2013) (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*,

24 566 U.S. 66, 70 (2012)) (alterations omitted). But the application of these concepts to new and

25 useful ends remains eligible for patent protection. *Id.* at 589–90.

26   Patent eligibility can be determined at the Rule 12(b)(6) stage despite the lack of expert

27 testimony or claim construction. *See Cleveland Clinic Found. v. True Health Diagnostics LLC*,

28 859 F.3d 1352, 1360 (Fed. Cir. 2017) (affirming § 101 rejection at motion to dismiss stage where

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patentee "provided no proposed construction of any terms or proposed expert testimony that would change the § 101 analysis"); *Yu v. Apple Inc.*, 1 F.4th 1040, 1046 (Fed. Cir. 2021) ("[P]atent eligibility can be determined at the Rule 12(b)(6) stage without the aid of expert testimony."); *PersonalWeb Techs. LLC v. Google LLC*, 8 F.4th 1310, 1319 (Fed. Cir. 2021) (affirming judgment on the pleadings of invalidity where alleged improvements "lie entirely in the realm of abstract ideas, with no plausibly alleged innovation in the non-abstract application realm") (quotations and alterations omitted); *CardioNet, LLC v. InfoBionic, Inc.*, 955 F.3d 1358, 1371–74 (Fed. Cir. 2020). However, "[t]his is true only when there are no factual allegations that, taken as true, prevent resolving the eligibility question as a matter of law." *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018). "[P]lausible factual allegations may preclude dismissing a case under § 101 where, for example, 'nothing on th[e] record ... refutes those allegations as a matter of law or justifies dismissal under Rule 12(b)(6).'" *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1097 (Fed. Cir. 2016) (quoting *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1352 (Fed. Cir. 2016)).

In *Alice*, the Supreme Court laid out a two-part framework for assessing the validity of patent claims under § 101. *See Alice Corp. Pty. Ltd. v. CLS Bank Intern.*, 573 U.S. 208 (2014). Under step one of the *Alice* framework, a court must "determine whether the claims at issue are directed to a patent-ineligible concept," including abstract ideas, natural phenomena, or laws of nature. *Id.* at 218. "[S]tep one of the Alice framework does not require an evaluation of the prior art or facts outside of the intrinsic record regarding the state of the art at the time of the invention." *CardioNet,* 955 F.3d at 1374; *see Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981) ("The 'novelty' of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter."); *Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1011 (Fed. Cir. 2018) ("The eligibility question is not whether anyone has ever used tabs to organize information. That question is reserved for §§ 102 and 103. The question of abstraction is whether the claim is 'directed to' the abstract idea itself."). However, "if the extrinsic evidence is overwhelming to the point of being indisputable, then a court could take notice of that and find the claims directed to the abstract idea

of automating a fundamental practice, . . . but the court is not required to engage in such an inquiry in every case." *CardioNet*, 955 F.3d at 1373–74. "If the claims are not directed to a patent-ineligible concept under Alice step 1, 'the claims satisfy § 101 and we need not proceed to the second step.'" *Data Engine*, 906 F.3d at 1007 (quoting *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1361 (Fed. Cir. 2018)).

The Supreme Court and the Federal Circuit have cautioned courts against characterizing the claims at a high level of abstraction untethered from the language of the claims. *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016); *Solutran, Inc. v. Elavon, Inc.*, 931 F.3d 1161, 1167–68; *McRO, Inc. v. Bandai Namco Games America, Inc.*, 837 F.3d 1299, 1313 (Fed. Cir. 2016); *TecSec, Inc. v. Adobe Inc.*, 978 F.3d 1278, 1294 (Fed. Cir. 2020).

Further, courts have cautioned that "[t]he 'novelty' of any element or steps in a process, or even of the process itself is of no relevance in determining whether the subject matter of a claim falls within the § 101 categories of possibly patentable subject matter." *Diamond*, 450 U.S. at 188–89; *see Intellectual Ventures I LLC v. Symantec Corp.* ("*Intellectual Ventures I*"), 838 F.3d 1307, 1315 (Fed. Cir. 2016) ("While the claims may not have been anticipated or obvious . . . that does not suggest that the idea . . . is not abstract, much less that its implementation is not routine and conventional."); *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016).

Courts have found that preemption is a significant indication that claims are directed to an abstract idea. *See ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 766 (2019) ("'[T]he concern that drives' the judicial exceptions to patentability is 'one of preemption[.]'"). However, "[w]hile preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility." *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015); *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed. Cir. 2015). Additionally, courts commonly find "functional" claims—i.e., those that recite a result without providing details for *how* that result is to be achieved—to be directed to abstract ideas. *See Univ. of Fla. Research Found. v. GE Co.*, 916 F.3d 1363, 1368 (Fed. Cir. 2019); *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1345 (Fed. Cir. 2018) ("result-oriented" claims paired with

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specification that "lacks any description" are directed to abstract ideas).

Further, the fact that a claimed step can be performed by the human mind or a person with a pencil and paper has often been found to be an indication that the claims are directed to patent ineligible abstract ideas. *See Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1378 (Fed. Cir. 2016); *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1371–72 (Fed. Cir. 2011); *Synopsys*, 839 F.3d at 1149.

The second step under *Alice* is "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.'" *Alice*, 573 U.S. at 217–18, (alteration in original) (quoting *Mayo*, 566 U.S. at 72–73). Deciding whether claims recite an "inventive concept," or something more than "well-understood, routine, conventional activities previously known to the industry," *Alice*, 573 U.S. at 225 (internal brackets omitted), may turn on underlying "question[s] of fact," *Aatrix*, 882 F.3d at 1128. "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); *Content Extraction and Tramission LLC v. Wells Fargo Bank, Nat. Ass'n*, 776 F.3d 1343, 1347–48 (Fed. Cir. 2014).

In cases involving software innovations, the *Alice* step two and frequently the *Alice* step one inquiry "often turns on whether the claims focus on specific asserted improvements in computer capabilities or instead on a process or system that qualifies an abstract idea for which computers are invoked merely as a tool." *Uniloc USA, Inc. v. LG Electronics USA, Inc.*, 957 F.3d 1303, 1306–07 (Fed. Cir. 2020). "[S]oftware can make patent-eligible improvements to computer technology, and related claims are eligible as long as they are directed to non-abstract improvements to the functionality of a computer or network platform itself." *Id.* at 1309; *see Customedia Techs., LLC v. Dish Net. Corp.*, 951 F.3d 1359, 1365 (Fed. Cir. 2020). The Federal Circuit has found software-related claims eligible where (1) "the claimed advance is on a solution to 'a problem specifically arising in the realm of computer networks' or computers," and (2) "the claim is properly characterized as identifying a 'specific' improvement in computer capabilities or network

1 functionality, rather than only claiming a desirable result or function." *TecSec*, 978 F.3d at 1293

2 (citations omitted); *see also Packet Intelligence LLC v. NetScout Sys., Inc.*, 965 F.3d 1299, 1309

3 (Fed. Cir. 2020) ("The asserted patents' specifications make clear that the claimed invention

4 presented a technological solution to a technological problem."); *Uniloc*, 57 F.3d at 1308 (finding

5 claims valid where "the claimed invention changes the normal operation of the communication

6 system itself"). The improvement need not be defined by reference to "physical components."

7 *Uniloc*, 957 F.3d at 1309; *Enfish*, 822 F.3d at 1339 ("To hold otherwise risks resurrecting a bright-

8 line machine-or-transformation test, . . . or creating a categorical ban on software patents.").

9 However, the Federal Circuit has stated that software patents are invalid where they "merely recite

10 generalized steps to be performed on a computer using conventional computer activity." *Uniloc*,

11 957 F.3d at 1308; *see also BASCOM*, 827 F.3d at 1350 (claims would be invalid if they "merely

12 recite[d] the abstract idea of filtering content along with the requirement to perform it on the Internet,

13 or to perform it on a set of generic computer components").

14 In determining whether claims are directed to a patent-eligible improved computer system

15 rather than an abstract idea, courts have found that technical advantages described in the

16 specification can be a significant indication of eligibility. *See CardioNet*, 955 F.3d at 1369–70

17 (advantages disclosed in specification for patent directed to cardiac monitoring device are

18 "important in our determination that the claims are drawn to a technological improvement"); *Visual

19 Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1259–60 (Fed. Cir. 2017); *but see Intellectual

20 Ventures I*, 838 F.3d at 1322 ("The district court erred in relying on technological details set forth

21 in the patent's specification and not set forth in the claims to find an inventive concept."). Courts

22 also consider the prosecution history to be relevant to assessing whether the claims are directed to

23 an improvement in computer technology. *See Ancora Techs., Inc. v. HTC America, Inc.*,

24 908 F.3d 1343, 1348–49 (Fed. Cir. 2018) (finding claims were directed to a "non-abstract computer-

25 functionality improvement" where "[t]he prosecution history reinforces what the patent itself

26 indicates about the change in previous verification techniques for computer security"). And courts

27 also must consider factual allegations in the Complaint. *See Aatrix*, 882 F.3d at 1125.

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1   **III.   DISCUSSION**

2   Unsurprisingly, the parties disagree as to whether the '564 and '602 Patents are patent

3   eligible under § 101. AviaGames generally argues that the claims of the '564 and '602 Patents are

4   directed to abstract ideas like managing games and manipulating data; lacking in a non-abstract

5   improvement to computer technology because they recite conventional and generic computer

6   elements; and lacking in an inventive concept. In response, Skillz generally argues that AviaGames

7   overgeneralizes the claims of the '564 and '602 claims and ignores their specific implementation

8   details; disregards excerpts from the specification and Skillz's complaint indicating the specific

9   advantages and technological solutions that the claims offered; and raises factual issues about the

10   conventionality of various technologies that cannot be resolved at the 12(b)(6) stage. The Court

11   considers each of the Asserted Patents in turn.

12   **A.   '564 Patent**

13   At a high level, the '564 Patent pertains to a plurality of client devices participating in a

14   digital gaming competition by communicating with remote game servers. In order to ensure that all

15   users have common gameplay, the clients generate pseudo-random number seeds using a unique

16   match identifier common to all of them. They use these seeds to generate pseudo-random numbers,

17   which they then use to bring about randomized behavior in gameplay. Since the client devices

18   participating in a particular game all use the same unique match identifier to generate pseudo-

19   random number seeds and ultimately pseudo-random numbers, they generate the same pseudo-

20   random numbers, which results in identical initial gameplay. However, since client devices in future

21   games will receive a different unique match identifier, gameplay can randomly vary between

22   different games—while being the same for two different clients playing the same game.

23   As a threshold matter, the Court notes that the parties appear to agree that Claim 1 of the

24   '564 Patent is representative of all claims. Skillz does not argue that any of the dependent claims

25   are directed to subject matter that is materially different from Claim 1, nor does it argue that any of

26   the dependent claims contain an inventive concept that is not already contained in Claim 1. The

27   Court agrees with the parties, so the Court's analysis will focus only on Claim 1 of the '564 Patent

28   as   representative   of   the   other   claims.   *See   Planet   Bingo,   LLC   v.   VKGS   LLC*,

13

576 Fed.Appx. 1005, 1007 (Fed. Cir. 2014) ("[T]here is no meaningful distinction between the method and system claims or between the independent and dependent claims."); *Elec. Power Grp. v. Alstom S.A.*, 830 F.3d 1350, 1352 (Fed. Cir. 2016) (finding claim was representative where plaintiff did not "present[] any meaningful argument for the distinctive significant of any claim limitations other than those included in" the representative claim).

Independent claim 1 of the '564 Patent recites the following:

> 1. A method comprising:
>
> receiving, at a client including an executable game instance, a stream of pseudo random number seeds characterized by a unique match identifier for an online digital gaming competition, the client enrolled in the online competition;
>
> receiving, at the client and from a game server, game data for executing the game instance, the game instance requiring one or more random numbers to complete execution of the game instance;
>
> generating, using the stream of pseudo-random number seeds, a plurality of pseudo-random numbers; and
>
> executing the game instance by the client and using the plurality of pseudo-random numbers to provide the online competition to a player such that a beginning of gameplay experience is common between the game instance and a second game instance executing on a second client enrolled in the online digital gaming competition;
>
> wherein at least one of receiving, generating, and executing is implemented by at least one data processor forming part of at least one computing system.

'602 Patent, Claim 1.

The parties dispute whether the '564 claims are directed to an abstract idea under *Alice* step one, with Skillz arguing that the claims are directed to a non-abstract improvement in computer technology. Further, the parties dispute that the '564 claims contain an inventive concept under *Alice* step two. The Court will consider each issue in turn.

1. Alice Step One: Whether the Claims are Directed to an Abstract Idea

AviaGames argues that Claim 1 involves four steps: (1) receiving a stream of pseudo-random number seeds; (2) receiving game data from the game server; (3) generating a plurality of pseudo-random numbers using the stream of pseudo-random number seeds; and (4) executing the

14

1   game instance using the plurality of pseudo-random numbers. *See* Motion, ECF No. 25 at 20–21.

2   Based on the claims and the purported advance in the specification, AviaGames argues that the '564

3   Patent is directed to "managing a game so that multiple players experience common initial

4   gameplay." *See id.* at 21. Accordingly, AviaGames argues that the '564 Patent is analogous to

5   providing two Solitaire players decks of cards that have the playing cards in the same, shuffled

6   order. *See id.* at 21–22. Further, AviaGames argues that courts have found that similar claims

7   directed to the management of games on a computing device are nothing more than the abstract idea

8   of organizing human activity. *See id.* at 21–22 (citing, *e.g.*, *GREE, Inc. v. Supercell Oy*,

9   834 Fed.Appx. 583, 588 (Fed. Cir. 2020); *Planet Bingo*, 576 Fed.Appx. at 1008). And AviaGames

10   argues that the recitation of pseudo-random number generation is an improper attempt to patent a

11   mathematical algorithm. *See id.* at 22–23. Additionally, AviaGames argues that the '564 claims do

12   not provide an improvement in computing technology, because they recite generic computer

13   components and could be carried out by a human using pen and paper. *See id.*

14   In response, Skillz argues that AviaGames overgeneralizes the '564 claims. Skillz argues

15   the claims are directed to specific implementations using pseudo-random number seeds to

16   standardize gameplay in an electronic skills-based game—not merely "managing a game so that

17   multiple players experience common initial gameplay." *See* Opposition, ECF No. 33 at 8–9.

18   Regarding AviaGames' Solitaire analogy, Skillz argues that the process a human would use to

19   arrange multiple decks of cards is not the same as the claimed '564 process, since it does not involve

20   the use of pseudo-random number seeds. *See id.* at 9 (citing *McRO*, 837 F.3d at 1303–304). Further,

21   Skillz argues that the specific steps of the '564 claims would not ordinarily be performed by human

22   beings. *See id.* at 9–10. Additionally, Skillz argues that the '564 claims are non-abstract because

23   they are directed to a specific technological improvement—namely, the use of common random

24   number seeds computed using a game instance's unique match identifier to standardize randomized

25   behavior in the game instance. *See id.* at 6–7. Skillz further argues that the examiner's explicit

26   finding that the '564 claims are patent eligible support its arguments. *See id.* at 7–8.

27   The Court finds that AviaGames has failed show that the claims of the '564 Patent are

28   directed to abstract ideas at the pleading stage. AviaGames proposes that the '564 claims are

15

1   directed to the abstract idea of "managing a game." *See* Motion, ECF No. 25 at 22. But this only

2   partially captures the subject matter of the claims—in fact, it only appears to pertain to the final step

3   of executing a game using pseudo-random numbers. Prior to this step, there are steps of distributing

4   game data to client devices, using a unique match identifier to generate pseudo-random numbers,

5   and other limitations that AviaGames' proposed abstract idea clearly fails to account for. The Court

6   finds that AviaGames has failed to heed the Federal Circuit's warning that "describing the claims at

7   such a high level of abstraction and untethered from the language of the claims all but ensures that

8   the exceptions to § 101 swallow the rule." *Enfish*, 822 F.3d at 1337.

9   The overbreadth of AviaGames' account of the '564 claims is confirmed by the

10   inapplicability of its real-world analogy. AviaGames argues that the '564 claims are analogous to

11   providing two Solitaire players decks of cards that have the playing cards in the same, shuffled

12   order. *See* Motion, ECF No. 25 at 21–22. The Court finds that this real-world analogy is too remote

13   from the claim elements. For example, in AviaGames' analogy, one person shuffles two decks of

14   cards and then distributes them to multiple players. But this ignores the fact that the '564 claims

15   happen in a different order and with additional elements—a unique match identifier is distributed to

16   each player and using this, each player's client device does a common randomizing operation to

17   result in standardized, randomized gameplay. AviaGames' purported real-world analogy leaves out

18   the unique match identifier, and it reorders claimed steps. The Court therefore does not find

19   AviaGames' real-world analogy to support that the claims are directed to abstract ideas.

20   Skillz's caselaw underlines the inadequacy of AviaGames' proffered real-world analogies.

21   In *McRO, Inc. v. Bandai Namco Games Am., Inc.*, for example, the Federal Circuit found claims

22   directed to "a specific asserted improvement in computer animation" where defendants "provided

23   no evidence that the process previously used by animators is the same as the process required by the

24   claims." *See McRO*, 837 F.3d at 1314. Similarly, AviaGames fails to show that real-world Solitaire

25   tournaments were previously organized via a process analogous to the '564 claims—*e.g.*, by

26   distributing a common number to participants or organizers and having them shuffle decks in some

27   process derived from that number. Further, in *Finjan, Inc. v. Blue Coat Systems, Inc.*, the Federal

28   Circuit found software-claims patent eligible where "the claims recite[d] more than a mere result"

1   and "there [was] no contention that the only thing disclosed is the result and not an inventive

2   arrangement for accomplishing the result." *Finjan*, 879 F.3d at 1305–1306. Here, AviaGames

3   appears to assert that the '564 claims are merely directed to the result of "managing a game so that

4   multiple players experience common initial gameplay," or merely "managing a game." *See* Motion,

5   ECF No. 25 at 21–22. But even AviaGames acknowledges that the '564 claims provide specific

6   steps for achieving that result: "Claim 1's method essentially involves four steps: (1) receiving a

7   stream of pseudo-random number seeds; (2) receiving game data from the game server; (3)

8   generating a plurality of pseudo-random numbers using the stream of pseudorandom number seeds;

9   and (4) executing the game instance using the plurality of pseudo-random numbers." *See id.*

10   at 20–21.

11   Further, AviaGames' caselaw fails to move the needle. AviaGames points to cases where

12   courts found claims pertaining to the management of games were directed to the abstract idea of

13   "organizing human activity." *See id.* at 21–22. But AviaGames' caselaw is inapposite.

14   AviaGames' closest case is *GREE*, but there the Federal Circuit found claims to be abstract that

15   were broad enough to cover the "long-standing and conventional game of correspondence chess."

16   *GREE*, 834 Fed.Appx. at 588. Here, AviaGames has cited only one real-world analog to the '564

17   claims—providing two Solitaire players decks of cards that have the playing cards in the same,

18   shuffled order. But AviaGames fails to assert that this real-world analog is either (1) a long-standing

19   and conventional practice or (2) that the '564 claims would be broad enough to cover such conduct.

20   *See* Motion, ECF No. 25 at 20–21. Accordingly, *GREE* is inapposite.

21   Otherwise, AviaGames cites *Marco Guldenaar* and *In re Smith*, but these pertained to claims

22   that simply recited the rules of dice and wagering games. *See In re Marco Guldenaar Holding B.V.*,

23   911 F.3d 1157, 1159 (Fed. Cir. 2018); *In re Smith*, 815 F.3d 816, 818 (Fed. Cir. 2016). The Court

24   sees little similarity between claims that outline abstract rules for playing a game and the '564

25   claims, which pertain to specific steps for setting up common, randomized gameplay in a networked

26   computing environment. *Planet Bingo* is similar, since the claims in that case were merely drawn

27   to implementing a generic bingo game. *See Planet Bingo*, 576 Fed.Appx. at 1007–1008. The Court

28   finds that there is little in common between the '564 claims and these cases—other than a connection

1   to games. The '564 claims allegedly improve how games are played in a computing environment,

2   whereas AviaGames' cases involve claims that simply recite or apply rules of a game.

3   AviaGames' failure to show that the '564 claims are directed to abstract ideas is further

4   underlined by Skillz's plausible allegations that the '564 claims are directed to a specific

5   improvement in computer technology. Skillz alleges that the inventors of the '564 Patent recognized

6   that games frequently use random numbers to determine game elements and properties, but within

7   a competitive gaming tournament, there are advantages to providing common gameplay to different

8   users so as to "level the playing field" for a game of skill. *See* Complaint, ECF No. 1 ¶ 85 (citing

9   '564 Patent, 14:51–60). Accordingly, the inventors' allegedly inventive solution was to use a

10   tournament-specific identification number to derive pseudo-random numbers for gaming sessions—

11   that way, gameplay would be "different between tournaments, but not between game instances in a

12   given tournament." *See id.* (citing '564 Patent, 15:5–7). These allegations of the specific

13   improvement of the '564 claims in light of the prior art are similar to those courts have found

14   sufficient to withstand an eligibility challenge in other cases. *See, e.g., BASCOM*, 827 F.3d

15   at 1343–45 (vacating dismissal of patent claims where patent "describes its invention as combining

16   the advantages of the then-known filtering tools while avoiding their drawbacks"); *Finjan*, 879 F.3d

17   at 1304 (affirming denial of motion for judgment as a matter of law for patent ineligibility where

18   claimed invention "enables more flexible and nuanced virus filtering"). The Court must accept these

19   plausible factual allegations, which are supported by the claims and the specification, as true at this

20   stage. *See Cellspin*, 927 F.3d at 1317 ("While we do not read *Aatrix* to say that any allegation about

21   inventiveness, wholly divorced from the claims or the specification, defeats a motion to dismiss,

22   plausible and specific factual allegations that aspects of the claims are inventive are sufficient. . . .

23   As long as what makes the claims inventive is recited by the claims, the specification need not

24   expressly list all the reasons why this claimed structure is unconventional.") (citing *Aatrix*, 882 F.3d

25   at 1128); '564 Patent, 14:49–60. In light of these allegations, the Court finds that Skillz has

26   adequately pled that the claims are directed to a non-abstract improvement in computer technology.

27   *See, e.g., McRO*, 837 F.3d at 1314.

28   AviaGames' arguments to the contrary are unavailing. AviaGames argues that the functional

18

1   steps of the '564 claims can be carried out by a human using pen and paper. *See* Motion, ECF No. 25

2   at 22. But the Court has no evidence in front of it on this point. AviaGames fails to identify a single

3   example of a pseudo-random number generation function—let alone one that can be performed by

4   a human. *See* Motion, ECF No. 25 at 22. AviaGames argues that the "pseudo-random number

5   generation" portion of the claims is an improper attempt to patent a mathematical algorithm. *See*

6   *id.* at 22–23. But it is a well-established principle of Federal Circuit caselaw that claims to an

7   otherwise patentable process can be patent eligible even if that process includes a mathematical

8   algorithm. *See, e.g.*, *In re Bd. of Trs. of Leland Stanford Junior Univ.*, 989 F.3d 1367, 1369 (Fed.

9   Cir. 2021); *Koninklijke N.V. v. Gemalto M2M Gmbh*, 942 F.3d 1143, 1145–46 (Fed. Cir. 2019).

10 And as outlined above, AviaGames has failed to show that the entirety of the '564 claims are directed

11 to unpatentable abstract ideas—rather, it focuses only on certain elements of the claims in its abstract

12 idea analysis, to the exclusion of others. Accordingly, AviaGames has not adequately demonstrated

13 that the incorporation of a mathematical algorithm dooms the claims here.

14   AviaGames argues that the '564 claims recite generic computer components used in their

15 conventional capacities. *See id.* at 22–23. According to AviaGames, the conventional components

16 of the '564 claims include pseudo-random number seeds, which it argues based on a single prior art

17 reference in the intrinsic record were "well-known" for online digital gaming. *See* Reply,

18 ECF No. 37 at 10 (citing U.S. Patent Application No. 2010/0022307 ("Steuer")). But "[t]he mere

19 fact that something is disclosed in a piece of prior art, for example, does not mean it was well-

20 understood, routine, and conventional." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1369 (Fed. Cir.

21 2018). And the Court notes that the examiner considered the Steuer reference at length during

22 prosecution, and yet the examiner still allowed the '564 claims and explicitly found they were patent

23 eligible under § 101. *See* Sacksteder Decl., ECF No. 25-1, Ex. E, August 23, 2016 Non-Final

24 Rejection ¶¶ 7, 12–17. AviaGames argues that the Court should not defer to the examiner's

25 conclusions, but it fails to specify why—other than to say that the examiner's decision predated

26 "most of the relevant Federal Circuit case law discussed above." *See* Motion, ECF No. 25 at 25.

27 That is not enough.

28   Accordingly, the Court finds that AviaGames has failed to show that the '564 claims are

directed to patent ineligible abstract ideas at *Alice* step one.

2. Alice Step Two: Whether the Asserted Claims Contain an "Inventive Concept" Sufficient to Confer Patent Eligibility

Since the Court finds that the '564 claims are not directed to abstract ideas under *Alice* step one, the Court does not need to reach *Alice* step two. *See Uniloc*, 957 F.3d at 1309 ("Because we hold the claims patent eligible under *Alice* step one, we need not proceed to the second step of *Alice*.") (citing *Visual Memory*, 867 F.3d at 1262).

* * *

Based on the above reasoning, the Court finds that AviaGames has not adequately shown that the '564 claims are directed to patent ineligible subject matter under § 101. Accordingly, the Court DENIES AviaGames' Motion to Dismiss as to Skillz's claim for infringement of the '564 Patent.

B. '602 Patent

AviaGames further asserts that the claims of the '602 Patent are directed to abstract ideas. As a threshold matter, the parties dispute whether independent claim 1 of the '602 Patent is representative of the other claims. AviaGames argues that claim 1 can be treated as representative of all claims because the other claims are "substantially similar and linked to the same abstract idea." *See* Motion, ECF No. 25 at 13 (citing *Content Extraction,* 776 F.3d at 1348). In response, Skillz argues that claim 1 of the '602 Patent is not representative of (1) claims 8 and 17, which require using pseudo-random number seeds that do not depend on the client device so that an initial state of the game is consistent for the plurality of participants or (2) claims 3–5, 12–14, and 21–23, which require a video feed recording in-game actions and broadcasting the capture to other client devices participating in a peer-to-peer event. *See* Opposition, ECF No. 33 at 16–17.

The Court agrees with Skillz. AviaGames has only provided conclusory argument in support of claim 1 being representative of all other '602 Patent claims. Accordingly, the Court will assess the eligibility of the '602 claims in three buckets: (1) independent claim 1, which is representative of claims 2, 6, 7, 9–11, 15–18, 20, and 24; (2) dependent claims 8 and 17; and (3) dependent claims 3–5, 12–14, and 21–23. *See, e.g., Alice,* 573 U.S. at 226 ("[T]he system claims are no different from

United States District Court
Northern District of California

1 the method claims in substance."); *Planet Bingo*, 576 Fed.Appx. at 1007 ("[T]here is no meaningful

2 distinction between the method and system claims[.]").

3   **1.   Claims 1, 2, 6, 7, 9–11, 15–18, 20, and 24**

4   Independent claim 1 of the '602 Patent is directed to Skillz's alleged invention whereby a

5 server provides a game to a client device only if the location of the client device, based on its GPS

6 or LPS geolocation system, meets certain geographic criteria. Claim 1 of the '602 Patent recites the

7 following limitations:

8

9   1. A method for implementation by at least one data processor
                    forming part of at least one computing system, the method
10   comprising:

11   receiving, by at least one data processor, data identifying a peer-to-
                    peer gaming event and comprising a request to register for the peer-
                    to-peer gaming event, the request originating from peer-to-peer
12   gaming platform software stored in memory of a client and executing
                    on the client, the client being remote from the data least one data
13   processor, the peer-to-peer event being a geographically restricted
                    peer-to-peer gaming competition having a plurality of participants
14   each playing a skill-based digital game;

15   associating, using the at least one data processor, the client with the
                    peer-to-peer gaming event;
16
                    receiving data characterizing a location of the client according to a
17   geolocation system of the client, wherein the geolocation system of
                    the client is a global positioning system (GPS) service or a local
18   positioning system (LPS) utilizing beacons; and

19   comparing the location of the client to a predefined geolocation of the
                    peer-to-peer event to determine, using the at least one data processor,
20   that the client satisfies a geographical location requirement of the
                    peer-to-peer gaming event; and
21
                    causing, using the at least one data processor, provision of the skill-
22   based digital game to the client during the peer-to-peer gaming event,
                    the skill-based digital game exchanging game data with a game server
23   remote from the at least one data processor and the client.

24

25 '602 Patent, Claim 1.   As the Court found above, the parties do not dispute that claim 1 is

26 representative of claims 2, 6, 7, 9–11, 15–18, 20, and 24. The Court agrees. Claims 10 and 19 are

27 software and system versions of claim 1, and courts commonly consider similar claims to be

28 representative. *See Planet Bingo*, 576 Fed.Appx. at 1007 ("[T]here is no meaningful distinction

                                        21

1   between the method and system claims[.]"); *Alice*, 573 U.S. at 226 ("[T]he system claims are no

2   different from the method claims in substance"); *Front Row Techs., LLC v. NBA Media Ventures,*

3   *LLC*, 204 F.Supp.3d 1190, 1265 (D.N.M. 2016) ("After comparing the various independent system

4   claims, the Court concludes that they are substantially similar[.]"), *aff'd sub nom.*, *Front Row Techs.*

5   *LLC v. MLB Advanced Media, L.P.*, 697 Fed.Appx. 701 (Fed. Cir. 2017).   Further, the remaining

6   claims pertain to secondary aspects of a game or gaming platform. *See* '602 Patent, Claims 2, 9,

7   11, 18, and 20 (specifying number of participants in a game or event); *id.*, Claims 6, 15, and 24

8   (targeted advertising related to events); *id.*, Claims 7 and 16 (method for transmitting monetary

9   prizes for games); *Elec. Power*, 830 F.3d at 1352 (considering claim representative where plaintiff

10   did not "present[] any meaningful argument for the distinctive significant of any claim limitations

11   other than those included in" the representative claim); *Content Extraction*, 776 F.3d at 1348.

12   Claim 1 of the '602 Patent primarily pertains to a remote server that only provides game

13   content to a particular client device if that client device's geolocation meets certain criteria. In the

14   Complaint, Skillz alleges that the alleged invention of Claim 1 could be used to restrict peer-to-peer

15   gaming events such that users can only participate if they are at certain geographical locations. *See*

16   Complaint, ECF No. 1 ¶ 64. For example, Skillz alleges that using the alleged invention of '602

17   Patent, peer-to-peer gaming events can be geographically restricted such that if they involve cash

18   games, they can be restricted "to comply with local laws and regulations." *Id.* ¶ 64; *see also id.* ¶

19   30. Skillz further alleges that this was an unconventional, novel technological solution to an issue

20   arising specifically in the context of electronic sports. *See id.* ¶¶ 62, 65. Skillz alleges that its

21   invention in Claim 1 was novel because "it makes it harder for users to trick the system to circumvent

22   geographical restrictions." *Id.* ¶ 65. According to Skillz, other approaches for determining user

23   location—for example, based on user-provided information (like a home address) or IP addresses—

24   could be falsified or spoofed using a proxy, whereas real-time location systems like GPS or LPS are

25   harder to circumvent. *See id.*; *see also id.* ¶ 66.

26   AviaGames argues that Claim 1 is invalid because (1) under *Alice* step one, Claim 1 is

27   directed to the abstract idea of comparing a participant's location to the location of an event and

28   limiting event participants to those within the predefined geographical boundary and (2) under *Alice*

22

1   step two, Claim 1 adds no inventive concept because it recites generic computing elements and no

2   improvement in the functioning of a computer. *See* Motion, ECF No. 25 at 10–20. In response,

3   Skillz argues that (1) under *Alice* step one, Claim 1 is directed to an improvement in computing

4   devices, not an abstract idea, and AviaGames overgeneralizes the claims and (2) under *Alice* step

5   two, Claim 1 has an inventive concept in that it is an unconventional solution rooted in computer

6   technology. *See* Opposition, ECF No. 33 at 22–25. The Court will address each issue in turn.

7
                    a.   *Alice* Step One: Whether the Claims are Directed to an Abstract Idea
8
        AviaGames argues that the "focus" of the asserted claims of the '602 Patent is "limiting
9
    event participation based on location." Motion, ECF No. 25 at 10. AviaGames argues that this is
10
    an abstract idea, because it has long been used for live sports broadcasts (blacking out home market
11
    when a stadium fails to sell enough tickets to a game) and in examples involving activity
12
    participation restrictions based on geographic location, like hunting and fishing zones and speed
13
    limits. *See id.* at 10. AviaGames further argues that the specification makes clear that the central
14
    focus of the '602 Patent is to "ensure the event participants are co-located," which has long been a
15
    practice regarding live sports events. *See id.* at 11. Additionally, AviaGames argues that the '602
16
    Patent claims do not improve a technological process, because they do not claim a novel way of
17
    achieving the purported advancement and they merely recite functional objectives like "receiving,"
18
    "comparing," etc. *See id.* at 12. AviaGames argues that the '602 claims are directed to abstract
19
    ideas in light of caselaw finding claims patent ineligible that are directed to (1) managing games;
20
    (2) managing access to information; and (3) data comparison that can be performed by the human
21
    mind or an algorithm. *See id.* at 13–15.
22
        Skillz disagrees, arguing that the claims of the '602 Patent embody a specific improvement
23
    to digital games, because using GPS or LPS to determine client location rather than user profile
24
    information or IP addresses like the prior art allows remote gaming tournaments with geographical
25
    restrictions that cannot be easily circumvented by users. *See* Opposition, ECF No. 33 at 15, 17–18.
26
    Skillz argues that AviaGames overgeneralizes the claims by ignoring the GPS or LPS requirement—
27
    particularly since it was added during prosecution to overcome a § 101 rejection—and the
28

                                                    23

1   requirement that various claimed elements are physically remote. *See id.* at 18–19. Further, Skillz

2   argues that AviaGames assumes that the claimed gaming tournaments only have a single location.

3   *See id.* at 19. Taking into account the specific technical limitations of the '602 claims, Skillz argues

4   that AviaGames' real-world analogies and caselaw are inapposite. *See id.* at 19–22.

5   The Court agrees with AviaGames that claim 1 of the '602 Patent is directed to an abstract

6   idea. Claim 1 merely recites the familiar concepts of gathering data, communicating it, comparing

7   it, and managing access to further data. Skillz argues that such an analysis ignores certain technical

8   details of the claims, like the GPS or LPS requirements and the physical remoteness of various

9   components. But the Court finds that the level of abstraction it has applied to the claims is consistent

10 with what the Federal Circuit and other courts have applied. *See Elec. Power*, 830 F.3d at

11 1351–1352, 1354 (finding claims that included limitation of "receiving data from other power

12 system data sources, the other power system data sources comprising at least one of transmission

13 maps, power plant locations, EMS/SCADA systems" to be directed to abstract idea of "gathering

14 and analyzing information of a specified content, then displaying the results"); *Content Extraction*,

15 776 F.3d at 1345, 1347 (claims including the limitation "receiving output representing a diversity

16 of types of hard copy documents from an automated digitizing unit" were directed to "abstract idea

17 of 1) collecting data, 2) recognizing certain data with the collected data set, and 3) storing that

18 recognized data in a memory"); *X One, Inc. v. Uber Techs., Inc.*, No. 16–CV–06050–LHK,

19 239 F.Supp.3d 1174, 1190–93 (finding claims reciting GPS directed to an abstract idea). Skillz can

20 only point to inapposite district court cases in support of its contention that the claims are directed

21 more narrowly. *See, e.g.*, *SEMICAPS Pte Ltd. v. Hamamatsu Corp.*, 393 F.Supp.3d 802, 815

22 (N.D. Cal. Nov. 6, 2019) (distinguishing claims *Elec. Power*, 830 F.3d 1350, as "accumulating

23 *existing data*," whereas claims at issue "*improved detection sensitivity*") (emphasis in original)).

24   So characterized, the "character as a whole" of claim 1 of the '602 Patent is an abstract idea.

25 The Federal Circuit has held that claimed steps of gathering, communicating, comparing, and

26 managing access to data are directed to abstract ideas. *See PersonalWeb*, 8 F.4th at 1317 (steps of

27 comparing data against other data and controlling access to data items are abstract); *Elec. Power*,

28 830 F.3d at 1353 ("[W]e have treated collecting information, including when limited to particular

24

1 content (which does not change its character as information), as within the realm of abstract ideas.");

2 *Chamberlain Grp., Inc. v. Techtronic Indus. Co.*, 935 F.3d 1341, 1347 (Fed. Cir. 2019) ("[T]he

3 broad concept of communicating information wirelessly, without more, is an abstract idea.").

4 Further, courts have found claims pertaining to location tracking to be directed to abstract ideas.

5 *See X One*, 239 F.Supp.3d at 1190–93; *Intellectual Ventures I LLC v. Capital One Bank (USA)*

6 ("*Intellectual Ventures II*"), 792 F.3d 1363, 1369 (Fed. Cir. 2015) ("There is no dispute that

7 newspaper inserts had often been tailored based on information known about the customer—for

8 example, a newspaper might advertise based on the customer's location. Providing this minimal

9 tailoring—e.g., providing different newspaper inserts based upon the location of the individual—is

10 an abstract idea."); *Elec. Comm. Techs., LLC v. ShoppersChoice.com, LLC*, 958 F.3d 1178, 1181

11 (Fed. Cir. 2020) ("Two of the six identified functions—monitoring the location of a mobile thing

12 and notifying a party in advance of arrival of that mobile thing—amount to nothing more than the

13 fundamental business practice of providing advance notification of the pickup or delivery of a

14 mobile thing."). Skillz quibbles with AviaGames' cited caselaw. *See* Opposition, ECF No. 33 at

15 20–21. But the abstractness of similar claimed steps cannot be denied—it is supported by a wide

16 array of Federal Circuit caselaw. *See, e.g., Elec. Power*, 830 F.3d at 1353–54 (collecting cases).

17 The specification of the '602 Patent supports the Court's finding. The specification indicates

18 that the '602 claims are directed to restricting access to gaming events based on a user's location.

19 *See* '602 Patent, 4:13–17 ("The event can be for a defined location and time. For example, an event

20 may occur at or during a specific time and at a designated location or venue."); 4:62–5:2 ("Event

21 organizers and venues can benefit from the presence of the participant[.]"); *id.*, 3:1–15 ("Social

22 aspects of live events can be ensured by imposing location restrictions (geographic and/or temporal)

23 and the current subject matter can enforce those restrictions to ensure that event participants are co-

24 located for the event."); *id.*, 3:64–4:11 ("Live events may be location-based, . . . foster social

25 interactions among players, increase game engagement, and/or build the gaming community."); *id.*,

26 4:62–5:2. The specification provides scant disclosures related to GPS or LPS. *See id.*, 9:36–39

27 ("Client 210$_i$, uses built-in geolocation system (e.g., geolocation systems/devices utilizing GPS,

28 wireless wide area network (WWAN), and WIFI technologies) to determine the client's location.");

1   *id.*, 2:3–7, 4:58–62.

2   AviaGames provides ample real-world examples indicating that limiting event participation

3   by location is a longstanding practice and not a technological solution to a technological problem.

4   *See* Motion, ECF No. 25 at 10 (citing "geographic access limitations placed on live sport broadcasts

5   that has been in place for decades" and "hunting and fishing zones, speed limits, rolling a shopping

6   cart in a grocery store parking lot, participating in state lotteries, alcohol purchases on certain days

7   at varying ages depending on the state in which the person is located, and purchasing items without

8   sales tax"); *id.* at 11 (citing practices of "live sport event providers for centuries" in requiring

9   participants to gather to participate in a gaming event). Skillz argues that AviaGames assumes that

10 claim 1 of the '602 Patent requires users to be co-located, which is not supported by the claims. *See*

11 Opposition, ECF No. 33 at 19. But AviaGames' real-world examples are not so limited. For

12 example, state lotteries and hunting and fishing zones could require that an individual be located in

13 one of many locations. *See* Motion, ECF No. 25 at 10. Based on AviaGames' examples, the Court

14 finds that it is not plausible that claim 1 of the '602 Patent provides a technological solution to a

15 technological problem. The problem of people saying they are where they are not, when access to

16 plenty of events and real-world benefits (lotteries, live sports broadcasts, legality of hunting and

17 fishing) are based around being in a particular location, is not a new or technological problem.

18   Skillz argues that claim 1 of the '602 Patent is directed to an improvement in computer

19 functionality based on the GPS or LPS limitation. The Court disagrees. Prior art in the intrinsic

20 record suggests that GPS was commonplace, including in the context of gaming. *See*

21 U.S. Patent Application No. 2012/0028718, ¶ 0097 (cited on face of '602 Patent);

22 U.S. Patent No. 8,683,272 (same). While "[t]he mere fact that something is disclosed in a piece of

23 prior art, for example, does not mean it was well-understood, routine, and conventional,"

24 *Berkheimer*, 881 F.3d at 1369, the way the '602 specification discusses GPS and LPS technology

25 further indicates that the inventors of the '602 Patent incorporated generally available GPS or LPS,

26 that these were conventional technologies, and the '602 claims do not use them for anything other

27 than their generic function of determining location. *See* '602 Patent, 3:24–27 ("The current subject

28 matter can be implemented using a mobile device, such as a tablet or smart phone and which can be

26

standalone and/or connected to a television, projector, and/or other display device."); *id.*, 9:36–39

("Client 210ᵢ, uses built-in geolocation systems (e.g., geolocation systems/devices utilizing GPS,

wireless wide area network (WWAN), and WIFI technologies) to determine the client's location.");

id., 4:58–62 (referencing "global positioning system (GPS) service or a local positioning system

(LPS) utilizing beacons" with no elaboration). After all, "positioning" is literally in the name of

these technologies ("Global *Positioning* System" and "Local *Positioning* System"). It is therefore

implausible that the claimed use of these technologies—to determine location—was anything other

than conventional.

Accordingly, the Court finds Skillz's cases, which found that claims were not directed to

abstract ideas where they disclosed a specific improvement in computer technology, are not

persuasive. Those cases involved improvements in the functionality of a computer itself—not

merely the application of well-known computer technology to a particular technology area. *See*

Finjan, Inc. v. Blue Coat Sys., Inc., 879 F.3d 1299, 1305 (Fed. Cir. 2018) ("[T]he method of claim

1 employs a new kind of file that enables a computer security system to do things it could not do

before."); *Ancora*, 908 F.3d at 1348–49 (claims were directed to a "non-abstract computer-

functionality improvement" where they relied on "specific and unique characteristics of certain

aspects of [BIOS memory] that the patent asserts . . . were not previously used in the way now

claimed"); *McRO*, 837 F.3d 1299, 1313 (Fed. Cir. 2016) ("[T]he claimed improvement here is

allowing computers to produce 'accurate and realistic lip synchronization and facial expressions in

animated characters' that previously could only be produced by human animators.").

To the extent Skillz is asserting that the use of GPS or LPS was an improvement in the

context of mobile gaming, the Court considers such a narrowing to a particular technological field

to be insufficient to convert the use of GPS or LPS into a non-abstract improvement in computer

technology. *See, e.g., Fitbit, Inc. v. AliphCom*, No. 16–cv–00118–BLF, 2017 WL 819235, at *10

(N.D. Cal. Mar. 2, 2017) ("While it is possible that claim 20 provides certain benefits to the field of

portable activity monitoring, this does not mean that it constitutes a 'specific asserted improvement

in [portable activity monitoring device] capabilities'—the intermediated settlement scheme of *Alice*

likely provided benefits to the financial world, the binary conversion method of *Gottschalk* likely

1   provided benefits to the computer world, and the same can likely be said for many other patent-

2   ineligible claims."); *In re TLI Comms. LLC Patent Litig.*, 823 F.3d 607, 613 (Fed. Cir. 2016)

3   ("[A]lthough the claims limit the abstract idea to a particular environment—a mobile telephone

4   system—that does not make the claims any less abstract for the step 1 analysis."); *Affinity Labs v.*

5   *DirecTV* ("*Affinity Labs II*"), 838 F.3d 1253, 1258–59 (Fed. Cir. 2016) ("All that limitation does is

6   to confine the abstract idea to a particular technological environment—in this case, cellular

7   telephones. The Supreme Court and this court have repeatedly made clear that merely limiting the

8   field of use of the abstract idea to a particular existing technological environment does not render

9   the claims any less abstract."); *Intellectual Ventures II*, 792 F.3d at 1366 ("An abstract idea does not

10 become nonabstract by limiting the invention to a particular field of use or technological

11 environment, such as the Internet.") (citing *Alice*, 573 U.S. at 223).

12   Skillz further argues that the '602 claims "do not preempt all processes for achieving the

13 claimed result." *See* Opposition, ECF No. 33 at 17–18. But AviaGames does not raise preemption

14 as an issue regarding the '602 claims in its Motion. *See* Motion, ECF No. 25. And the Federal

15 Circuit has held that a lack of preemption is not sufficient to show that claims are directed to patent-

16 eligible subject matter. *See Ariosa*, 788 F.3d at 1379 ("While preemption may signal patent

17 ineligible subject matter, the absence of complete preemption does not demonstrate patent

18 eligibility."); *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed. Cir. 2015)

19 ("[T]hat the claims do not preempt all price optimization or may be limited to price optimization in

20 the e-commerce setting do not make them any less abstract."); *see also ChargePoint*, 920 F.3d at

21 769 ("Even a specification full of technical details about a physical invention may nonetheless

22 conclude with claims that claim nothing more than the broad law or abstract idea underlying the

23 claims, thus preempting all use of that law or idea."). Further, the Court notes that the '602 Patent

24 does not support that the use of GPS or LPS is as "specific" as Skillz asserts, including by providing

25 a non-limiting list of generic hardware components for implementing LPS. *See* '602 Patent, 4:58–62

26 (referencing a "local position system (LPS) utilizing beacons (for example, wireless routers, base

27 stations, low-power dedicated beacons, and the like).").

28   Accordingly, the Court finds that AviaGames has adequately shown that claim 1 of the '602

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1 Patent is directed to abstract ideas. The Court continues to *Alice* step two.

2   b. *Alice* Step Two: Whether the Asserted Claims Contain an "Inventive Concept"
               Sufficient to Confer Patent Eligibility

3   The second step of *Alice* considers whether the claims contain an inventive step that

4 transforms the unpatentable abstract idea into patentable subject matter. *Alice*, 573 U.S. at 217. The

5 parties dispute whether the claim 1 of the '602 Patent provides an inventive concept under *Alice*

6 step two.

7   AviaGames argues that the claims recite only generic computing elements used according

8 to their conventional, routine functions, including generic processors, memories, and mobile

9 devices, along with generic networks that conventionally exchange data. *See* Motion, ECF No. 25

10 at 15–16. Accordingly, AviaGames argues that the claims are not directed to an improvement in

11 the functioning of a computer like courts require at *Alice* step two. *See id.* at 16. Further,

12 AviaGames argues that although the examiner found the '602 claims were patent eligible, the Court

13 should depart from the examiner's reasoning, because it was improperly based on the idea that

14 claims directed to physical elements must be patent eligible, which the caselaw does not support.

15 *See id.* at 18–19. Additionally, AviaGames argues that Skillz's allegations in the Complaint

16 regarding the unconventionality of the '602 claims and the technical problems they solved are not

17 plausible, because they are unsupported by the '602 Patent itself. *See id.* at 19–20.

18   In response, Skillz argues that AviaGames has failed to show the lack of an inventive concept

19 in claim 1 of the '602 Patent. *See* Opposition, ECF No. 33 at 22–25. Skillz argues that AviaGames

20 is asking the Court to disregard Skillz's factual allegations, which is improper at the Rule 12(b)(6)

21 stage. *See id.* at 22. Further, Skillz argues that AviaGames fails to consider the claim elements of

22 the '602 as an ordered combination, as the Federal Circuit requires. *See id.* at 22–23 (citing

23 *BASCOM*, 827 F.3d at 1349–50). Skillz analogizes the '602 claims to those found patent eligible

24 in *DDR*, because they provide an unconventional solution that is "necessarily rooted in computer

25 technology in order to overcome a problem specifically arising in the realm of [digital games]." *See*

26 *id.* at 23 (citing *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257–59 (Fed. Cir. 2014)).

27 Further, Skillz analogizes the '602 claims to those found eligible in *BASCOM*, where the Court

28

1   found an inventive concept in the "non-conventional and non-generic arrangement of known,

2   conventional pieces" in order to "overcome the problem of 'susceptib[ility] to circumvention by the

3   user.'" *See id.* at 23–24 (citing *BASCOM*, 827 F.3d at 1348, 1350). At the very least, Skillz argues

4   that there are disputes of fact as to (1) the conventionality of the '602 claims and (2) claim

5   construction that render AviaGames' Motion premature. *See* Opposition, ECF No. 33 at 24–25.

6   The Court agrees with AviaGames. Claim 1 of the '602 Patent is directed to generic

7   technology used in its conventional capacity: for example, a "processor" "receiv[es] . . . data"; a

8   "geolocation system" provides "data characterizing a location of the client"; a "digital game"

9   "exchang[es] game data with a [remote] game server." '602 Patent, Claim 1; *see also id.*

10   13:4–14:40; *Yu*, 1 F.4th at 1045 (no inventive concept where "the claimed hardware configuration

11   itself is not an advance") (emphasis omitted). Skillz does not assert that it invented any of these

12   components, and the specification does not describe them as inventive.

13   The Court further agrees with AviaGames that it is appropriate to depart from the examiner's

14   findings regarding eligibility of the '602 claims. *See* Motion, ECF No. 25 at 18–19. The prosecution

15   history of the '602 Patent indicates that the examiner found the addition of physical elements to the

16   '602 claims to be sufficient to confer patent eligibility. *See* Sacksteder Decl., ECF No. 25-1, Ex. D

17   ("Claims may be amended to include the physical elements of claim 3."). Courts have repeatedly

18   found otherwise. *See, e.g., Chamberlain*, 935 F.3d at 1348 ("[T]he mere physical nature of . . .

19   claim elements (e.g., controller, interface, and wireless data transmitter) is not enough to save the

20   claims from abstractness, where the claimed advance is directed to the wireless communication of

21   status information using off-the-shelf technology for its intended purpose."); *SAP*,

22   898 F.3d at 1169–70 ("Some of the claims require various databases and processors, which are in

23   the physical realm of things. But it is clear, from the claims themselves and the specification, that

24   these limitations require no improved computer resources InvestPic claims to have invented, just

25   already available computers, with their already available basic functions, to use as tools in executing

26   the claimed process."); *TLI*, 823 F.3d at 611 ("While claim 17 requires concrete, tangible

27   components such as 'a telephone unit' and a 'server,' the specification makes clear that the recited

28   physical components merely provide a generic environment in which to carry out the abstract idea

1 of classifying and storing digital images in an organized manner.")

2 It is further worth noting that Skillz alleges that in the prior art, the location determining step

3 could be done by a human providing his or her location, but GPS and LPS are better suited because

4 they make it harder for a user to circumvent geographical restrictions. *See* Opposition, ECF No. 33

5 at 22–23 (citing Complaint, ECF No. 1 ¶ 65). But the Federal Circuit has expressly indicated that

6 mere accuracy or efficiency gains resulting from the automation of human activity via a computer

7 are not sufficient to render claims patent eligible. *See OIP*, 788 F.3d at 1363 ("[R]elying on a

8 computer to perform routine tasks more quickly or more accurately is insufficient to render a claim

9 patent eligible."); *Data Engine*, 906 F.3d at 1013 ("The mere automation of this process does not

10 negate its abstraction."); *PersonalWeb*, 8 F.4th at 1319 (finding that claims fail *Alice* step two where

11 they "merely 'automate or otherwise make more efficient traditional … methods.'") (quoting *OIP*,

12 788 F.3d at 1363); *Credit Acceptance Corp. v. Westlak Servs.*, 859 F.3d 1044, 1055 (Fed. Cir. 2017)

13 ("Our prior cases have made clear that mere automation of manual processes using generic

14 computers does not constitute a patentable improvement in computer technology."); *Cellspin*,

15 927 F.3d at 1316 ("But the need to perform tasks automatically is not a unique technical problem.").

16 The Court acknowledges that Skillz also alleges that the use of GPS or LPS makes it harder for users

17 to circumvent geographic restrictions, which is analogous to *BASCOM*. *See BASCOM*, 827 F.3d at

18 1348 (finding claims patent eligible that caused computer system to be "less susceptible to

19 circumvention by the user"). However, the Court also notes that *BASCOM* did not involve

20 automation of human activity, whereas claim 1 of the '602 Patent does.

21 Skillz argues that AviaGames fails to consider claim 1 of the '602 Patent "as an ordered

22 combination," citing *BASCOM*. *See* Opposition, ECF No. 22–23 (citing *BASCOM*, 827 F.3d

23 at 1349–50). But Skillz has failed to show what about the ordered combination of the '602 claims

24 is an inventive concept. Its factual allegations focus primarily on the use of a mobile device's GPS

25 or LPS location to determine whether the device's location meets certain criteria. *See* Complaint,

26 ECF No. 1 ¶ 65. Otherwise, the claims simply situate this technology in a generic server-client

27 network environment and indicate that the GPS or LPS location is used to determine whether or not

28 to provide game content to the device. Courts have found the situation of claims in a computer

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1   networking environment or the siting of claims in a particular area of technology to be insufficient

2   to provide an inventive concept for purposes of *Alice* step two. *See BSG*, 899 F.3d at 1291 ("As a

3   matter of law, narrowing or reformulating an abstract idea does not add 'significantly more' to it.");

4   *Ultramercial*, 772 F.3d at 716 ("Narrowing the abstract idea of using advertising as a currency to

5   the Internet is an attempt to limit the use of the abstract idea to a particular technological

6   environment, which is insufficient to save a claim.") (internal quotations and alterations omitted).

7   Accordingly, the Court disagrees with Skillz that the "ordered combination" of the elements of

8   claim 1 of the '602 Patent is sufficient to provide an inventive concept.

9   Skillz argues that by finding a lack of an inventive concept in the '602 claims, the Court

10   must improperly ignore the factual allegations to the contrary that Skillz provides in the Complaint.

11   *See* Opposition, ECF No. 33 at 22. Further, Skillz argues that such allegations are at least sufficient

12   to raise a fact issue as to the conventionality of the '602 claims. *See id.* at 24–25. But the Court

13   does not need to accept "allegations that are merely conclusory, unwarranted deductions of fact, or

14   unreasonable inferences." *In re Gilead*, 536 F.3d at 1055. And the Court finds that in light of the

15   intrinsic record, the allegations Skillz cites in support of an inventive concept in the '602 claims are

16   conclusory or implausible. *See* Opposition, ECF No. 33 at 22–23 (citing Complaint, ECF No. 1 ¶¶

17   63–65). As the Court found above, Skillz's allegations that the use of GPS or LPS was

18   unconventional, innovative, or an improvement are implausible in light of the intrinsic record, which

19   indicates that these technologies were conventional and that the '602 claims recite using them for

20   generic location-determining functions. *See BSG*, 899 F.3d at 1291 ("Although BSG Tech

21   narrowed its claims to specific database structures, those structures are well-understood and

22   conventional. Such narrowing does not supply an inventive concept."). Accordingly, while the

23   Court acknowledges caselaw like *Cellspin* advising courts that "specific, plausible factual

24   allegations" are sufficient to overcome a motion to dismiss on § 101 grounds, the Court finds that

25   Skillz's allegations supporting the alleged presence of an inventive concept in the '602 claims are

26   not plausible, and therefore not sufficient to create a fact issue or otherwise defeat AviaGames'

27   Motion. *Cellspin*, 927 F.3d at 1317–18.

28   Skillz primarily points to the *DDR* and *BASCOM* cases in support of its contention that

1   claim 1 of the '602 Patent provides an inventive concept. *See* Opposition, ECF No. 33 at 22–24

2   (citing *DDR*, 773 F.3d at 1257–59; *BASCOM*, 827 F.3d at 1348, 1350). But neither case strikes the

3   Court as particularly applicable to the '602 claims. *DDR* pertains to claims "necessarily rooted in

4   computer technology," and the Court found above that it is not plausible to consider the '602 claims

5   to be "necessarily rooted in computer technology." *See DDR*, 773 F.3d at 1257; *see also X One*,

6   239 F.Supp.3d at 1191. Further, *BASCOM* pertains to a "non-conventional and non-generic

7   arrangement of known, conventional pieces." *BASCOM*, 827 F.3d at 1350. But Skillz has failed to

8   plausibly allege how the "arrangement" of the '602 claims is anything other than a generic computer

9   network that uses conventional GPS or LPS technology for its generic location-determining

10   function. Accordingly, the Court is not persuaded that *DDR* or *BASCOM* indicate that Skillz has

11   shown the presence of an inventive concept in the '602 claims.

12   Skillz argues that AviaGames' Motion should be denied because claim construction has not

13   yet taken place. *See* Opposition, ECF No. 33 at 25. But Skillz fails to raise a single claim

14   construction dispute or propose a single construction, instead opting to list several terms that

15   AviaGames "oversimplif[ies]" or for which AviaGames "ignores narrower claim constructions."

16   *See id.* This is not sufficient to raise fact issues that prevent the Court from ruling on patent

17   eligibility at the pleading stage. *See Front Row Techs.*, 204 F.Supp.3d at 1238–45 (ruling on subject

18   matter eligibility before claim construction where "the parties have not identified any disputed claim

19   constructions that prevent the Court from addressing the § 101 merits at this stage").

20   Accordingly, the Court finds that Skillz has failed to show an inventive concept in claim 1

21   of the '602 Patent. Since the Court finds that the claim 1 is directed to abstract ideas without an

22   inventive concept to transform the unpatentable abstract ideas into patent eligible subject matter, the

23   Court finds that AviaGames has shown that claim 1 is directed to patent ineligible subject matter.

24   Further, the Court finds that claims 2, 6, 7, 9–11, 15–18, 20, and 24 of the '602 Patent are also

25   directed to patent ineligible subject matter, since claim 1 is representative of these claims, and Skillz

26   does not specifically argue that any of these claims are directed to patent eligible subject matter.

27   **2. Claims 3–5, 12–14, 21–23 – Recording In-Game Actions**

28   Claims 3–5, 12–14, and 21–23 ("Broadcasting Claims") pertain to taking a video recording

1   of a user's screen during gameplay and broadcasting it to other client devices participating in a

2   particular gaming event. Claim 3 of the '602 Patent recites the following:

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4   3. The method of claim 1, further comprising:

5   generating, using the at least one data processor, a video feed
            recording in-game actions by, using the peer-to-peer gaming
            platform, capturing an interface display space of the skill-based
6   digital game and broadcasting the capture to peer-to-peer gaming
            platforms of one or more additional clients participating in the peer-
7   to-peer event.

8   Claim 4 of the '602 Patent recites the following:

9

10   4. The method of claim 3, wherein generating the video feed includes
            simultaneously broadcasting the capture and a second capture of in-
            game actions of another client to enable comparison of the in-game
11   actions between participants of the peer-to-peer gaming event.

12 Claim 5 of the '602 Patent recites the following:

13

14   5. The method of claim 4, wherein the another client is selected based
            on a ranking of performance of the second client in the peer-to-peer
            gaming competition.

15

16   Claims 12 to 14 and 21 to 23 of the '602 Patent recite materially the same limitations as

17 Claims 3 to 5. Claims 12 and 21 recite the same limitations as Claim 3 in the context of software

18 and system claims. Claims 4, 13, and 22 recite broadcasting *two* client device's screens to another

19 client device. And Claims 5, 14, and 23 recite a method for selecting which client device's screen

20 to broadcast. The Court finds that Claim 3 of the '602 Patent is representative of Claims 4, 5, 12 to

21 14, and 21 to 23. *See Voter Verified, Inc. v. Election Sys. & Software LLC*, 887 F.3d 1376, 1385

22 (Fed. Cir. 2018) ("While these claims encompass both methods and systems, we find there to be no

23 distinction between them for § 101 purposes, as they simply recite the same concept.") (citing *Alice*,

24 573 U.S. at 226). Neither party appears to dispute this.

25   In the Complaint, Skillz alleges that maintaining electronic records of each competitor's in-

26 game actions and making them available to other competitors serves to effectively minimize

27 cheating. *See* Complaint, ECF No. 1 ¶ 30. Accordingly, Skillz alleges that claims 3–5, 12–14, and

28 21–23 are directed to a novel, unconventional, and technological solution to an issue arising

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specifically in the context of electronic sports. *See id.* ¶¶ 66–67. The '602 specification includes several disclosures relevant to Claim 3:

- The '602 specification states that outside of bars dedicated to eSports, venues for eSporting events "often lack sufficient network connections for gaming consoles or computer systems used in the competition. While many bars have television, often these bars and other venues lack appropriate audio/video and related equipment, (such as A/V connectors, adaptors, power outlets, power cords, and the like) to display event participant game-play and/or connect to gaming consoles and/or computing systems." '602 Patent, 1:31–38.

- The '602 Patent states that "[a] video feed recording in-game actions can be generated by, using the peer-to-peer gaming platform, capturing an interface display space of the skill-based digital game and broadcasting the capture to peer-to-peer gaming platforms of one or more additional clients participating in the peer-to-peer event. Generating the video feed can include simultaneously broadcasting the capture and a second capture of in-game actions of another client to enable comparison of the in-game actions between participants of the peer-to-peer gaming event. The another client can be selected based on a ranking of performance of the second client in the peer-to-peer gaming competition." '602 Patent, 2:7–18.

- The '602 Patent states that "some example implementations of the current subject matter can provide for viewing of event participant gameplay without requiring special audio/visual equipment, connections, adaptors, and the like. The viewing may take place at a venue without interfering with existing patrons who are not participating in the event (e.g., other venue customers). The viewing may be customized for each event participant, which can increase participant engagement and enjoyment. The current subject matter can be implemented using a mobile device, such as a tablet or smart phone and which can be standalone and/or connected to a television, projector, and/or other display device." '602 Patent, 3:16–27.

- The '602 Patent includes details regarding a "[v]ideo replay engine," which allows video recordings of user gameplay "to be streamed live and stored for all game entries which can

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later be verified for authenticity (e.g., anti-cheating) and also reviewed live by an event host for entertainment, information, and to increase engagement of players." *Id.*, 6:3–9. The '602 Patent further provides details regarding example implementations involving capturing screen shots of a graphical user interface "at an appropriate rate," capturing open graphics library layers, or capturing data in a pixel buffer. *Id.*, 6:9–23. The '602 Patent states that "other implementations are possible." *Id.*, 6:23. Additionally, the '602 Patent discloses that the video capture can include recording metadata like time of capture, location based data, and user input. *See id.* 6:24–31.

- The '602 Patent discloses details about generating a live broadcast of captured video between user client devices, such that "an audience (e.g., other participants) can view a participant's game play without requiring existing audio/video equipment in a venue." *Id.*, 6:32–42. The '602 Patent discloses that this live video feed functionality can allow participants to view their gameplay side-by-side with another game, and can be controlled by an event host. *Id.*, 6:43–61.

- The '602 Patent describes details of a user interface for streaming event videos. *See id.*, 9:1–21, 11:28–46.

The parties dispute whether claims 3–5, 12–14, and 21–23 are directed to patent eligible subject matter. The Court considers representative claim 3 under the two-step *Alice* framework below.

> a. *Alice* Step One: Whether the Claims are Directed to an Abstract Idea

Skillz argues that the Broadcasting Claims are not directed to an abstract idea because they "improve . . . capturing in-game actions." Opposition, ECF No. 33 at 16. Skillz argues that the Complaint and the '602 specification identify the technological problem of participants' ability to cheat at peer-to-peer gaming events, and the Broadcasting Claims provide a specific and substantial improvement over prior anti-cheating methods in broadcasting the display of client devices to other client devices. *See id.* at 17. In response, AviaGames argues that using video recording to prevent cheating is an ordinary function for mobile devices and does not make the claims patent eligible, citing to various pieces of prior art cited on the face of the '602 Patent that disclose similar anti-

1 cheating methods. *See* Reply, ECF No. 37 at 6.

2 The Court agrees with AviaGames. Skillz has not shown that the Broadcasting Claims are

3 directed to a specific improvement in computer technology. Because the claims are directed to

4 broad functions—"generating," "recording," "capturing," and "broadcasting"—without any

5 technological improvement for performing those functions, they are not directed to a specific

6 technological improvement. *See Interval Licensing*, 896 F.3d at 1346. Further, while Skillz pleads

7 that "[t]he solution implemented by the '602 Patent provides a specific and substantial improvement

8 over prior anti-cheating methods by generating an electronic record of the peer-to-peer gaming

9 event," the Court does not need to accept such conclusory allegations as true. *In re Gilead*, 536

10 F.3d at 1055. Neither the Complaint nor the specification provide any information about prior art

11 approaches to anti-cheating. Further, AviaGames points to prior art in the intrinsic record that

12 suggests that recording the display of a client device for recording and streaming to other devices

13 was well-established in the prior art. *See, e.g.*, U.S. Patent Application 2008/0234047A1 at [0060];

14 U.S. Patent Application 2009/0208181 ¶¶ 0002, 0006, claim 1 (cited in the '602 Patent); U.S. Patent

15 No. 6,699,127, 3:59–4:10 (same). While a prior art reference alone is not sufficient to indicate that

16 a technology was conventional, *Berkheimer*, 881 F.3d at 1369, this Court considers AviaGames'

17 multiple prior art references on the face of the patent to be sufficient to render Skillz's assertion that

18 the Broadcasting Claims were directed to a specific improvement in computer technology to be an

19 unreasonable inference at the pleading stage. *In re Gilead*, 536 F.3d at 1055.

20 Contrary to Skillz's arguments, the Court finds that the Broadcasting Claims are directed to

21 the abstract idea of storing, communicating, and displaying data. Courts have consistently found

22 similar claims to be directed to abstract ideas. *Interval Licensing*, 896 F.3d at 1345 ("[T]he

23 collection, organization, and display of two sets of information on a generic display device is

24 abstract[.]"); *Affinity Labs II*, 838 F.3d at 1258 (claims directed to abstract idea of "providing out-

25 of-region access to regional broadcast content"); *Trading Techs. Int'l, Inc. v. IBG LLC*, 921 F.3d

26 1084, 1092 (Fed. Cir. 2019) (finding claims for receiving and displaying information directed to

27 abstract ideas); *TLI*, 823 F.3d at 611 (finding claims directed to "the abstract idea of classifying and

28 storing digital images in an organized manner"); *Content Extraction*, 776 F.3d at 1347 ("The

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1   concept of data collection, recognition, and storage is undisputedly well-known. Indeed, humans

2   have always performed these functions."); *Yu*, 1 F.4th at 1042 (claims directed to "the abstract idea

3   of taking two pictures (which may be at different exposures) and using one picture to enhance the

4   other in some way"); *see also Bozeman*, 955 F.3d at 979 (claims reciting process involving receiving

5   data and comparing it to other data to detect fraud were directed to abstract idea).

6   Further, the Broadcasting Claims are drafted at a high level—reciting "generating,"

7   "recording," "capturing," and "broadcasting" steps—similar to claims that courts have previously

8   found to be directed to abstract ideas. *See OIP*, 788 F.3d at 1363; *Univ. of Fla.*, 916 F.3d at 1368;

9   *Affinity Labs II*, 838 F.3d at 1258 ("There is nothing in claim 1 that is directed to how to implement

10   out-of-region broadcasting on a cellular telephone. Rather, the claim is drawn to the idea itself.");

11   *Mayo*, 566 U.S. at 78–80. The specification provides little additional detail, instead opting for broad

12   descriptions similar to the claims. *See, e.g.,* '602 Patent, 6:3–61 ("Video replay engine 270 can . . .

13   enable processing, streaming, and storing of the captured video; and support retrieval, usage, and

14   sharing of video content.").

15   Additionally, analogies between these claims and longstanding, real-world practices are

16   plentiful. For example, the idea of recording or broadcasting a video feed showing people's

17   behavior to ensure that they do not break laws or violate policies is just the abstract idea of a security

18   camera. Even before security cameras, security guards arguably provided the same function—

19   serving as a human recording device that could report on any suspicious activity and serve as a

20   warning to potential wrongdoers. The fact that the Broadcasting Claims appear to simply adapt

21   fundamental concepts, including the stuff of "brick-and-mortar" and "pen and paper" analogies, to

22   the context of mobile gaming serves as a strong indication that these claims are directed to nothing

23   more than abstract ideas. *See Intellectual Ventures I*, 838 F.3d at 1317; *CyberSource*, 654 F.3d

24   at 1372.

25   Accordingly, the Court finds that the Broadcasting Claims are directed to the idea of storing,

26   communicating, and displaying data.

27   b. *Alice* Step Two: Whether the Asserted Claims Contain an "Inventive Concept"

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Sufficient to Confer Patent Eligibility

AviaGames argues that the Broadcasting Claims do not contain an inventive step because they add only "token postsolution components" or "insignificant post-solution activity." *See* Motion, ECF No. 25 at 17–18 (citing *Bilski*, 561 U.S. at 612; *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1244 (Fed. Cir. 2016)). In response, Skillz argues that the Broadcasting Claims are not so trivial, since Skillz alleges they provide a "specific and substantial improvement over prior anti-cheating methods by generating an electronic record of the peer-to-peer gaming event[.]" Opposition, ECF No. 33 at 24 (citing Complaint, ECF No. 1 ¶ 67). On reply, AviaGames argues that generating a video feed recording to prevent cheating is conventional based on prior art cited on the face of the patent. *See* Reply, ECF No. 37 at 9.

The Court agrees with AviaGames. Skillz fails to point to any inventive concept outside of the abstract ideas themselves. Skillz argues that the inventive concept of the Broadcasting Claims is "generating an electronic record of the peer-to-peer gaming event." But this is nothing more than the abstract idea of storing data. *See TLI*, 823 F.3d at 612 (invalidating claims directed to "generic computer functions such as storing, receiving, and extracting data"); *Stanford*, 989 F.3d at 1374 ("Simply storing information and providing it upon request does not alone transform the abstract idea into patent eligible subject matter."). Courts have consistently found that if an alleged inventive concept is merely part of the abstract idea the claims are directed to, then it is insufficient to satisfy step two of the *Alice* test. *See ChargePoint*, 920 F.3d at 775 ("Because [network communication] is the abstract idea itself, this cannot supply the inventive concept at step two. The claims are therefore ineligible."); *Credit Acceptance*, 859 F.3d at 1056 (invalidating claims where "the use and arrangement of conventional and generic computer components recited in the claims . . . do not transform the claim, as a whole, into 'significantly more' than a claim to the abstract idea itself"); *SAP*, 898 F.3d at 1168 ("What is needed is an inventive concept in the non-abstract application realm.").

Courts have declined to find similarly high-level, functional claims supported by scant additional details in the specification, as having an inventive concept. *See Affinity Labs of Texas, LLC v. DirecTV, LLC* ("*Affinity Labs I*"), 109 F.Supp.3d 916, 926 (W.D. Tex. 2015) ("[T]he Federal

1   Circuit has invalidated patents under § 101 for not qualifying as an inventive concept because it did

2   not specify how the patent performs the steps claimed in the patent."); *TLI*, 823 F.3d at 615 (no

3   inventive concept where "the specification limits its discussion of these components to abstract

4   functional descriptions devoid of technical explanation as to how to implement the invention");

5   *Clarilogic, Inc. v. FormFree Holdings Corp.*, 681 Fed.Appx. 950, 954–55 (Fed. Cir. 2017) (holding

6   claim ineligible where it recited an "unknown and unclaimed process" to allegedly transform data);

7   *Yu*, 1 F.4th at 1045 (no inventive concept where claim is "recited at a high level of generality").

8   While the specification provides some detail—for example, different methods for sampling a user's

9   display for storage and broadcasting—it fails to provide any detail for many of the claimed steps of

10   the Broadcasting Claims, and it makes clear that even the detail it does provide is non-limiting. '602

11   Patent, 6:3–61.

12   Additionally, the Broadcasting Claims are implemented on generic hardware, and Skillz fails

13   to argue that any of the claimed hardware is inventive or unconventional. Courts have consistently

14   found a lack of an inventive concept in similar circumstances. *See Elec. Power*, 830 F.3d at 1355

15   ("We have repeatedly held that such invocations of computers and networks that are not even

16   arguably inventive are 'insufficient to pass the test of an inventive concept in the application' of an

17   abstract idea.") (quoting *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1353 (Fed. Cir. 2014)); '602

18   Patent, 2:47–67, 13:4–14:40 (describing generic hardware that can be used to implement the alleged

19   inventions).

20   Further, limiting the abstract ideas to the mobile gaming context is not sufficient to serve as

21   an inventive concept for purposes of the § 101 inquiry. *See Content Extraction*, 776 F.3d at 1348

22   (no inventive concept where claims "attempt[ed] to limit the abstract idea of recognizing and storing

23   information . . . to a particular technological environment"); *BSG*, 899 F.3d at 1291 ("As a matter

24   of law, narrowing or reformulating an abstract idea does not add 'significantly more' to it."); *TLI*,

25   823 F.3d at 614 ("[T]he telephone unit simply provides the environment in which the abstract idea

26   . . . is carried out.").

27   Accordingly, the Court finds that the Broadcasting Claims are patent ineligible.

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3. Claim 8 and 17 – Random Number Generation

2   The parties dispute whether dependent Claims 8 and 17 of the '602 Patent impact the § 101

3   analysis. Claim 8 of the '602 Patent recites the following:

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5   > 8. The method of claim 1, wherein the peer-to-peer gaming platform
        > software executing on the client provides a random number seed to an
6   > operating system independent random number generator so that an
        > initial state of the skill-based digital game is consistent for the
7   > plurality of participants.

8   Claim 17 of the '602 Patent is nearly identical, with the only difference that it claims a computer

9   program, rather than a method. The Court will treat Claim 8 as representative. Neither party appears

10   to oppose this.

11   Skillz's only allegation related to claims 8 or 17 of the '602 Patent in the Complaint is a brief

12   reference to the '602 Patent's identification of varying difficulty between game instances. *See*

13   Complaint, ECF No. 1 ¶ 63. One of the problems with the prior art the '602 Patent specification

14   identifies is that "games played by event participants often vary in difficulty (and therefore player

15   outcome varies) because the game may present a different scenario each time the game is played.

16   Such a condition makes it challenging to determine event competition winners or rankings in a fair

17   manner." '602 Patent, 1:38–43. The specification describes that "[t]he peer-to-peer gaming

18   platform software executing on the client can provide a random number seed to an operating system

19   independent random number generator so that an initial state of the skill-based digital game is

20   consistent for the plurality of participants." *Id.*, 2:39–44. Further, the specification describes that

21   "[t]he starting game state can be the same for all entries and all participants, for example, by having

22   the peer-to-peer gaming platform 240_i provide a seed to an operating system independent number

23   generator. In some implementations, a stream of random numbers can be provided from event server

24   260. Game instances 230_i, which often have elements of randomness, can start in a consistent state

25   across all participants." *Id.*, 7:3–11.

26   AviaGames argues that claims 8 and 17 merely add "token postsolution components" or

27   "insignificant post-solution activity" to the idea of the '602 claims. *See* Motion, ECF No. 25

28   at 17–18. Further, AviaGames argues that claims 8 and 17 fail to describe any specific technological

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1   solution for how these insignificant steps are carried out such that they might provide an inventive

2   concept. *See id.* Skillz argues that these claims solve problems disclosed in the specification—

3   including that it is difficult to determine competition winners without a consistent initial state for

4   different users' games. *See* Opposition, ECF No. 33 at 16–17. Further, Skillz argues that these

5   claims are not directed to abstract ideas for the same reason the '564 Patent claims are not directed

6   to abstract ideas. *See id.* at 17.

7   The Court agrees with AviaGames. Claims 8 and 17 are entirely functional in nature—they

8   describe a claimed outcome—"an initial state of the skill-based digital game is consistent for the

9   plurality of participants"—but they fail to provide specific steps for how this outcome is achieved.

10   For example, the claim recites that the software executing on the client "provides" a random number

11   seed to an operating system independent random number generator without any indication as to

12   where the seed comes from, how it is derived, etc. Courts have found such broad claims with

13   similarly functional language patent ineligible, including because they pose significant preemption

14   concerns that are not present in more specific claims. *See ChargePoint*, 920 F.3d at 769;

15   *Ultramercial*, 772 F.3d at 715–16.

16   Skillz cannot hide behind the '564 claims in seeking to argue that claims 8 and 17 of the

17   '602 Patent are directed to patent eligible subject matter. Claims 8 and 17 are directed to a different

18   method, and they are significantly less detailed and more functionally claimed than the '564 claims.

19   For example, there is no mention of the "unique match identifier" in the '602 claims, which appears

20   to be central to the allegedly unconventional approach that the '564 claims provide. *See* Complaint,

21   ECF No. 1 ¶¶ 84, 86, 87; *see* Sacksteder Decl., ECF No. 25-1, Ex. E ¶¶ 12–17. Further, claims 8

22   and 17 are not supported by the ample specification disclosures, prosecution history disclosures, or

23   factual allegations that support the eligibility of the '564 claims at this stage.

24   Under *Alice* step one, the Court finds that the functional claims are directed to the abstract

25   idea of a mathematical algorithm. *See RecogniCorp, LLC v. Nintendo Co., Ltd.*, 855 F.3d 1322,

26   1327 (Fed. Cir. 2017) ("A process that start[s] with data, add[s] an algorithm, and end[s] with a new

27   form of data [is] directed to an abstract idea.") (citing *Digitech Image Techs., LLC v. Elecs. for

28   Imaging, Inc.*, 758 F.3d 1344 (Fed. Cir. 2014)); *Elec. Power*, 830 F.3d at 1354 ("[W]e have treated

1   analyzing information . . . by mathematical algorithms, without more, as essentially mental

2   processes within the abstract-idea category."); *Gottschalk v. Benson*, 409 U.S. 63, 71–72 (1972) ("It

3   is conceded that one may not patent an idea. But in practical effect that would be the result if the

4   formula for converting BCD numerals to pure binary numerals were patented in this case."). The

5   Court's analysis is supported by the significant preemption concerns of functional claims like claims

6   8 and 17 of the '602 Patent. *See ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 766 (2019)

7   ("'[T]he concern that drives' the judicial exceptions to patentability is 'one of preemption[.]'");

8   *Univ. of Fla.*, 916 F.3d at 1368.

9   Further, the Court finds that Skillz has failed to show that claims 8 or 17 are directed to an

10   improvement in computer functionality under *Alice* step one or that they contain an inventive

11   concept under *Alice* step two. Instead, Skillz has primarily deferred to the arguments it provided in

12   support of the '564 claims, which the Court considers to be inapposite. Claims 8 and 17 do not

13   provide a specific technological improvement or solution—they do not provide enough detail to

14   provide a non-abstract solution. *See Affinity Labs I*, 109 F.Supp.3d at 926 ("[T]he Federal Circuit

15   has invalidated patents under § 101 for not qualifying as an inventive concept because it did not

16   specify how the patent performs the steps claimed in the patent."); *TLI*, 823 F.3d at 615 (no inventive

17   concept where "the specification limits its discussion of these components to abstract functional

18   descriptions devoid of technical explanation as to how to implement the invention"); *Intellectual

19   Ventures I*, 838 F.3d at 1322 ("The district court erred in relying on technological details set forth

20   in the patent's specification and not set forth in the claims to find an inventive concept."). Further,

21   the '602 Patent makes clear that the claims are implemented on generic and conventional computing

22   elements. Accordingly, the Court finds that claims 8 and 17 do not disclose a non-abstract

23   improvement in computing technology or an inventive concept.

24   Additionally, the Court finds support for the patent ineligibility of claims 8 and 17 of the

25   '602 Patent in the *Apple* case AviaGames cites. *See* Motion, ECF No. 25 at 17 (citing *Apple v.

26   Ameranth, Inc.,* 842 F.3d at 1244). The Court there found that claims that depended from patent-

27   ineligible claims were directed to "insignificant post-solution activity" where the claim called for a

28   desired result and did "not attempt to claim any method for achieving that result." *See Apple v.*

1   *Ameranth, Inc.*, 842 F.3d at 1244. The Court finds that this description fits claims 8 and 17 of the

2   '602 Patent perfectly.

3   Accordingly, the Court finds that AviaGames has adequately shown that claims 8 and 17 of

4   the '602 Patent are directed to patent ineligible subject matter.

5   * * *

6   Based on the above reasoning, the Court finds that AviaGames has adequately shown that

7   the '602 claims are invalid as directed to patent-ineligible subject matter. Accordingly, the Court

8   DISMISSES Skillz's infringement claim based on the '602 Patent. Further, since the Court finds

9   that AviaGames has shown that the claims of the '602 Patent are directed to patent ineligible subject

10   matter, the Court finds that amendment would be futile. *See Eminence Capital*, 316 F.3d at 1052;

11   *Papst*, 193 F.Supp.3d at 1095 ("[T]he asserted claims are directed to patent-ineligible subject

12   matter, a defect which cannot be cured through amendment of a complaint[.]"); *Internet Patents*,

13   29 F.Supp.3d at 1270 (N.D. Cal. 2013). Accordingly, the Court's dismissal is WITHOUT LEAVE

14   TO AMEND.

15   **IV.**   **ORDER**

16   For the foregoing reasons, IT IS HEREBY ORDERED that:

17   1.   AviaGames' Motion to Dismiss Skillz's infringement claim under the '564 Patent is

18   DENIED; and

19   2.   AviaGames' Motion to Dismiss Skillz's infringement claim under the '602 Patent is

20   GRANTED WITHOUT LEAVE TO AMEND.

21   Dated: March 14, 2022

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                                       BETH LABSON FREEMAN

23   United States District Judge

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