3

4

5

6

7

8

10

11

12

13 14

15

16

17

19 20

18

21

2223

23 24

25

2627

28

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA

SUPERCELL OY,

Plaintiff,

vs.

GREE, INC., ET AL.,

Defendants.

CASE No. 17-cv-05556-YGR

ORDER RE: MOTION TO DISMISS

Re: Dkt. No. 26

Plaintiff Supercell Oy ("Supercell") brings this patent infringement action against defendants GREE, Inc.; GREE International Entertainment, Inc.; GREE International, Inc.; and Funzio Games, Inc. (collectively "GREE") alleging that defendants infringed two of plaintiff's patents, namely U.S. Patent No. 9,106,449 (the "'449 Patent") and U.S. Patent No. 9,104,520 (the "'520 Patent"). Now before the Court is defendants' motion to dismiss plaintiff's claims pursuant to Fed. R. Civ. Pro. 12(b)(6) on the ground that the asserted patents are not patent eligible under 35 U.S.C. § 101.

Having carefully reviewed the pleadings, the papers and exhibits submitted on this motion, the parties' arguments at the hearing held on February 13, 2018, and for the reasons set forth more fully below, the Court **Grants** defendants' motion to dismiss with regard to the '449 Patent and **DENIES** the motion with regard to the '520 Patent.

I. PATENTS AT ISSUE

A. The '449 Patent

The '449 Patent is titled "Method, Apparatus and System for Obtaining Logon Information." (*See* Complaint, Ex. A, '449 Patent.) The specification describes a "method, apparatus, and system" for transferring logon information between a "value-added service such as an online game" (the "game client") and Instant Messaging client (the "IM client") via a "function

plug-in." ('449 Patent at 1:16-18, 27-28; Figs. 2, 3.)

In order to access an online game a user must first logon through an IM client. ('449 Patent at 1:33-42.) The conventional logon method required a "communication process" which was "pre-configured" between the game client and IM client. (*Id.* at 2:18-24.) This meant that any upgrade to the game client had to coincide with a simultaneous upgrade to the corresponding IM client so that a new communication process could be pre-configured between the two clients. As a result, "if a new game client [was] issued, the new game client [could] not communicate with IM client because no communication process [was] created between the new game client and the IM client." (*Id.* at 2:24-27.) The "new game client [could] not log on the game server until a communication process [was] created between the new game client and the IM, for example, until the version of the IM client [was] upgraded." (*Id.* at 2:27-31.)

The '449 Patent purports to solve this problem by placing a "function plug-in" between the game client and IM client. Thus, independent claim 1 recites:

A method for obtaining logon information, comprising:

obtaining, by Instant Messaging (IM) client of a user, logon information which comprises a user account of the user when the user logs on the IM client;

sending, by value- added service client of the user, a request for logon information when the user started the value-added service client;

receiving, by function plug-in, the request for logon information from the value-added service client;

sending, by the function plug-in, the request for the logon information to the IM client;

returning, by the IM client, the logon information of the user *to the function plug-in;*

sending, by the function plug-in, the logon information to the value-added service client; and

sending, by the value-added service client, the logon information of the user obtained from the IM client to value-added service server to log on the value-added service center.

(*Id.* at 7:13-34 (emphasis supplied).) The patent further recites that the function plug-in sends requests for logon information to and receives logon information from an IM client through a

¹ The conventional method employed four entities, namely an IM client, game client, game authentication server, and IM authentication server. (*Id.* at Fig. 1)

"common interface." (*Id.* at Fig. 3.) This enables the game client to obtain logon information from the IM client via the function plug-in and ultimately log on to the game server to start a game. (*Id.* at 4:43-47; Fig. 3.)

Five claims depend on claim 1 (2 through 6) and add further limitations such as where: (i) "the request for the logon information is sent to the IM client through a common interface . . . and the logon information is received from the IM client through the common interface[;]; (ii) "the common interface is configured by the IM client[;]" (iii) the request for logon information is received from the value-added service client; and (iv) "loading the function plug-in before receiving the request for logon information from the [game] client." (*Id.* at 7:34-8:7.)

Additionally, the '449 Patent contains one other independent claim, namely claim 7, which describes:

A system for obtaining logon information, comprising:

a value-added service client, adapted to send a request for logon information when a user starts the value-added service client, receive the logon information which comprises a user account of the user from a function plug-in, and send the logon information of the user to a value-added service server to log on the value-added service server;

the function plug-in, adapted to receive the request for the logon information from the value-added service client and send the request for the logon information to ~ Instant Messaging (IM) client; receive the logon information from the IM client; send the logon information to the value-added service client;

the IM client, adapted to obtain logon information of the user when the user logs on the IM client, receive the request for the logon information from the function plug-in, and send the logon information to the function plug-in.

(Id. at 8:8–25.) Claim 7 has seven dependent claims (8 through 14). (Id. at 8:26–46.)

The '449 Patent states that placement of a function plug-in between the game client and IM client enables the game client to "obtain the logon information easily, flexibly and conveniently." (*Id.* at 3:30-42.) Further, the method described in the '449 patents purport to improve "expansibility of the IM client" because the function plug-in can communicate with "various different IM clients" so long as the IM client is capable of providing a common interface. (*Id.* at 3:22-48.) Therefore, when a game client is updated there is no need to develop a corresponding

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

update for the IM client. (Id. 3:47-50.)

В. The '520 Patent

The '520 Patent is titled "Method and Apparatus for Upgrading Application." (See Complaint, Ex. B, '520 Patent.) Here, the specification recites a "method and apparatus" for upgrading computer applications "so as to avoid providing too many patch packages for the same version of an application." (Id. at 1:66-2:2.) The '520 patent purports to enable developers to create a single installation patch which can be used to upgrade an application across multiple release channels (e.g., an official channel, Internet Explorer, 360 Secure Browser). (Id. at 1:52-56.) The patent states that the method described therein reduces the "workloads of the developer" and makes it "much eas[ier] to maintain the application." ('520 Patent, 3:5-7; 3:15-17.)

Computer installation packages contain two elements, namely a "Data Portion" and "Customized Information Portion." (Id. at 1:39, 3:9.) The Data Portion contains information regarding the specific incremental upgrade such as the new application content. For a given application upgrade the Data Portion of an installation package will be the same across all release channels. By contrast, the Customized Information Portion includes "customized information such as the releases channel of the installation package, a network traffic tip, an update mode, and/or a link to the release channel" which will necessarily be different across various release channels. (Id. 1:42-47, 4:7-9.)

Under the conventional process for upgrading an application, differences between the Data Portion of an old installation package and the Data Portion of a new installation package were "found out by using a bsdiff tool." (Id. at 1:30-34.) Next, an installation upgrade patch containing only the additional information in the Data Portion of the new installation package was generated "using a dspatch tool." (Id. at 1:34-38.) The developer was then required to write a unique installation upgrade patch for each release channel by analyzing manually the Customized Information contained in the old installation package for each release channel and writing this

28

²⁶ 27

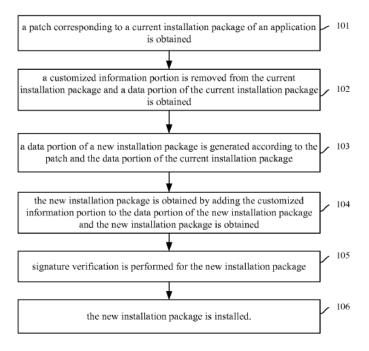
² Bsdiff and bspatch tools are binary delta encoding formats. Delta encoding is a way of storing or transmitting data in the form of differences (deltas) between sequential data rather than complete files.

Customized Information into the new installation upgrade patch. As applications may be released on one hundred different channels, application developers needed to generate many different upgrade patches with the *same* Data Portions but *different* Customized Information Portions. This resulted in heavy workloads for developers, slower generation of upgrade patches, and more difficulty in maintaining applications. (*Id.* at 1:50-56.)

The '520 Patent recites a method for generating a new installation patch which has a Data Portion *different* from the old installation package and a Customized Information Portion which is the *same* as the old installation package for a given release channel. Independent claim 1 describes:

1. A method for upgrading an application, comprising: obtaining a patch package corresponding to a current installation package of an application; removing a customized information portion from the current installation package and obtaining a data portion of the current installation package; generating a data portion of a new installation package according to the patch package and the data portion of the current installation package; obtaining the new installation package by adding the customized information portion to the data portion of the new installation package; and installing the new installation package.

(*Id.* at 9:65–10:8 (emphasis supplied).) Thus, the claim eliminates the need for developers to write manually unique installation patches for each release channels. By following the method described in the '520 Patent application developers can purportedly write a single patch package which can be applied across various release channels. The claimed method is illustrated below:



('520 Patent at Fig. 1.)

Claim 1 of the '520 Patent is representative of all asserted claims. Nineteen claims depend on claim 1 and add limitations such as "where the information of the installation package comprises a Message-Digest Algorithm 5 (md5) value" (claim 3) and (ii) where "generating a data portion of a new installation package . . . comprises: reading a preset length of the data portion of the current installation package into memory and reading a present length of the patch into memory" (claim 8). (*Id.* at 10:18-29 (claim 3); 10:48-61 (claim 8).)

II. LEGAL FRAMEWORK

A. Patent Eligibility Under § 101

The scope of subject matter eligible for patent protection is defined in Section 101 of the Patent Act: "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101. The Supreme Court has "long held that this provision contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable." *Alice Corp. Pty. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014) (quoting *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013)). In applying this exception, courts "must distinguish between patents that claim the building blocks of human ingenuity and those that integrate the building blocks into something more." *Alice*, 134 S. Ct. at 2354 (internal quotations and alterations omitted); *see also Mayo Collaborative Servs. v. Prometheus Labs, Inc.*, 132 S. Ct. 1289, 1301 (2012).

"The Supreme Court, setting up a two-stage framework, has held that a claim falls outside § 101 where (1) it is 'directed to' a patent-ineligible concept, *i.e.*, a law of nature, natural phenomenon, or abstract idea, and (2), if so, the particular elements of the claim, considered both individually and 'as an ordered combination, do not add enough to transform the nature of the claim into a patent-eligible application." *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (quoting *Alice* 134 S.Ct. at 2355). "The Supreme Court's formulation makes clear that the first-stage filter is a meaningful one, sometimes ending the § 101 inquiry." *Id.* (citing *Alice*, 134 S.Ct. at 2355.) "At the same time, the two stages are plainly related" in that

Northern District of California

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

they "involve overlapping scrutiny of the content of the claims . . . [and] there can be close questions about when the inquiry should proceed from the first stage to the second." Id. (citing Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1339 (Fed. Cir. 2016)). The burden of establishing invalidity rests on the movant. See Microsoft Corp. v. i4i Ltd. P'ship, 131 S. Ct. 2238, 2245 (2011) (citing 35 U.S.C.A. § 282).

Thus, in considering whether claims are patent-ineligible, the court must first determine whether the claims are directed to a patent-ineligible concept, such as an abstract idea (the "Stage-One Inquiry"). See Diamond v. Chakrabarty, 447 U.S. 303, 309 (1980). "A principle, in the abstract, is a fundamental truth . . . [which] cannot be patented." Gottschalk v. Benson, 409 U.S. 63, 67 (1972) (internal citations and quotations omitted). "Phenomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work." Id. To determine whether patent claims are directed to an abstract idea, the Court must "distill[] the gist of the claim[s]." Open Text S.A. 2015 WL 269036 (N.D. Cal. 2015), at *2 (citing *Bilski v. Kappos*, 561 U.S. 593, 611-12 (2010)). A "claim directed to an abstract idea does not move into section 101 eligibility territory by 'merely requir[ing] generic computer implementation." buySAFE, Inc. v. Google, Inc., 765 F.3d 1350, 1354 (Fed. Cir. 2014) (alteration in original) (citing Alice, 134 S.Ct. at 2355).

If claims are directed to an abstract idea, the court must then consider whether the claims contain a sufficient "inventive concept" such that "the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself" (the "Stage-Two Inquiry"). Alice, 134 S. Ct. at 2355 (quoting Mayo, 132 S. Ct. at 1294); see also DDR Holdings, LLC v. Hotels.com, L.P., 773 F.3d 1245, 1255 (Fed. Cir. 2014) ("Distinguishing between claims that recite a patent-eligible invention and claims that add too little to a patent-ineligible abstract concept can be difficult, as the line separating the two is not always clear."). "For the role of a computer in a computerimplemented invention to be deemed meaningful in the context of this analysis, it must involve

³ On the other hand, courts must be careful not to oversimplify claims because "[a]t some level, all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." Alice, 134 S. Ct. at 2354; see also Amdocs (Israel) Ltd. v. Openet Telecom, Inc., 841 F.3d 1288, 1299 (Fed. Cir. 2016).

more than performance of 'well-understood, routine, [and] conventional activities previously known to the industry." *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass'n*, 776 F.3d 1343, 1347-48 (Fed. Cir. 2014) (alteration in original) (internal quotations and citations omitted). Further, claims must be "directed to a 'specific means or method' for improving technology" and not "simply directed to an abstract end-result." *RecogniCorp, LLC v. Nintendo Co., Ltd.*, 855 F.3d 1322, 1326 (Fed. Cir. 2017). For example, "when a claim directed to an abstract idea 'contains no restriction on how the result is accomplished . . . [and] [t]he mechanism . . . is not described, although this is stated to be the essential invention" then the claim is not patent-eligible. *Intellectual Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1316 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1348 (Fed. Cir. 2015)).

B. Motion to Dismiss

Pursuant to Rule 12(b)(6), a complaint may be dismissed for failure to state a claim upon which relief may be granted. Dismissal for failure to state a claim under Federal Rule of Civil Procedure 12(b)(6) is proper if there is a "lack of a cognizable legal theory or the absence of sufficient facts alleged under a cognizable legal theory." *Conservation Force v. Salazar*, 646 F.3d 1240, 1242 (9th Cir. 2011) (citing *Balistreri v. Pacifica Police Dep't*, 901 F.2d 696, 699 (9th Cir. 1988)). The complaint must plead "enough facts to state a claim [for] relief that is plausible on its face." *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007). A claim is plausible on its face "when the plaintiff pleads factual content that allows the court to draw the reasonable inference that the defendant is liable for the misconduct alleged." *Ashcroft v. Iqbal*, 556 U.S. 662, 678 (2009). If the facts alleged do not support a reasonable inference of liability, stronger than a mere possibility, the claim must be dismissed. *Id.* at 678–79. Mere "conclusory allegations of law and unwarranted inferences are insufficient to defeat a motion to dismiss." *Adams v. Johnson*, 355 F.3d 1179, 1183 (9th Cir. 2004).

II. DISCUSSION

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

A. The '449 Patent

1. Stage-One Inquiry: Claims Directed to an Abstract Idea?

At the Stage-One Inquiry, the Court must determine whether the asserted claims are directed to an abstract idea. Courts deem claims directed to "analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category." Electric Power, 830 F.3d at 1353 (citing In re TLI Commc'ns LLC Patent Litig, 823 F.3d 607, 613 (Fed. Cir. 2016); Digitech Image Techs., LLC v. Elecs. for Imaging, Inc., 758 F.3d 1344, 1351 (Fed. Cir. 2014); Bancorp Servs, L.L.C. v. Sun Life Assurance Co. of Canada (U.S.), 687 F.3d 1266, 1278 (Fed. Cir. 2012). The use of "existing computers as tools in aid of processes focused on 'abstract ideas" is not sufficient to remove a claim from the abstract-idea category. Id. (citing Enfish, 822 F.3d at 1335–36; Alice, 134 S.Ct. at 2358–59). For example, the Supreme Court in *Alice* found that claims directed to "facilitate the exchange of financial [information] between two parties by using a computer system as a third-party intermediary" were abstract. Alice, 134 S. Ct. at 2352. The Alice Court further held that "the prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of [an abstract idea] to a particular technological environment." Id. at 2358 (quoting Bilski, 561 U.S. at 610–11; see Parker v. Flook, 437 U.S. 584 (1978). Similarly, in Electric *Power*, the Federal Circuit "treated collecting information, including when limited to particular content (which does not change its character as information), as within the realm of abstract ideas." Electric Power, 830 F.3d at 1353. The Electric Power Court further "recognized that merely presenting the results of abstract processes of collecting and analyzing information, without more . . . is abstract as an ancillary part of such collection and analysis." *Id.* at 1354.

By contrast, claims which "focus[] not on asserted advances in uses to which existing computer capabilities could be put, but on a specific improvement . . . in how computers could carry out one of their basic functions" may fall outside the abstract-idea category. *Electric Power*, 830 F.3d at 1354 (citing *Enfish*, 822 F.3d at 1335–36 (the question is "whether the focus of the claims is on the specific asserted improvement in computer capabilities" or on computers which

"are invoked merely as a tool")); see also Alice, 134 S.Ct. at 2358–59. However, the "mere automation of manual processes using generic computers does not constitute a patentable improvement in computer technology." Credit Acceptance Corp. v. Westlake Servs., 859 F.3d 1044, 1055 (Fed. Cir. 2017) (citing TLI, 823 F.3d at 612; OIP Techs., Inc. v. Amazon.com, Inc., 788 F.3d 1359, 1363 (Fed. Cir. 2015)). Similarly, making a "process more efficient" in itself does not "render an abstract idea less abstract." Secured Mail Solutions LLC v. Universal Wilde, Inc., 873 F.3d 905, 910 (Fed. Cir. 2017).

Ultimately, to be patentable, claims must "sufficiently describe how to achieve [an improvement in computer technology] in a non-abstract way." *Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329, 1337 (Fed. Cir. 2017) (finding limitations requiring "sending" and "directing" of information "d[id] not sufficiently describe how to achieve these results in a non-abstract way"); *see also Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1258–59 (Fed. Cir. 2016) (holding that claims were directed to an abstract idea where they claimed "the function of wirelessly communicating regional broadcast content to an out-of-region recipient, not a particular way of performing that function"). For example, claims which recite "generalized steps to be performed on a computer using conventional computer activity" are deemed abstract. *See In re TLI*, 823 F.3d at 612 (citing *Enfish*, 822 F.3d at 1338).

With regard to the '449 Patent, the Court finds that the challenged claims are directed to an abstract idea and thus do not cover patentable subject matter under the Stage-One Inquiry. The claims are not directed to an improvement in "computer functionality" but merely recite "generalized steps to be performed on a computer using conventional computer activity." *TLI*, 823 F.3d at 612; *see Enfish*, 822 F.3d at 1338; *McRO*, *Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016). In addition, the Court finds that the challenge claims are "simply directed to [the] abstract end-result" of sending, receiving, and authenticating logon information, and not to a "specific means or method for improving technology." *RecogniCorp*, 855 F.3d at 1326 (internal quotations omitted).

Specifically, the challenged claims do not recite a new way to authenticate online gamers through IM clients or purport to improve computer functionality through enhancements to the

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

"inter-process communication" between game clients and IM clients. Further, the challenged claims do not purport to make the user authentication process faster or more efficient or more accurate. For example, the '449 Patent indicates that the end result of the claimed method is no different than conventional processes in which an online gamer enters login information into an IM client and, if authenticated, is granted access to a game. ('449 patent at 2:17-20.) Accordingly, the challenged claims merely employ "existing computers as tools in aid of processes focused on 'abstract ideas.'" TLI, 823 F.3d at 613 (citing Enfish, 822 F.3d at 1335–36). This is not sufficient to remove the claims from the abstract-idea category. *Electric Power*, 830 F.3d at 1353.

Plaintiff argues that the claims at issue are directed to a "specific implementation of a solution to a problem in the software arts[,]" Enfish, 822 F.3d at 1336, 1339, namely a solution to the problem arising from the interface mechanism between game clients and IM clients. Under conventional logon methods, direct, pre-configured communication was required between the two clients which meant that a game client could not be updated without also updating the corresponding IM client. (See '449 patent at 2:18-24.) According to plaintiff, the challenged claims are directed to improving computer technology by placing a function plug-in between two "peer entities" (i.e., a game client and IM client of the same user) to improve "expansibility of the IM client." (Id. at 3:30-42.)

Plaintiff does not persuade. Applying a plug-in specifically to "peer entities" or in the context of online gaming is not sufficient to remove the '449 Patent from the abstract idea category because "the prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of [the idea] to a particular technological environment." Alice, 134 S. Ct. at 2358 (quoting *Bilski*, 561 U.S. at 610–11); see also Flook, 437 U.S. at 584. Further, as the Federal Circuit "caution[ed]" in DRR, "not all claims purporting to address Internet-centric challenges are eligible for patent." DDR, 773 F.3d at 1258.

Even if the challenged claims were directed to an improvement in computer functionality, the '449 Patent fails to describe the structure of the function plug-in or how to apply the plug-in between a game client and IM client to achieve the purported technological improvement. See

Two-Way Media, 874 F.3d at 1337 (finding that claims reciting the "sending" and "directing" of information were not sufficiently descriptive). Stated differently, to be patentable, the claims must be "directed to a 'specific means or method' for improving technology" and not "simply directed to an abstract end-result." RecogniCorp, 855 F.3d at 1326. Here, the challenged claims merely recite an abstract and generic "method for obtaining logon information" through a function plug-in by "receiving" a request for logon information from a game client, "sending" that request to an IM client, "returning" the logon information from the IM client to the function plug-in, "receiving" the logon information by the plug-in, and "sending" the logon information from the plug-in to the game client. Further, the '449 Patent does not indicate a specific structure for the function plug-in⁴ but instead describes the plug-in using three lines of "pseudo-code" which indicate the end result of using the plug-in rather than a particular means of achieving that result. ('449 Patent, 5:1–10.) Such "result-based functional language" is deemed "abstract." See Two-Way Media, 874 F.3d at 1337. Accordingly, the Court finds that the challenged claims fail to describe a specific "means or method for improving technology" by placement of a function plug-in between two peer entitles. See RecogniCorp, 855 F.3d at 1326.

2. Stage-Two Inquiry: Sufficient Inventive Concept?

Having determined that the claims at issue in the '449 Patent are directed to an abstract idea, the Stage-Two inquiry requires the Court to "determine whether the claim elements, when viewed individually and as an ordered combination, contain an inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application." *Smart Sys. Innovations*, 873 F.3d at 1373–74; *see also BASCOM Glob; Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016) (stating that the "inventive concept may arise in one or more of the individual claim limitations or in the ordered combination of the limitations"). "A claim contains an inventive concept if it 'include[s] additional features' that are more than 'well-understood, routine, conventional activities." *Id.* (quoting *Alice*, 134 S. Ct. at 2357, 2359). The

⁴ For example, according to the patent, the function plug-in need not adhere to a specific structure so long as it "may be configured according to function[al] requirements of a corresponding game client and invoke[s] the common interface according to [the IM client's] requirements." ('449 Patent, 4:49–52.)

Federal Circuit has held that "in addressing the second step of *Alice*, [] claiming the improved speed or efficiency inherent with applying the abstract idea on a computer [does not] provide a sufficient inventive concept." *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1367 (Fed. Cir. 2015). "To save a patent at step two, an inventive concept must be evident in the claims." *Two-Way Media*, 784 F.3d at 1338 (citing *RecogniCorp*, 855 F.3d at 1327).

The Court finds that the '449 Patent does not "contain an inventive concept sufficient to transform the claimed abstract idea into a patent-eligible application." *Smart Sys. Innovations*, 873 F.3d at 1373–74. Plaintiff argues that the application of a function plug-in between peer entities is enough to "save the ['449 Patent] at step two." *Id.* (citing *RecogniCorp*, 855 F.3d at 1327). Supercell relies primarily on *DDR* in arguing that the challenged claims recite a sufficient inventive concept, namely use of a function plug-in to solve an "Internet-centric problem" which is specific to application logon technology. *DDR*, 773 F.3d at 1258. Plaintiff highlights that the conventional method prevented developers from upgrading online games unilaterally because the communication between the game client and the IM client needed to be pre-configured. ('449 patent at 2:18-24.) Accordingly, a game client could not be upgraded without upgrading the corresponding IM client. The '449 Patent purports to solve this problem by applying a function plug-in between the game client and IM client.

Supercell does not persuade. First, the challenged claims merely describe the function plug-in as any generic software programmed to achieve a desired result, namely enabling the game client "to obtain logon information from the IM client through the function plug-in and then log on a game server." (*See* '449 Patent at 4:44–46.) The claims do not articulate a specific means or method to achieve this result, as the function-plug is defined to cover any computer software "configured according to function[al] requirements of a corresponding game client and invoke[s] the common interface according to [the IM client's] requirements." (*See id.* at 4:49–52.) The '449 Patent recites the use of generic computer software and hardware, namely a "function plug-in," "value-added service client," "IM client," and "value-added service server." ('449 Patent at 7:13–34.) "When claims like the Asserted Claims are 'directed to an abstract idea' and 'merely require[e] generic computer implementation,' they do[] not move into section 101 eligibility

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

territory." Smart Sys. Innovations, LLC v. Chicago Transit Auth., 873 F.3d 1364, 1375 (Fed. Cir. 2017) (buySAFE, 765 F.3d at 1354. Second, and in any event, DDR is distinguishable. There, the challenged claims recited an unconventional technical solution to retaining website visitors who clicked on an advertisement for a product. See DDR, 773 F.3d at 1257. As noted the DDR Court specifically "caution[ed]" that "not all claims purporting to address Internet-centric challenges are eligible for patent." Id. 1258. The Court went on to hold that to be patent eligible a claim must "not attempt to preempt every application of [an] idea." *Id.* at 1259. Here, the challenged claims recite generic language which states that communications between a game and IM client can be intermediated via a function plug-in to achieve the desired result of eliminating the need for developers to upgrade a game client and corresponding IM client simultaneously. The language of Claim 1 itself illustrates the generic nature of steps; namely that of "receiving" requests for, "obtaining", "returning", and "sending" user and logon information between the two clients. These steps are described using language which is so generic that it attempts "to preempt every application of [this] idea." Id. Further, limiting the method to communications between two specific peer entities, namely a game client and IM client, is not sufficient to save the '449 Patent at Stage-Two because "the prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of [the idea] to a particular technological environment." Alice, 134 S. Ct. at 2358.

Next, plaintiff attempts to analogize to *Enfish* in arguing that the challenged claims are "not simply directed to *any* form" of applying a functional plug-in between two client but are instead directed to a particular way of doing so. *Enfish*, 822 F.3d at 1337 (emphasis in original). *Enfish* is distinguishable. There, the challenged claims were directed to a self-referential table which had a specified nonconventional structure. *Id.* at 1338. The table "store[d] information related to each column in rows of that same table, such that new columns can be added by creating new rows in the table," as opposed to conventional tables, which "require[d] a programmer to predefine a structure and subsequent [data] entry [to] conform to that structure." *Id.* at 1337–38. By contrast, Supercell's "function plug-in" lacks a specific structure and is defined in software "pseudo-code" which describes results rather than a particular way of achieving those results.

Northern District of California

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

(See '449 Patent at 5:1–10.) For example, the function plug-in as defined covers any software so long as it "may be configured according to function[al] requirements of a corresponding game client and invoke[s] the common interface according to [the IM client's] requirements." ('449 Patent at 4:49-52.)

Finally, Supercell avers that even if the "the limitations of the claims, taken individually, recite generic computer, network, and Internet components, none of which is inventive by itself," the "ordered combination of the limitations" constitutes an inventive concept sufficient to confer patent eligibility. BASCOM, 827 F.3d at 1349-50. In BASCOM, the Federal Circuit found that the challenged claims "recite a specific, discrete implementation of the abstract idea of filtering content" which constituted an inventive concept because "the patent describes how its particular arrangement of elements is a technical improvement over prior art ways of filtering such content." Id. at 1350. According to plaintiff, the ordered combination "of interactions between the game client, IM client, and plug-in is inventive." (Dkt. No. 31, Opposition at 21.)

Plaintiff's argument fails because the '449 Patent does not "describe[] how its particular arrangement of elements is a technical improvement over prior art ways of" applying a function plug-in between two clients BASCOM, 827 F.3d at 1349-50. The Court finds that the "ordered combination of the limitations" in the '449 Patent do not constitute an inventive concept because the ordered combination recited in the claims is logically required for the function plug-in to receive and send logon information between game and IM clients. For example, a request for user information must be "sent" by a client to an intermediary plug-in before the "request" is received by that plug-in. The request must be "received" by the plug-in before the request is then "sent" to the second client. The requested information must be "sent" by the second client back to the plugin before it is "received" back by the intermediary plug-in. Finally, the plug-in must "receive" this logon information before sending it back to the first client. Any other ordering of claimed steps would defeat the purpose of user authentication.

Accordingly, the Court finds that the '449 Patent is not patent eligible. Therefore, defendants' motion is **GRANTED** as to the '449 Patent.

//

B. The '520 Patent

1. Stage-One Inquiry: Claims Directed to an Abstract Idea?

The Court finds that the asserted claims in the '520 Patent, "viewed in light of their respective specifications, are not directed to an abstract idea, and thus cover patentable subject matter." *See Synchronoss Technologies, Inc. v. Dropbox, Inc.*, 226 F.3d 1000, 10007 (N.D. Cal. 2016). The claims, "like those in *Enfish* and *McRO*, are directed on their face to an improvement to computer functionality: a more-efficient mechanism" for upgrading applications with a single installation patch which can be applied across all release channels of an application. ⁵ *Id*.

In *McRO*, the Federal Circuit held that a method for automating the animation of lip movement and facial expressions by replacing an animator's subjective evaluation with automated rules was not an abstract idea. *McRO*, 837 F.3d at 1313-16. The *McRO* Court highlighted that the claims at issue recited "many exemplary rule sets that go beyond" merely identifying "differences in mouth positions for similar phonemes based on context" which characterized the subjective manual process. *Id.* at 1307. Further, the Court noted the lack of "evidence that the process previously used by animators is the same as the process required by the claims [at issue]." *Id.* at 1314. For example, the conventional process was driven by subjective human determinations "rather than specific, limited mathematical rules." *Id.* Thus, the Court found that the "computer is employed to perform a distinct process to automate a task previously performed by humans." *Id.*

Similarly, the '520 Patent recites a method for generating a single installation patch which can be used to upgrade an application across different release channels. The '520 Patent purports to solve a problem rooted in computer technology, namely that when upgrading an application developers must generate a unique installation patch for each release channel which contains a Customized Information Portion specific to that release channel. Unlike the conventional method which required developers to "provide a lot of patch packages corresponding to different

⁵ As noted, the claims in *Enfish* were directed to a self-referential table with a nonconventional structure which "store[d] information related to each column in rows of that same table, such that new columns can be added by creating new rows in the table," as opposed to conventional tables, which "require[d] a programmer to predefine a structure and subsequent [data] entry [to] conform to that structure." *Id.* at 1337–38.

Northern District of California

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

customized information portions[,]" the present invention offers a "method and apparatus for upgrading an application, so as to avoid providing too many patch packages for the same version of an application." ('520 Patent at 1:59-2:2.) Stated simply, the conventional method employed human labor to generate many patch packages manually. (Id.) By contrast, the present invention recites an automated method for generating a single patch package which can be applied across different release channels to reduce "the workloads of the developer" and make it easier to "maintain the application." (*Id.* at 3:5-7.)

As in McRO, defendants fail to proffer sufficient evidence that "the process previously used by [application developers] is the same as the process required by the claims." McRO, 837 F.3d at 1314. For example, representative claim 1 recites a specific method for creating a new installation package in which a client terminal, after receiving a patch package, creates a Data Portion for the new installation package based on the patch package and the Data Portion of the old installation package. ('520 Patent at 9:65-10:8, Figs. 1, 2.) The Customized Information Portion of the old installation package is then added to the Data Portion of the new installation package. (Id. at 9:65-10:8, Figs. 1, 2.) This process enables developers to create a single installation patch capable of upgrading an application regardless of the release channel. ('520 patent, 2:66-3:7, 3:52-59, 8:3-11, 8:48-56.) Accordingly, the Court finds on the present record that the '520 Patent recites a method which employs computers to "perform a distinct process to automate a task previously performed by humans."6 Id.

Defendants attempt to characterize the '520 Patent as being directed to the abstract idea of "collecting, manipulating, and analyzing data." See Capital One Bank, 792 F.3d at 1369. In Capital One Bank, the Federal Circuit found that claims directed to "customizing web page content as a function of navigation history and information known about the user" were abstract

⁶ The specifications bolster this conclusion. See Enfish, 822 F.3d at 1337 ("our conclusion that the claims are directed to an improvement of an existing technology is bolstered by the specification's teachings that the claimed invention achieves other benefits over conventional databases, such as increased flexibly . . . and smaller memory requirements"). As the specifications explain, the challenged claims are directed to improving the process through which computers are used to upgrade applications by making that process more efficient, less labor- and memory-intensive, and more flexible. (See '520 Patent at 1:54-56.)

because the claims involved the mere "customizing [of] information based on (1) information known about the user and (2) navigation data." *Id.* Similarly, in *Capital One Fin. Corp.*, the Court held that claims which recited a method of editing an XML document were abstract on the ground that the claims were directed to "collecting, displaying, and manipulating data" in a particular technological context. *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1339–40 (Fed. Cir. 2017).

GREE oversimplifies the challenged claims by characterizing them broadly as the collection, manipulation, and analysis of data. Defendants ignore the fact that the '520 Patent recites a specific method and apparatus for upgrading an application by (i) extracting the Customized Information Portion of an old installation package and (ii) combining the Customized Information Portion of the old installation package with the Data Portion of a new installation package (iii) to generate a single installation patch which can be used to upgrade an application across all release channels. ('520 Patent at 9:65–10:8, Figs. 1, 2.) By following the method described in the '520 Patent, developers can generate a single installation patch with a Customized Information Portion which is *the same* as the old installation package for a given release channel and a Data Portion which is *different* than the old installation package. Accordingly, the Court finds that the claims "focus [] not on asserted advances in uses to which existing computer capabilities could be put, but on a specific improvement . . . in how computers could carry out one of their basic functions." *Electric Power*, 830 F.3d at 1354 (citing *Enfish*, 822 F.3d at 1335–36). The challenges claims thus go beyond the "mere automation of manual processes using generic computers." *Credit Acceptance*, 859 F.3d at 1055 (citing *In re TLI Commc'ns*, 823 F.3d at 612).

Accordingly, defendants' motion to dismiss plaintiffs' claims under the '520 Patent is **DENIED** on the ground that the claims are not directed to an abstract concept.

⁷ Thus, unlike *Symantec*, the specifications here contain sufficient restrictions on "how the result is accomplished." *Symantec Corp.*, 838 F.3d at 1316.

2. Stage-Two Inquiry: Sufficient Inventive Concept?

Even if the '520 Patent were not directed to an abstract idea the Court would still find it patent eligible under the Stage-Two inquiry because the '520 Patent contains a sufficient inventive concept. As described above, the '520 Patent recites a method and apparatus for generating and installing an installation patch across different release channels to solve a problem specific to application upgrade technology. *See DDR*, 773 F.3d at 1258. The specification explains that the conventional process of generating installation patches required a developer to write a unique patch for each release channel. ('520 Patent at 1:50-56.) The '520 Patent purports to solve this problem by enabling developers to create a single patch package which can be applied across different release channels regardless of the Customized Information Portion contained therein.⁸ (*Id.* at 2:66-3:7.)

GREE counters that the concept of upgrading a software application using information from an old installation package was known, conventional, and widely used. Defendants argue that U.S. Patent Publication No. 2008/0127170 (the "170 Publication") indicates that some items in the Customized Information Portion of an installation package can be recognized and removed. (*See* '170 Publication ¶ 0057.) Further, U.S. Patent Publication No. 2006/0136895 (the "895 Publication") describes a process in which the Customized Information Portion can be "recognize[d]" separately from the "application installer." (*See* '895 Publication ¶ 0036.)

GREE does not persuade. First, the fact that the '170 Patent indicates that some components of the Customized Information Portion of an installation package can be recognized

⁸ Plaintiff argues that dependent claims 3 and 8 provide further support. Claim 3 recites how the technical solution is applied when the information in the patch and installation packages comprises md5 values. ('520 Patent at 10:18-29.) Defendants counter that a "hash identifier" such as an md5 hash "is a generic and routine concept that does not transform the claims to a patent eligible application of the abstract idea." *Smart Sys. Innovations*, 873 F.3d at 1374 n.9 (Fed. Cir. 2017). Next, plaintiff argues that claim 8 describes a method for generating the Data Portion of the new installation package by reading preset portions of the packages into memory. (*Id.* at 10:48-61.) Again defendants counter that claim 8 is not inventive because it fails to recite a particular memory storage medium. (*See* '520 Patent at 9:17–21 ("Machine-readable instructions used in the examples disclosed herein may be stored in [a] storage medium readable by multiple processors such as [a] hard drive . . . RAM, ROM . . . or other proper storage device."). In light of the Court's ruling the Court need not reach this issue.

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

and removed does not establish that the method and apparatus recited in the '520 Patent for generating and installing an installation patch across different release channels was known, conventional, and widely used. *See DDR*, 773 F.3d at 1258. Second, and similarly, the reference in the '895 Patent to "recogniz[ing]" a Customized Information Portion fails to show that the '520 Patent recites only known and conventional concepts because the '520 Patent goes beyond the mere recognition of data. *See id*.

Next, defendants argue that the '520 Patent lacks an inventive concept because the installation patch generated through the method described in the '520 Patent is the same as the installation patches generated by the conventional method. According to defendants, the only difference between the convention method and the method described in the '520 Patent is that the challenged claims employ computers to increase the speed and efficiency of the application upgrade process. See Capitol One Bank, 792 F.3d at 1370. GREE asserts that "merely adding computer functionality to increase the speed or efficiency of [a] process does not confer patent eligibility on an otherwise abstract idea." *Id.*; see also Credit Acceptance, 859 F.3d at 1055. ("automation of manual processes using generic computers does not constitute a patentable improvement in computer technology"); Secured Mail, 873 F.3d at 910 (making "a process more efficient . . . does not necessarily render an abstract idea less abstract"). However, defendants ignore the fact that the installation patch generated through the method described in the '520 Patent is *substantively different* than the installation patches generated by the conventional method. Specifically, the challenged claims describe a method for generating a single installation patch which can be applied across all application release channels whereas the conventional method required developers to write a unique patch for each release channel. The conventional method required developers to write a unique patch for each application release channel.

Accordingly, defendants' motion to dismiss plaintiffs' claims under the '520 Patent is **DENIED** on the additional ground that the claims contain a sufficient inventive concept.

26 // 27 //

28

United States District Court Northern District of California

III. **CONCLUSION** For the foregoing reasons, defendants' motion to dismiss is **GRANTED** as to the '449 Patent and **DENIED** as to the '520 Patent. This terminates Dkt. No. 26. IT IS SO ORDERED. Dated: April 3, 2018 YVONNE GONZALEZ ROGERS UNITED STATES DISTRICT COURT JUDGE