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UNITED STATES DISTRICT COURT

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NORTHERN DISTRICT OF CALIFORNIA

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PURE DATA SYSTEMS, LLC,

Plaintiff,

8

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v.

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UBISOFT, INC.,

Defendant.

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Case No. 18-cv-00852-JCS

ORDER RE DEFENDANT'S MOTION TO DISMISS UNDER FED. R. CIV. P. 12(b)(6)

Re: Dkt. No. 28

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I. INTRODUCTION

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Plaintiff Pure Data Systems, LLC ("PDS") filed this case against Defendant Ubisoft, Inc.

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alleging that Ubisoft directly and indirectly infringed the claims of two patents that PDS owns,

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U.S. Patent Nos. 5,999,947 (the "'947 patent") and 6,321,236 (the "'236 patent").[1] The patents

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relate to a method of and system for distributing differences between data storage systems.

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Ubisoft moves to dismiss PDS's complaint pursuant to Rule 12(b)(6) of the Federal Rules of Civil

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Procedure. First, Ubisoft argues that the patents are directed to patent-ineligible subject matter

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under 35 U.S.C. § 101. Second, Ubisoft argues that PDS's claims of indirect infringement under

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35 U.S.C. § 271(b) and § 271(c) lack a plausible allegation that Ubisoft had knowledge of the

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infringing acts. The Court held a hearing on July 13, 2018. For the reasons stated below,

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Ubisoft's motion to dismiss is DENIED IN PART and GRANTED IN PART. PDS may proceed

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on its claims for direct infringement but its indirect infringement claims are dismissed with leave

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to amend.[2]

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[1] The '947 patent is available in the record as Exhibit A to PDS's complaint (dkt. 1-1) and as Exhibit A to PDS's opposition (dkt. 42-1). The '236 patent is available in the record as Exhibit B to the complaint (dkt. 1-2) and as Exhibit C to PDS's opposition (dkt. 42-3).

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[2] The parties have consented to the jurisdiction of the undersigned magistrate judge for all purposes pursuant to 28 U.S.C. § 636(c). *See* dkts. 9, 15.

II.   BACKGROUND

A.   The '947 Patent

1. Overview

The '947 patent was filed on May 27, 1997 and covers a "method of distributing database differences." '947 Patent (cover page paragraph [22]); Compl. (dkt. 1) ¶ 18. Specifically, the '947 patent concerns a "method, computer program product, and system that allows changes made to an original database table found on a server computer to be reflected in client copies of the database table based on intermittent client requests for synchronization." '947 Patent (cover page paragraph [57]). In other words, a client computer that maintains a local copy of a database can receive updates on demand from a server, and the server will transmit only the changes to the database since that client last received an update, without needing to transmit data that has not changed. PDS claims the invention solves a "problem unique to data storage systems, by greatly enhancing and facilitating the operation and efficiency of data storage systems." Compl. ¶ 2. For example, the invention improves the functioning of data storage systems by "efficiently using system resources and permitting client systems that are intermittently (as opposed to continuously) connected to a server system to synchronize with information from the server." Id. ¶ 3 (citing '947 Patent at 1:9–19).

2. Claims

The '947 patent includes fourteen claims. '947 Patent at (cover page paragraph [57]). PDS alleges in this action that Ubisoft, a video game company, directly infringes Claim 6 of the '947 patent in Ubisoft's game library updates, game statistics updates, and game updates. Id. ¶¶ 20–21, 27–29, 35, 38, 45. PDS also alleges that Ubisoft is "indirectly infringing one or more claims" of the '947 patent. Id. ¶ 19. In its opposition brief, PDS seeks to reserve the right to assert additional claims, such as those dependent on the asserted claim, like Claims 8 and 9. Opp'n (dkt. 42) at 7. All three claims are addressed below.

a. Claim 6

Claim 6 reads as follows:

A method of distributing database differences corresponding to database change events made to a database table located on a server computer to client copies of the database table located on one or more client computers, each client computer capable of having different database engines comprising the steps of:

storing database differences at the server computer in a generic format;

receiving from a client computer a request for all database differences needed to make a client copy of the database table current;

translating the differences from the generic format into instructions having a specific format compatible with the type of database engine associated with the client copy of the database table; and

transmitting the instructions to the client computer for execution on the client database engine to make the client copy of the database table current.

'947 Patent at 15:29–47.

b. Dependent Claims 8 and 9

Claim 8 adds a limitation to Claim 6 as follows:

A method as recited in Claim 6 wherein the type of database engine is ascertained by reference to profile information regarding the client computer.

Id. at 15:49–51. Claim 9 recites additions to Claim 6 comprising the steps of:

creating and storing on the server computer one or more sequentially versioned updates containing database differences corresponding to database change events made to the database table since the preceding update;

determining which updates are necessary for making the client copy of the database table current; and

generating the database differences based upon the necessary updates prior to the step of translating the differences into instructions.

Id. at 15:54–16:7.

3. Prior Art Acknowledged in the '947 Patent

The '947 patent acknowledges that, in the prior art, "[o]ne way to distribute changes made to a database or database table is to download the entire table each time a client makes a connection with the server." *Id.* at 2:1–3. However, the '947 patent states that this requires "large

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amounts of bandwidth on the communications link" and "will make for an expensive and time

consuming transfer that, in many instances, will be intolerable and impracticable." *Id.* at 2:5–8.

Additionally, the '947 patent acknowledges another prior art system that "make[s] a comparison of

the client representation of the database (or other form of data store) and the original database on

the server at the time that the client makes a connection with the server." *Id.* at 2:9–12.

According to the '947 patent, however, "[s]uch dynamic comparisons require large amounts of

hand shaking and data transfer between the client and the server." *Id.* at 2:12–14.

PDS claims that the '947 patent survived "a rigorous examination that lasted more than 2.5

years."[3] Opp'n at 5. According to PDS, during prosecution of the application, the Examiner at the

United States Patent and Trademark Office ("USPTO") attempted to apply as prior art U.S. Patent

No. 5,758,355 ("Buchanan") to the pending claims. Compl. ¶ 5. PDS states that the '947 patent

was distinguished on the grounds that Buchanan "merely discloses the concept of bi-directional

synchronization of a client database and a server database, and does not make any reference to

translating database differences at a particular data format." *Id.* Additionally, PDS alleges that the

USPTO attempted to apply as prior art U.S. Patent No. 5,634,052 ("Morris"). *Id.* ¶ 6. PDS states

that the '947 patent was distinguished because where the Morris system transmits database

differences from the client to the server, the '947 patent transmits database differences from the

server to the client, "which enables the client computer to maintain an updated copy of a database

table stored at the server." *Id.*

B. The '236 Patent

1. Overview

The '236 patent was filed on August 3, 1999 as a continuation of the '947 patent

application. '236 Patent (cover page paragraph [22]), 1:8–11. The '236 patent covers a "system

for distributing database differences" and shares "a nearly identical specification" with the '947

patent. Compl. ¶ 49; Opp'n at 4 n.2.

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[3] Excerpts from the prosecution history of the '947 patent are available in the record as Exhibit B
to PDS's opposition (dkt. 42-2).

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2. Claims

2   The '236 patent includes seventeen claims. '236 Patent (cover page paragraph [57]). PDS

3   alleges the direct infringement of Claim 1. Compl. ¶¶ 52, 59, 61, 75. As with Claim 6 of the '947

4   patent, PDS alleges that Ubisoft directly infringes Claim 1 in its game library updates, game

5   statistics updates, and game updates. *Id.* ¶¶ 51, 60, 68. PDS also alleges that Ubisoft is "indirectly

6   infringing one or more claims" of the '236 patent. *Id.* ¶ 50.

7   Claim 1 reads as follows:

8   A system for distributing differences corresponding to one or more
             change events made to a data store located on a server computer, the
9   differences being distributed to one or more client copies of at least
             a portion of the data store, wherein the one or more client copies of
10   the at least a portion of the data store are located on one or more
             client computers, the system comprising:

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12   a current server version of the data store configured to permit
                    modifications to data contained therein;

13   a reference server version of the data store;

14   a differencing engine that identifies, at a given instance in
                    time, any differences between the current server version of
15   the data store and the reference server version of the data
                    store;
16
                    one or more updates storing one or more differences
17   generated by the differencing engine wherein the one or
                    more differences are in a first format;
18
                    a translator that converts any differences destined for the
19   client copy of the at least a portion of the data store from the
                    first format into a second format;
20
                    a communication network; and
21
                    a synchronizer that obtains from the differencing engine any
22   differences that are needed to make the one or more client
                    copies of the at least a portion of the data store current, and
23   transmits the differences to the one or more client copies of
                    the at least a portion of the data store by way of the
24   communication network.

25   '236 Patent at 14:63–15:22.

26   **3. Prior Art Acknowledged in the '236 Patent**

27   The '236 patent acknowledges the same prior art as the '947 patent. *Id.* at 2:5–21. PDS

28   alleges that, similar to the '947 patent, the '236 patent "survived a rigorous examination that lasted

1 over two years."[4] Opp'n at 5. According to PDS, during prosecution of the application, as with

2 the '947 patent, the USPTO attempted to apply Buchanan as prior art. Compl. ¶ 5. PDS states

3 that Buchanan was again distinguished on the basis that Buchanan "does not disclose a database

4 with a translated format." *Id.* Additionally, PDS alleges that the USPTO attempted to apply as

5 prior art U.S. Patent No. 5,870,765 ("Bauer"). *Id.* ¶ 7. PDS states that the pending claims were

6 distinguished "on the basis that they are directly opposed to the disclosure of the Bauer patent."

7 *Id.*

8   **C.**   **The Present Motion and the Parties' Arguments**

9   **1.**   **Ubisoft's Motion**

10   Ubisoft argues that Claim 6 of the '947 patent and Claim 1 of the '236 patent (collectively

11 "the asserted claims") constitute patent-ineligible subject matter pursuant to the two-part test set

12 forth in *Alice Corporation Pty. Ltd. v. CLS Bank International*, 134 S. Ct. 2347, 2355 (2014).

13 Mot. (dkt. 28) at 4. Under step one, Ubisoft contends that the asserted claims are directed to the

14 abstract ideas of updating and translating, and that "updating changed information in an

15 understandable format is a long known and conventional practice." *Id.* at 5–12. To support this

16 position, Ubisoft analogizes the asserted claims to conventional real-world practices that it asserts

17 are used by case law reporters and field salespersons. *Id.* Furthermore, Ubisoft points to cases

18 that hold "updating" or "translating" data to be abstract ideas. *Id.* at 12–15 (citing, *e.g.*, *White*

19 *Knuckle Gaming, LLC v. Elec. Arts Inc.*, No. 1:15-CV-150-JNP-PMW, 2016 WL 3129133 (D.

20 Utah June 2, 2016), *aff'd*, 683 F. App'x 931 (Fed. Cir. 2017); *Yodlee, Inc. v. Plaid Techs. Inc.*, No.

21 14-1445 (LPS), 2016 WL 2982503 (D. Del. May 23, 2016)). At step two, Ubisoft argues that the

22 asserted claims do not add an inventive concept but merely recite generic computer components to

23 perform the abstract ideas. *Id.* at 15–24.

24   Additionally, Ubisoft moves to dismiss PDS's allegations of indirect infringement, arguing

25 that PDS fails to allege plausibly that Ubisoft had knowledge of its infringing acts while the

26 patents were in force, as 35 U.S.C. § 271(b) and § 271(c) require. *Id.* at 24–25.

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28 [4] Excerpts from the prosecution history of the '236 patent are available in the record as Exhibit D
to PDS's opposition (dkt. 42-4).

2. PDS's Opposition

PDS responds by arguing that Ubisoft fails to meet its "heavy burden of proving, by clear and convincing evidence," that the asserted claims are directed to ineligible subject matter. Opp'n at 1, 8. In a footnote, PDS also submits that this Court lacks subject-matter jurisdiction to consider a § 101 eligibility challenge, stating that § 101 is not one of the defenses in 35 U.S.C. § 282(b) authorized to be raised in a patent infringement action. *Id.* at 8 n.4.

Under *Alice*, PDS argues that the asserted claims are not directed to an abstract idea under step one but rather improve on an existing technological process. *Id.* at 13 (citing *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335–36 (Fed. Cir. 2016)). Moreover, PDS contends that Ubisoft oversimplifies the patents in its characterizations of the abstract concepts. *Id.* at 12–13.

Next, PDS argues that, if the Court were to reach step two of the *Alice* test, the asserted claims embody an inventive concept because "[t]he limitations of the claims, taken together as an ordered combination, teach the inventive concept of allowing client representations of a data store to be managed by a different type of data store engine than that managing the server data store." *Id.* at 14–16. Furthermore, PDS argues that Ubisoft fails to meet its heavy burden of proving by clear and convincing evidence that the claims' combination of elements is "well-understood, routine and conventional to a skilled artisan in the relevant field." *Id.* at 17–18 (quoting *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018)). To support this argument, PDS points to a USPTO memorandum of changes in examination procedure issued in light of the recent *Berkheimer* ruling.[5] *Id.*

According to PDS, three Federal Circuit cases support its position that the asserted claims are patent eligible. *Id.* at 18–20 (citing *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245 (Fed. Cir. 2014); *BASCOM Glob. Internet Servs. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016); *Amdocs (Isr.) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288 (Fed. Cir. 2016)).

Finally, PDS urges this Court to limit its analysis and ruling to the two asserted claims, and seeks to reserve the right to assert additional claims for infringement contentions, with Claims 8

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[5] This memorandum, referred to as the "Berkheimer Memo," is available in the record as Exhibit E to PDS's opposition (dkt. 42-5).

1 and 9 of the '947 patent given as examples. Opp'n at 6–7.

2   **3. Ubisoft's Reply**

3   In its reply, Ubisoft maintains that the record demonstrates clearly and convincingly that

4 the asserted claims are directed to mere abstract ideas and are not patent eligible. Reply (dkt. 47)

5 at 1–2. With respect to Claims 8 and 9 of the '947 patent, Ubisoft responds that PDS has not

6 affirmatively alleged infringement of these additional claims, but that regardless they fail the *Alice*

7 test as additional abstract ideas without any inventive concepts. *Id.* at 2 n.2.

8   Under the first step of the *Alice* test, Ubisoft argues that PDS implicitly concedes that the

9 claims are directed to abstract ideas by failing to challenge its conventional real-world examples

10 and not addressing its proffered case law. *Id.* at 3–5. Under step two, Ubisoft argues that the

11 claims only describe *what* the invention is to do, but not *how*, and therefore fail to teach an

12 inventive concept. *Id.* at 5–7. It is this lack of an inventive concept, Ubisoft contends, that

13 distinguishes this case from *DDR Holdings*, *BASCOM*, and *Amdocs*. *Id.* at 7–8. Additionally,

14 Ubisoft rejects PDS's contention that *Berkheimer* requires an expert report to resolve an *Alice*

15 motion, citing recent authority for support. *Id.* at 1 n.1, 8–9 (citing, *e.g.*, *Voter Verified, Inc. v.*

16 *Election Sys. & Software LLC*, 887 F.3d 1376, 1386 (Fed. Cir. 2018)).

17   Finally, Ubisoft notes that PDS did not respond to its motion to dismiss the indirect

18 infringement claims, and argues that these claims should therefore be dismissed. *Id.* at 9–10.

19 **III. ANALYSIS**

20   **A. Legal Standard Under Rule 12(b)(6)**

21   Ubisoft moves to dismiss PDS's complaint pursuant to Rule 12(b)(6) of the Federal Rules

22 of Civil Procedure. A Rule 12(b)(6) motion to dismiss challenges the legal sufficiency of the

23 claims alleged. *See Parks Sch. of Bus. v. Symington*, 51 F.3d 1480, 1484 (9th Cir. 1995). In

24 considering such a motion, a court must take "all allegations of material fact in the complaint as

25 true and construe them in the light most favorable to the non-moving party." *Cedars-Sinai Med.*

26 *Ctr. v. Nat'l League of Postmasters of U.S.*, 497 F.3d 972, 975 (9th Cir. 2007). Although a

27 complaint "need not contain detailed factual allegations," it must "plead 'enough facts to state a

28 claim to relief that is plausible on its face.'" *Weber v. Dep't of Veterans Affairs*, 521 F.3d 1061,

1   1065 (9th Cir. 2008) (quoting *Bell Atl. Corp v. Twombly*, 550 U.S. 544, 570 (2007)). In a patent

2   eligibility challenge under 35 U.S.C. § 101, however, it is the legal sufficiency of the patent—

3   rather than of the complaint itself—that is at issue.

4   It is well settled that courts may determine patent eligibility under § 101 at the Rule

5   12(b)(6) stage. *See generally, e.g.*, *Voter Verified*, 887 F.3d at 1386 (Fed. Cir. 2018) (affirming

6   determination of ineligibility on a motion to dismiss under Rule 12(b)(6)); *Genetic Techs. Ltd. v.*

7   *Merial L.L.C.*, 818 F.3d 1369, 1380 (Fed. Cir. 2016) (same); *Content Extraction & Transmission*

8   *LLC v. Wells Fargo Bank, N. A.*, 776 F.3d 1343, 1345 (Fed. Cir. 2014) (same).[6] Indeed, there are

9   many virtues of "addressing section 101 at the outset of litigation," such as doctrinal justifications

10   based on "the section 101 determination bear[ing] some of the hallmarks of a jurisdictional

11   inquiry," and practical benefits including conversation of resources for litigants as well as the

12   judiciary. *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 718–19 (Fed. Cir. 2014) (Mayer, J.,

13   concurring).

14   Judgment on the pleadings is possible, however, "only when there are no factual

15   allegations that, taken as true, prevent resolving the eligibility question as a matter of law." *Aatrix*

16   *Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018). The Federal

17   Circuit's recent decision in *Berkheimer* recognized that patent eligibility is "a question of law that

18   may contain underlying issues of fact." *Automated Tracking Sols., LLC v. Coca-Cola Co.*, 723 F.

19   App'x 989, 992 (Fed. Cir. 2018) (citing *Berkheimer*, 881 F.3d at 1368). For instance, "[t]he

20   question of whether a claim element or combination of elements is well-understood, routine and

21   conventional to a skilled artisan in the relevant field is a question of fact."[7] *Berkheimer*, 881 F.3d

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23   [6] Likewise, there is no question that this Court has subject matter jurisdiction to consider a patent
     eligibility challenge. To hold otherwise would be to disregard the same precedents and many
24   more. *See BASCOM*, 827 F.3d at 1347 ("The Supreme Court has also consistently held that § 101
     provides a basis for a patentability/validity determination that is independent of—and on equal
25   footing with—any other statutory patentability provision.").
     [7] The *Berkheimer* court noted that these factual disputes are to apply the "clear and convincing"
26   standard of proof. *Berkheimer*, 881 F.3d at 1368. This standard, however, is inapplicable to
     motions at the pleadings stage (such as this one) where no extrinsic evidence is considered and
27   facts in dispute are viewed in the light most favorable to the non-moving party. *See Yodlee*, 2016
     WL 2982503, at *2; *Blue Spike, LLC v. Google Inc.*, No. 14-1650 (YGR), 2015 WL 5260506, at
28   *4 (N.D. Cal. Sept. 8, 2015); *Modern Telecom Sys. LLC v. Earthlink, Inc.*, No. 14-0347 (DOC),
     2015 WL 1239992, at *7–8 (C.D. Cal. Mar. 17, 2015).

at 1368. However, this is not to say that § 101 challenges cannot be resolved on motions to dismiss where there exists no genuine dispute over the underlying facts. *Id.* ("Patent eligibility has in many cases been resolved on motions to dismiss or summary judgment. Nothing in this decision should be viewed as casting doubt on the propriety of those cases."); *see also Automated Tracking Sols.*, 723 F. App'x at 995 (holding that because the plaintiff's complaint failed to support the contention that the patent involved a developing technology instead of well-understood, routine, and conventional systems, the fact was not in dispute).

B. Subject Matter Eligibility

1. *Alice* and § 101

Section 101 of the Patent Act defines what subject matter is eligible for patent protection. It provides that "[w]hoever 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. Implicit in this provision, however, is a well-established exception that "[l]aws of nature, natural phenomena, and abstract ideas are not patentable." *Alice*, 134 S. Ct. at 2354 (quoting *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)). "[T]he concern that drives this exclusionary principle [is] one of pre-emption," because monopolization of abstract ideas "through grant of a patent might tend to impede innovation more than it would tend to promote it." *Id.* (quoting *Mayo Collaborative Servs. v. Prometheus Labs, Inc.*, 566 U.S. 66, 70 (2012)). At the same time, "an invention is not rendered ineligible for patent simply because it involves an abstract concept." *Id.* After all, "[a]t some level, all inventions . . . embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *Id.* (quoting *Mayo*, 566 U.S. at 71).

The Supreme Court in *Alice* set forth a framework to distinguish patent-ineligible subject matter that claims abstract ideas from "patent-eligible applications of those concepts." *Id.* at 2355. Relying on its earlier *Mayo* decision, the Court articulated the two-step analysis as follows:

> First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts. *Mayo*, 566 U.S. at 76-77. If so, we then ask, "[w]hat else is there in the claims before us?" *Id.* at 78. To

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> answer that question, we consider the elements of each claim both individually and "as an ordered combination" to determine whether the additional elements "transform the nature of the claim" into a patent-eligible application. *Id.* at 79, 78. We have described step two of this analysis as 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." *Id.* at 82.

Alice, 134 S. Ct. at 2355 (brackets in original; format of internal citations modified).

In *Alice*, the claims at issue "relate[d] to a computerized scheme for mitigating 'settlement risk'—*i.e.*, the risk that only one party to an agreed-upon financial exchange will satisfy its obligation." *Id.* at 2352. To summarize in broad strokes, the patents described a system in which a third-party intermediary computer system would monitor the transaction parties' bank accounts, and would issue instructions to complete the transaction only if and when both parties were able to satisfy their obligations. *Id.* The Court held that "the concept of intermediated settlement is a fundamental economic practice long prevalent in our system of commerce," and that the patents at issue were therefore "directed to" an abstract idea for the purpose of the first *Mayo* step. *Id.* at 2356–57 (citations and internal quotation marks omitted).

At the second step, the *Alice* Court considered whether the patents at issue supplemented that abstract idea with an "inventive concept" sufficient to confer eligibility. *Id.* at 2357. Based on the principles that neither "[s]tating an abstract idea while adding the words 'apply it'" nor "limiting the use of an abstract idea to a particular technological environment" is enough, the Court held that "the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." *Id.* at 2358 (citations and internal quotation marks omitted). The Court concluded that although the claimed method described the process in somewhat more detail—"[a]s stipulated, [it] require[d] the use of a computer to create electronic records, track multiple transactions, and issue simultaneous instructions"—all of the computer functions implicated were "well-understood, routine, conventional activities previously known to the industry" and required "no more than . . . a generic computer to perform generic computer functions." *Id.* at 2359 (citations, brackets, and internal quotation marks omitted). Because the patents did "not, for example, purport to improve the functioning of the computer itself [or] effect an improvement in any other technology or technical field," the Court held that they did not add an

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inventive element to elevate the claims beyond ineligible abstract ideas. *Id.* at 2359–60.

Accordingly, the Court affirmed the Federal Circuit's conclusion that the patents were invalid. *Id.*

at 2360.

2. Abstract Ideas After *Alice*

The Supreme Court determined that it "need not labor to delimit the precise contours of the

'abstract ideas' category in [*Alice*]." *Id.* at 2357. In the years since, the Federal Circuit has had

frequent occasion to consider, and give more definition to, the "abstract ideas" exception.

In *DDR Holdings*, the Federal Circuit found a patent directed to "systems and methods of

generating a composite web page that combines certain visual elements of a 'host' website with

content of a third-party merchant" to be eligible subject matter. *DDR Holdings*, 773 F.3d at 1248.

The court commented that "[a]lthough the claims address a business challenge (retaining website

visitors), it is a challenge particular to the Internet." *Id.* at 1257. The court distinguished cases

invalidating patents that "merely recite the performance of some business practice known from the

pre-Internet world along with the requirement to perform it on the Internet" on the basis that the

patent at issue in *DDR Holdings* was "necessarily rooted in computer technology in order to

overcome a problem specifically arising in the realm of computer networks." *Id.* Analyzing the

claims under *Alice* step two, the court noted that when the claim limitations were taken together as

an ordered combination, they recited an invention that was "not merely the routine or conventional

use of the Internet." *Id.* However, the court cautioned that "not all claims purporting to address

Internet-centric challenges are eligible for patent." *Id.* at 1258.

Conversely, in *Content Extraction*, the Federal Circuit held that patents describing a

method of extracting, recognizing, and storing digital data from scanned hard copy documents

were ineligible subject matter. *Content Extraction*, 776 F.3d at 1351. Under step one, the court

characterized the claims as being drawn to the abstract idea of "1) collecting data, 2) recognizing

certain data within the collected data set, and 3) storing that recognized data in a memory." *Id.* at

1347. Under step two, the court found no inventive concepts sufficient to save the patent, for "all

of the additional limitations in the claims . . . recite well-known, routine, and conventional

functions of scanners and computers." *Id.* at 1349.

1   The Federal Circuit's 2016 decision in *Enfish* determined patent eligibility under step one

2   because the claims were not directed to an abstract idea. *Enfish*, 822 F.3d at 1336. There, the

3   patents were directed to a "self-referential" logical model for a computer database designed to

4   "improve the way a computer stores and retrieves data in memory." *Id.* at 1330, 1339. The court

5   observed that the claims were directed to "a specific implementation of a solution to a problem in

6   the software arts" as opposed to "a situation where general-purpose computer components [were]

7   added post-hoc to a fundamental economic practice or mathematical equation." *Id.* at 1339.

8   Three recent Federal Circuit decisions rejecting district court ineligibility rulings also are

9   informative. In *BASCOM*, the patent at issue was a "content filtering system for filtering content

10   retrieved from an Internet computer network by individual controlled access network accounts."

11   *BASCOM*, 827 F.3d at 1345. Under step one, the court concluded the claims were directed to the

12   abstract idea of "filtering content." *Id.* at 1348. Under step two, however, the court found an

13   inventive concept in the patent's "non-conventional and non-generic arrangement of known,

14   conventional pieces," which therefore did not risk preempting "all ways of filtering content on the

15   Internet." *Id.* at 1350. In *Amdocs*, the most relevant patent concerned a "system, method, and

16   computer program for merging data in a network-based filtering and aggregating platform as well

17   as a related apparatus for enhancing networking accounting data records." *Amdocs*, 841 F.3d at

18   1291. Accepting the district court's ruling that the claim was directed to an abstract concept, the

19   Federal Circuit again conducted its analysis under step two. *Id.* at 1300. There, the need for an

20   inventive concept was satisfied by the patent's "unconventional technological solution (enhancing

21   data in a distributed fashion) to a technological problem (massive record flows which previously

22   required massive databases)." *Id.* Most recently, in *Berkheimer*, the patent at issue related to

23   "digitally processing and archiving files in a digital asset management system" with a system that

24   "parses files into multiple objects and tags the objects to create relationships between them."

25   *Berkheimer*, 881 F.3d at 1362. At step one, the court held that the claims were directed to the

26   abstract ideas of parsing, comparing, storing, and editing data. *Id.* at 1366. At step two, however,

27   the court held that the district court's dismissal for patent ineligibility under § 101 was improper

28   because a genuine issue of material fact existed over whether the claims improved the disclosed

1 archival system in an unconventional, inventive manner. *Id.* at 1370. Without deciding whether

2 the claims were patent eligible, the court determined only that the record was insufficient to

3 answer the presented factual questions, and therefore remanded the case for further proceedings.

4 *Id.* at 1370–71.

5 In other recent cases applying this standard, the Federal Circuit has found claims patent

6 ineligible. *See, e.g.*, *Voter Verified*, 887 F.3d at 1385–86 (finding claims directed to patent-

7 ineligible subject matter); *Automated Tracking Sols.*, 723 F. App'x at 995 (same); *Elec. Power*

8 *Grp., LLC v. Alstom, S.A.*, 830 F.3d 1350, 1355 (Fed. Cir. 2016) (same).

9 **C. Application to the Asserted Claims**

10 For the purposes of this *Alice* analysis, the Court will consider the eligibility of the asserted

11 claims (Claim 6 of the '947 patent and Claim 1 of the '236 patent) together.[8] While the '947

12 patent covers a "method" of distributing database differences and the '236 patent covers a

13 "system" for distributing database differences, there is no distinction between them for § 101

14 purposes, as they recite the same concept. *See Alice*, 134 S. Ct. at 2360 ("[T]he system claims are

15 no different from the method claims in substance. The method claims recite the abstract idea

16 implemented on a generic computer; the system claims recite a handful of generic computer

17 components configured to implement the same idea."); *see also Voter Verified*, 887 F.3d at 1385.

18 Indeed, both PDS's opposition and Ubisoft's reply present the claims' *Alice* analyses under a

19 single framework as well. Opp'n at 11–20; Reply at 2–9.

20 **1. *Alice* Step 1: The Asserted Claims Are Directed to an Abstract Idea**

21 Ubisoft contends that the asserted claims are directed to the abstract idea of "updating

22 recipients with changed information in a format usable by the recipient." Mot. at 5–6. The Court

23 agrees.

24 PDS rests the majority of its step one analysis on *Enfish* and argues that the claims are not

25 directed to an abstract idea "but rather improve on an existing technological process." *Id.* at 11–13

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[8] Because the Court holds that Ubisoft cannot establish on the pleadings that these claims are ineligible under § 101, the Court need not reach the question of whether, if the only claims identified in the complaint were ineligible, PDS could proceed based on other dependent claims
28 not discussed in its complaint.

1   (citing *Enfish*, 822 F.3d at 1335–36). In *Enfish*, the Federal Circuit found that the claims' specific

2   improvement to computer storage and memory, embodied in the unique "self-referential" data

3   structure, rendered the claims non-abstract. *Enfish*, 822 F.3d at 1339. ("In other words, we are

4   not faced with a situation where general-purpose computer components are added post-hoc to a

5   fundamental economic practice or mathematical equation. Rather, the claims are directed to a

6   specific implementation of a solution to a problem in the software arts."). But the court

7   recognized that "in other cases involving computer-related claims, there may be close calls about

8   how to characterize what the claims are directed to. In such cases, an analysis of whether there are

9   arguably concrete improvements in the recited computer technology could take place under step

10 two." *Id.* Here, the asserted claims and their specific limitations are not "unambiguously directed

11 to an improvement in computer capabilities" nor do they "readily lend themselves to a step-one

12 finding that they are directed to a nonabstract idea." *See BASCOM*, 827 F.3d at 1349 (citing

13 *Enfish*, 822 F.3d at 1335–40). The Court, therefore, defers considerations of the claims' specific

14 improvements, or inventive concepts, for step two.

15   Generally, claims that encapsulate "longstanding commercial practice[s]," "method[s] of

16 organizing human activity," or "fundamental economic practice[s]" are found to be directed to the

17 abstract. *See Alice*, 134 S. Ct. at 2356–57. The real-world business examples that Ubisoft

18 analogizes to in its motion are persuasive, and PDS does nothing to distinguish them. *See* Mot. at

19 7–12 (analogizing PDS's claims to the "pocket parts" practice of updating case law reporters

20 where only the new or changed information is published as well as to practices involving field

21 salespersons where businesses update them with only the new products or prices in advance of

22 customer meetings). The specifications of the '947 and '236 patents themselves acknowledge this

23 field salesperson example, albeit in the different context of illustrating uses for the purported

24 invention, rather than discussing existing practices. *See* '947 Patent at 1:54–67; '236 Patent at

25 1:58–2:4. Moreover, beyond this concept of "updating," the Court has no difficulty concluding

26 that changing information into a format compatible for use by a recipient represents the abstract

27 idea of "translating."

28   Further, the Court is not persuaded by PDS's contentions that Ubisoft's characterizations

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1   of its claims amount to oversimplifications for the purpose of step one. *See* Opp'n at 12–13. It is

2   true that describing claims at too "high [a] level of abstraction and untethered from the language of

3   the claims all but ensures that the exceptions to § 101 swallow the rule." *Enfish*, 822 F.3d at 1337.

4   Here, however, the identified abstract concepts are not untethered from the language of the claims.

5   Claim 6 of the '947 patent specifically calls out "translating" format differences, *see* '947 patent at

6   15:41–44, and its dependent claims refer to Claim 6's action as one of providing "updates." *See*

7   *id.* at 15:54–16:7. In addition, courts have found patents that recite similar "update" or "translate"

8   functions to be directed to abstract ideas on multiple occasions. *See White Knuckle Gaming*, 2016

9   WL 3129133, at *3 (finding a "simple internet-based method of updating the software of sports

10 video games" to be an abstract idea); *Intellectual Ventures I, LLC v. Motorola Mobility LLC*, 81 F.

11 Supp. 3d 356, 366 (D. Del. 2015) (finding claims that generically recite the steps of "presenting,"

12 "sending," and "receiving" updates to be directed to an abstract idea); *Yodlee*, 2016 WL 2982503,

13 at *25 (finding claims that use "broad, functional language" with focus on the "idea of translating

14 data into a new form" to be abstract). Even taken together, the combined idea of "updating" plus

15 "translating" still succumbs to the abstract. *See RecogniCorp, LLC v. Nintendo Co., Ltd.*, 855 F.3d

16 1322, 1327 (Fed. Cir. 2017) ("Adding one abstract idea . . . to another abstract idea . . . does not

17 render the claim non-abstract."). The claims at issue do not discuss the technological processes

18 underlying the processes of transmitting updates or translating formats, and PDS does not

19 meaningfully articulate how Ubisoft's general description of the asserted claims fails to capture

20 any relevant part of them.

21   Finally, the fact that the asserted claims are directed to actions that "exist only in the

22 context of computer-based systems," *see* Opp'n at 13, does not make the idea any less abstract.

23 *See Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1366 (Fed. Cir. 2015)

24 ("An abstract idea does not become nonabstract by limiting the invention to a particular field of

25 use or technological environment"). Accepting that the asserted claims are directed to an abstract

26 idea, the Court turns to step two of the *Alice* test.

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2. *Alice* Step 2: Ubisoft Has Not Shown the Asserted Claims Only Teach Well-Understood, Routine, or Conventional Solutions

Under step two, the Court must examine the elements of each claim "both individually and as an ordered combination" to determine whether the additional elements "contain[] an inventive concept sufficient to transform the claimed abstract idea into a patent-eligible concept." *Alice*, 134 S. Ct. at 2355, 57 (citations and internal quotation marks omitted). These additional features must be more than "well-understood, routine, conventional activities previously known to the industry." *Id.* at 2359 (citations and internal quotation marks omitted).

The main thrust of Ubisoft's step two argument is that PDS's claims recite only the use of generic computer components in their generic functions to implement an abstract idea, and therefore lack an inventive concept. *See* Mot. at 15–23. In other words, the claims only describe "**what** the element is to do (e.g., translate from one format to another and translate), but not **how**." *See* Reply at 5. From the specifications it is clear, and PDS does not assert otherwise, that the claims' limitations, taken individually, recite only generic computer, network, and internet components. *See* '236 Patent at 14:63–15:22 (reciting a "server," a "differencing engine," a "translator," a "communication network," and a "synchronizer"). This, however, does not in itself defeat patent eligibility. Rather, "an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces." *BASCOM*, 827 F.3d at 1350; *see also DDR Holdings*, 773 F.3d at 1256–59; *Amdocs*, 841 F.3d at 1300–01. When Ubisoft attacks the "updating" or "translating" features independently, it fails to account for the combined arrangement. *Cf.* Mot. at 16–17. That the basic concept of "updating" may be abstract also does not address the particular method of providing updates described here—tracking changes made at different points in time, and sending on demand only the data that changed since a previous update. Thus, at issue here is whether PDS's claims *in their ordered combination of elements* are non-generic and non-conventional in the industry. This is a question of fact. *See Berkheimer*, 881 F.3d at 1369. At the hearing, counsel for Ubisoft focused on this argument that the patents fail step two because they do not call for more than generic computer technology, but did not meaningfully address the lack of proof at this stage as to whether the *activities* described in the patents were in fact "well-understood, routine, conventional[, and] previously known to the

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industry." *See Alice*, 134 S. Ct. at 2359.

PDS alleges that its ordered combination of claim elements "presented new and unique

advantages over the state of the art at the time," and that although its inventions "have by today

been widely adopted by leading businesses, at the time of the invention, the technologies were

innovative." Compl. ¶ 4. PDS therefore argues that the system and method described in its

patents are not "'well-understood, routine and conventional to a skilled artisan in the relevant

field.'" Opp'n at 17 (quoting *Berkheimer*, 881 F.3d at 1368).[9]

Ubisoft's primary argument to rebut PDS's allegation of novelty is that the Court can take

judicial notice of what Ubisoft contends are analogous business practices outside of the digital

realm: the use of "pocket parts" to supplemental legal reference books, and businesses providing

updated catalog information to sales representatives in the field. Mot. at 7–11; Reply at 9.

According to Ubisoft, the practice of using pocket parts is subject to judicial notice as a generally

known fact not subject to reasonable dispute, and the salesperson analogy is discussed in the

patent specifications themselves. Reply at 3–4 & n.4. Assuming for the sake of argument that

pocket parts are in fact appropriate for judicial notice, the Court is not persuaded that its

familiarity with that concept can suffice for a determination of what would have been well known

to "a skilled artisan in the relevant field" at the time the patents were issued. *See Berkheimer*, 881

F.3d at 1368. Moreover, though helpful for informing the underlying business concept, the

"pocket parts" practice is an imperfect analogy to PDS's purported invention: it entails periodic

updates (instead of on-demand updates), and while Ubisoft suggests that a publisher could

[9] PDS also argues that its claims are "'necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.'" *Id.* at 18–20 (quoting *DDR Holdings*, 773 F.3d at 1257, and citing *BASCOM*, 827 F.3d at 1349–52; *Amdocs*, 841 F.3d at 1300–02). Because there is no basis to conclude at this stage that the methods described in the complaint were routine and conventional at the time of patenting, the Court need not resolve whether the potential application of similar methods to non-digital data storage and transmission, such as in Ubisoft's analogy to a company sending partial catalog updates to its sales representatives in the field, differentiates the claims at issue from patents that have been held to satisfy step 2 of the *Alice* test based on their specificity to technological problems and contexts. It is worth noting that claims addressing digital data management have not uniformly survived this test. *See, e.g.*, *Content Extraction*, 776 F.3d at 1348; *but see Amdocs*, 841 F.3d at 1300 ("[T]his claim entails an unconventional technological solution (enhancing data in a distributed fashion) to a technological problem (massive record flows which previously required massive databases).").

1 translate the format or language of pocket parts to meet its customers' needs, *see* Mot. at 10, the

2 use of translation in this context—to the extent that it occurs at all—falls far outside the sort of

3 general knowledge that can be considered without any evidence at the pleading stage.

4 Ubisoft also analogizes PDS's claims to the practice of a company sending only the

5 updated portions of its catalog to sales representative in the field in preparation for meetings with

6 clients. While that scenario leaves open the possibility of a more direct analogy to the patents at

7 issue—the representative might make ad hoc requests for updates, as opposed to the periodic

8 mailing of pocket parts, and it is conceivable that the company might convert its updates to

9 different formats or languages to meet the needs of different representatives—the Court has no

10 knowledge of any actual use of such a practice, much less any confidence that the common use of

11 such a practice is "is generally known within [this] court's territorial jurisdiction." *Cf.* Fed. R.

12 Evid. 201(b)(1) (addressing the requirements for judicial notice). Ubisoft contends that the patents

13 themselves reveal such practices, but the relevant discussion in the patent specifications in fact

14 presents this usage as an innovative application of the inventions, not as an already common

15 practice (whether or not using digital networks as the means of transmission). *See* '947 Patent at

16 1:54–67; '236 Patent at 1:58–2:4. Ubisoft fails to present any cognizable basis for concluding

17 that, contrary to PDS's allegations, PDS's claims involve activities that were well-understood,

18 routine, and conventional in the data storage industry.

19 Defense counsel argued at the hearing that the '947 patent reveals that the sort of on-

20 demand updates described therein were already in use, pointing to a passage describing systems

21 that directly compared the client's version of the database to the server's version each time an

22 update was requested. *See* '947 Patent at 2:9–17. As discussed in the patent specifications, such

23 prior art does not establish common usage of the particular method at issue here—maintaining

24 records of each revision on the server and determining which revisions occurred since the client's

25 last update, in order to increase the efficiency of the updating process. *Id.* at 2:18–34.

26 The Federal Circuit's post-*Berkheimer* cases with similar procedural postures offer Ubisoft

27 no refuge from the Court's decision today. In *Voter Verified*, no argument was made that the

28 ordered combination of generic computer components transformed the claims into something

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1   other than "well-understood, routine, or conventional" activity, and therefore the claims could

2   properly be found invalid on a Rule 12(b)(6) motion. *Voter Verified*, 887 F.3d at 1386 ("Neither

3   party disputes that the claims recite the use of general purpose computers that carry out the

4   abstract idea."). In *Automated Tracking Solutions*, the plaintiff argued that the claims'

5   components—not the ordered arrangement thereof—were non-conventional because they involved

6   a developing technology. *Automated Tracking Sols.*, 723 F. App'x at 995. However, because the

7   court found nothing in the complaint or specifications to support this contention, judgment on the

8   pleadings remained proper. *Id.* Thus, both cases are inapposite to the dispute here, where PDS

9   argues that the ordered arrangement of limitations in the claims provide the requisite

10 unconventional solution, and Ubisoft has not shown the practices at issue to be conventional. In

11 fact, another post-*Berkheimer* ruling only confirms that Rule 12(b)(6) dismissal is improper here.

12 *See Aatrix Software*, 882 F.3d at 1127–30. In *Aatrix Software*, the court held that the plaintiff's

13 concrete allegations that the claims improved computer functionalities and that the ordered

14 combination of elements was not well-understood, routine, and conventional activity were

15 sufficient to preclude dismissal at the Rule 12(b)(6) stage. *Id.* at 1128 ("[T]hat question [of

16 whether the claim elements or the claimed combination are well-understood, routine, and

17 conventional] cannot be answered adversely to the patentee based on the sources properly

18 considered on a motion to dismiss, such as the complaint, the patent, and materials subject to

19 judicial notice.") Similarly, PDS concretely alleges that its purported invention improves data

20 storage system efficiencies in a non-conventional manner and Ubisoft has not presented

21 cognizable sources showing that allegation to be false. *See* Compl. ¶¶ 3, 4.

22   In a separate case alleging infringement of the same patents that PDS filed against

23 Electronic Arts, Inc. in the Central District of California, Judge Kronstadt recently concluded that

24 applying the second step of *Alice* to the patents at issue implicates "questions of fact that cannot be

25 resolved on a motion to dismiss." *Pure Data Sys., LLC v. Elec. Arts, Inc.*, No. LA CV18-01097

26 JAK (KSx), slip op. at 6 (C.D. Cal. July 3, 2018).[10] This Court agrees with that conclusion.

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28 [10] Both parties submitted the *Electronic Arts* order after briefing on the present motion had
    concluded. *See* dkts. 49, 50.

1   In sum, Ubisoft fails to sufficiently prove that the asserted claims, in the ordered

2 arrangement of their elements, teach nothing more than "well-understood, routine, conventional

3 activities previously known to the industry." *See Alice*, 134 S. Ct. at 2359. The Court cannot hold

4 that the claims, as a matter of law, are directed to patent ineligible subject matter. Accordingly,

5 Ubisoft's motion to dismiss on the basis of § 101 ineligibility is denied.

6   **D.   Indirect Infringement**

7   Ubisoft also seeks to dismiss PDS's indirect infringement allegations pursuant to Rule

8 12(b)(6) of the Federal Rules of Civil Procedure. Mot. at 24–25. Ubisoft argues that PDS's

9 indirect infringement claims should be dismissed because PDS pleads no facts that plausibly

10 establish Ubisoft's knowledge of the '947 and '236 patents prior to their expiration date. *Id.* The

11 Court agrees.

12   Under 35 U.S.C. § 271(b) and § 271(c), induced and contributory infringement, forms of

13 indirect patent infringement liability, require "proof the defendant knew the acts were infringing."

14 *Commil USA, LLC v. Cisco Sys., Inc.*, 135 S. Ct. 1920, 1928 (2015). The '947 patent was filed on

15 May 27, 1997, and the '236 patent was filed as a continuation of that application, subject to the

16 same twenty year patent term provision. '236 Patent (cover page paragraphs [*], [63]).

17 Therefore, both patents expired on May 27, 2017—before PDS filed its complaint. While PDS

18 alleges indirect infringement in its complaint, *see* Compl. ¶¶ 19, 46, 50, 76, PDS fails to allege any

19 facts that plausibly show that Ubisoft, during the time the patents were in force, knew its acts were

20 infringing, and PDS does not address this issue in its opposition brief. Instead, all of PDS's

21 arguments are directed to the subject matter eligibility of its claims. Because PDS fails to

22 plausibly allege knowledge as required for indirect infringement claims under § 271(b) and (c),

23 these claims are dismissed with leave to amend.
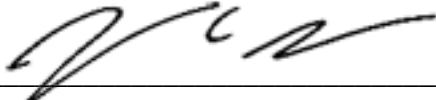
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IV. CONCLUSION

For the foregoing reasons, Ubisoft's motion to dismiss PDS's complaint is DENIED, with the exception of the indirect infringement claims, which are hereby DISMISSED with leave to amend. PDS may file an amended complaint no later than August 3, 2018.

IT IS SO ORDERED.

Dated: July 13, 2018

_____
JOSEPH C. SPERO
Chief Magistrate Judge