IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

GEOCOMPLY SOLUTIONS INC., §
§
    Plaintiff, §
§
v. §   Civil Action No. 22-1273-WCB
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XPOINT SERVICES LLC, §
§
    Defendant. §
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MEMORANDUM OPINION AND ORDER

In this patent infringement action, defendant Xpoint Services LLC ("Xpoint") has moved to dismiss the complaint filed by plaintiff GeoComply Solutions Inc. ("GeoComply") under Federal Rule of Civil Procedure 12(b)(6) on two grounds. Dkt. No. 16. First, Xpoint contends that the claims asserted against it are directed to subject matter rendered patent-ineligible under 35 U.S.C. §101. Second, Xpoint contends that GeoComply's complaint does not sufficiently allege infringement of any of the asserted claims. For the reasons set forth below, the motion to dismiss is GRANTED with respect to the portion of Xpoint's motion based on 35 U.S.C. § 101 and GRANTED IN PART with respect to the portion of Xpoint's motion based on infringement.

I.   Background

GeoComply has developed software that is used by online gaming providers to determine the location of persons who attempt to use the providers' software applications. Many online gaming services, including sports betting services, are legal in some jurisdictions and illegal in others. Some users who are located in a jurisdiction in which activities such as sports betting are prohibited may attempt to "spoof" or otherwise mask their locations to make it appear that they

are in a jurisdiction in which such activities are legal. GeoComply's products purport to enable

online gaming providers to determine a user's actual location and grant access only to those users

who are located in a jurisdiction in which the provider's services are legal.

GeoComply owns U.S. Patent No. 9,413,805 ("the '805 patent"). The patent is generally

directed to methods for determining the location of the device a user employs when interacting

with an online gaming service. GeoComply has asserted the '805 patent against Xpoint in this

action.

Xpoint, a direct competitor of GeoComply, offers similar geolocation services for online

gaming providers. In this action, GeoComply alleges that Xpoint provides geolocation services to

a third party, PlayStar NJ LLC, which operates the "PlayStar online casino." Dkt. No. 1 ¶¶ 15–

19. GeoComply alleges that Xpoint's provision of geolocation services to PlayStar infringes

GeoComply's rights in the '805 patent. *Id.* ¶ 20.

Claim 1 of the '805 patent recites as follows:

1.   A method for determining a geo-location, the method comprising:

transmitting a request to a first server by a first device;

collecting geolocation data associated with the first device in response to
the request, the geolocation data collected by a module stored in memory and
executed by a processor on the first device, the first device in communication with
the first server which provides a service over a network;

identifying that one or more selected programs are present at the first
device;

transmitting the geolocation data and programs [sic] and a list of the present
selected programs to a second server;

receiving a geolocation message from the second server, the geolocation
message generated at least in part from the geolocation data and a list of the present
selected programs; and

providing the received geolocation message to the first server.

In simpler terms, the steps of claim 1 can be summarized as follows: (1) a request is sent from a user's device to a first server; (2) in response to the request, geolocation data associated with the user's device is collected by a program stored on the user's device; (3) a determination is made whether certain programs are stored on the user's device; (4) geolocation data for the user's device and a list of the programs of interest that are stored on the user's device are sent to a second server;[1] (5) a geolocation message, based on the geolocation data and the list of stored programs, is generated by the second server; and (6) the geolocation message is then sent to the first server.

Of the remaining claims of the '805 patent, dependent claims 2 and 3 of the '805 patent specify environments in which the method of claim 1 is configured to perform. In particular, dependent claim 2, although clumsily worded, appears to limit claim 1 by reciting that the user's device is a mobile device and the geolocation data is collected by an application installed on the mobile device. Dependent claim 3, although equally clumsily worded, appears to limit claim 1 by reciting that the geolocation data is collected by a network browser plug-in installed on the user's device. Dependent claims 4 through 6 limit claim 1 by providing that the collection of data includes "remote devices in the proximity of" the user's device (claim 4), "device data from the network at the location of" the user's device (claim 5), and "building information from within the building of" the user's device (claim 6).[2] Dependent claims 7 and 8 limit claim 1 by providing that the programs present on the user's device include a "proxy application" (claim 7) and a "screen sharing program" (claim 8). Dependent claim 9 limits the geolocation message recited in claim 1

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[1] Although claim 1 recites "transmitting the geolocation data and programs and a list of the present selected programs," it is apparent from context that the inclusion of the words "and programs" was a scrivener's error, and that it is the "list" of programs that is transmitted, not the "programs" themselves.

[2] In its complaint, GeoComply has asserted claims 1–3, 7–9, and 10 of the '805 patent. Dkt. No. 1 ¶ 43. Claims 4 through 6 have not been asserted.

by requiring it to be "in the form of a binary message indicating a pass or fail of" the user's device regarding a geolocation requirement.   Independent claim 10 recites a "non-transitory computer readable storage medium" having a program that is configured to perform steps that track the steps recited in claim 1.

The feature of claim 1 that is the principal focus of GeoComply's briefing is the third method step: identifying whether certain programs are present on the device.   With respect to that step, the specification of the '805 patent discloses that certain "undesirable programs" may be present on a user's device and that those programs may be considered in the verification of a user's location.   '805 patent, col. 1, ll. 34–38.   Two examples of such programs are "screen sharing program[s]" and "proxy program[s]," which the '805 patent discloses can be detected using a "[s]creen sharing protection module" and a "[p]roxy detection module," respectively.   *Id.* at col. 3, ll. 42–53.   Because those programs can be used to make it appear that the user's device is located in a place other than its true location, the '805 patent specification explains that a device's location data may be less reliable if the device has one or more of those programs installed.   If one of those programs is detected on a user's device, the specification adds, the program can be blocked or its presence can be considered when verifying the user's location.   *See id.* at col. 2, ll. 1–10, col. 3, ll. 42–67, col. 6, ll. 58–64.

Shortly after GeoComply filed its complaint, Xpoint filed its motion to dismiss, contending that the asserted claims of the '805 patent are directed to patent-ineligible subject matter and that GeoComply's complaint has failed to adequately plead infringement under its two theories of divided direct infringement and contributory infringement.   I held oral argument on the motion on January 31, 2023.

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II.   Legal Standard

Under Federal Rule of Civil Procedure 12(b)(6), a complaint should be dismissed if it "fail[s] to state a claim upon which relief can be granted." The Third Circuit has instructed district courts to conduct a "two-part analysis" in evaluating a motion to dismiss for failure to state a claim. *Fowler v. UPMC Shadyside*, 578 F.3d 203, 210 (3d Cir. 2009). First, the district court must separate the factual and legal elements of the claims. *Id.* That is, the court "must accept all of the complaint's well-pleaded facts as true, but may disregard any legal conclusions" set forth in the complaint. *Id.* at 210–11. Second, the court "must then determine whether the facts alleged in the complaint are sufficient to show that the plaintiff has a 'plausible claim for relief.'" *Id.* at 211 (quoting *Ashcroft v. Iqbal*, 556 U.S. 662, 679 (2009)).

Patent eligibility under 35 U.S.C. § 101 is a question of law, based on underlying facts. *See Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018); *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1364–65 (Fed. Cir. 2018). Disputes over eligibility can be, and frequently are, resolved on a Rule 12(b)(6) or Rule 12(c) motion "where the undisputed facts, considered under the standards required by that Rule, require a holding of ineligibility under the substantive standards of law." *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1166 (Fed. Cir. 2018) (citing cases).

III.   Patent Eligibility Under 35 U.S.C § 101

A. Principles

Section 101 of the Patent Act defines patent-eligible subject matter. It states: "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 therefore, subject to the conditions and requirements of this title." 35 U.S.C. § 101. The Supreme Court has interpreted

that provision to carve out exceptions to that broad characterization of patentable subject matter for "[l]aws of nature, natural phenomena, and abstract ideas." *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014) (quoting *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)).

The framework for determining whether a patent is directed to an unpatentable abstract idea is well settled. The Supreme Court's decision in *Alice* established the now-familiar two-step test for patentability in that context. The first step entails determining whether the claim at issue is directed to an "abstract idea." The second step entails determining whether the claim contains an "inventive concept" that removes the claimed subject matter from the realm of abstraction. *Alice*, 573 U.S. at 217–18; *see also Mayo Collaborative Servs. v. Prometheus Lab'ys, Inc.*, 566 U.S. 66, 72–73 (2012).

1. Abstract Idea

Neither the Supreme Court nor the Federal Circuit has ventured a single, comprehensive definition of an "abstract idea." *See id.* at 221 ("[W]e need not labor to delimit the precise contours of the 'abstract ideas' category in this case."); *Bilski v. Kappos*, 561 U.S. 593, 621 (Stevens, J., concurring in the judgment) ("The Court . . . never provides a satisfying account of what constitutes an abstract idea."); *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2018); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016) ("The Supreme Court has not established a definitive rule to determine what constitutes an 'abstract idea' sufficient to satisfy the first step of the *Mayo/Alice* inquiry . . . ."). Rather than a unitary test, what has emerged from the cases applying section 101 is a group of related principles that can be applied in gauging whether or not a patent claim is directed to an abstract idea. Those general principles that most directly apply to this case are the following:

First, the courts have characterized "method[s] of organizing human activity" as abstract. *See Alice*, 573 U.S. at 220; *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1285 (Fed. Cir. 2018). For example, the courts have identified fundamental economic and business practices as abstract ideas. *See Elec. Power Grp.*, 830 F.3d at 1353 ("We need not define the outer limits of 'abstract idea . . . .'"); *SAP Am.*, 898 F.3d at 1166; *Intell. Ventures I LLC v. Symantec Corp.*, 838 F.3d 1307, 1313 (Fed. Cir. 2016). Such business practices can include relatively specific functions such as disseminating regionally broadcasted content to users outside the region, *see Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1261–62 (Fed. Cir. 2016); classifying an image and storing the image based on its classification, *see In re TLI Commc'ns LLC Pat. Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016); or managing a bingo game, *see Planet Bingo, LLC v. VKGS LLC*, 576 F. App'x 1005, 1008 (Fed. Cir. 2014).

Applying that principle to patents that claim the use of computers in performing particular activities, courts have held that simply implementing particular economic practices on a computer does not make those practices patent-eligible. *See BSG Tech*, 899 F.3d at 1285 ("If a claimed invention only performs an abstract idea on a generic computer, the invention is directed to an abstract idea at step one" of *Alice*.); *Fair Warning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093 (Fed. Cir. 2016); *TLI*, 823 F.3d at 612; *Enfish*, 822 F.3d at 1338.

Second, as applied to computer applications, the courts have looked to whether the claim in question is directed to an improvement in computer technology as opposed to simply providing for the use of a computer to perform "economic or other tasks for which a computer is used in its ordinary capacity." *Enfish*, 822 F.3d at 1336; *see also Universal Secure Registry LLC v. Apple Inc.*, 10 F.4th 1342, 1357 (Fed. Cir. 2021); *Yu v. Apple Inc.*, 1 F.4th 1040, 1044 (Fed. Cir. 2021); *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1316 (Fed. Cir. 2016). Where the

claims at issue provide for an improvement in the operation of a computer, such as a new memory system, a new type of virus scan, or a new type of interface that makes a computer function more accessible, the Federal Circuit has found the claims patent-eligible. *See Data Engine Techs. LLC v. Google LLC*, 906 F.3d 999, 1007–11 (Fed. Cir. 2018) (methods for making electronic spreadsheets more accessible); *Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc.*, 880 F.3d 1356, 1361–63 (Fed. Cir. 2018) (improved display devices); *Finjan, Inc. v. Blue Coat Sys., Inc.*, 879 F.3d 1299, 1303–06 (Fed. Cir. 2018) (novel method of virus scanning); *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1258–60 (Fed. Cir. 2017) (improved computer memory system).

Third, in the field of computer-related applications, the Federal Circuit has held that claims "directed to collection of information, comprehending the meaning of that collected information, and indication of the results, all on a generic computer network operating in its normal, expected manner" are abstract. *Int'l Bus. Machines Corp. v. Zillow Grp., Inc.*, 50 F.4th 1371, 1378 (Fed. Cir. 2022) (quoting *In re Killian*, 45 F.4th 1373, 1380 (Fed. Cir. 2022)); *see also SAP Am.*, 898 F.3d at 1167 ("[C]laims focused on 'collecting information, analyzing it, and displaying certain results of the collection and analysis' are directed to an abstract idea.") (quoting *Elec. Power Grp.*, 830 F.3d at 1353–54); *Trading Techs. Int'l, Inc. v. IBG, LLC*, 921 F.3d 1378, 1385 (Fed. Cir. 2019); *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1345 (Fed. Cir. 2018); *Fair Warning IP*, 839 F.3d at 1093.

Fourth, in determining whether a method claim is directed to an abstract idea, the Federal Circuit has focused on whether the claim is purely functional in nature or is sufficiently concrete or specific to be directed to a patent-eligible process rather than a patent-ineligible result. For example, in *SAP America*, 898 F.3d at 1167, the court asked whether the claim had "the specificity required to transform [it] from one claiming only a result to one claiming a way of achieving it."

To answer that question, the Federal Circuit has directed courts to "look to whether the claims focus on a specific means or method, or are instead directed to a result or effect that itself is the abstract idea and merely invokes generic processes and machinery." *See also Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329, 1337 (Fed. Cir. 2017); *McRO*, 837 F.3d at 1314 ("We . . . look to whether the claims in these patents focus on a specific means or method that improves the relevant technology or are instead directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery."); *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1244 (Fed. Cir. 2016) (claim that "calls for the desired result of associating a customer's order with said customer, and does not attempt to claim any method for achieving that result," is ineligible); *see generally Diamond v. Diehr*, 450 U.S. 175, 182 n.7 (1981) (A patent may issue "for the means or method of producing a certain result or effect, and not for the result or effect produced." (citation omitted)); *Le Roy v. Tatham*, 55 U.S. 156, 175 (1853) ("A patent is not good for an effect, or the result of a certain process" because such patents "would prohibit all other persons from making the same thing by any means whatsoever.").

Fifth, and relatedly, "the concern that drives" the judicial exceptions to patentability is "one of preemption." *Alice*, 573 U.S. at 216; *see also ChargePoint, Inc. v. SemaConnect, Inc.*, 920 F.3d 759, 766 (Fed. Cir. 2019); *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015). In determining whether a particular invention is directed to an abstract idea, it is therefore important to ask whether according patent protection to the claimed subject matter would have a broad preemptive effect on future innovation in the same field. *See Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1341 (Fed. Cir. 2013).

2. Inventive Concept

If the court determines that a claim is directed to an abstract idea, the court proceeds to

Alice step two. That step requires the court "to examine the elements of the claim to determine

whether it contains an 'inventive concept' sufficient to 'transform' the claimed abstract idea into

a patent-eligible application." *Alice*, 573 U.S. at 221 (quoting *Mayo*, 566 U.S. at 72, 78–79).

The "inventive concept" is "an element or combination of elements that is 'sufficient to

ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible

concept] itself.'" *Alice*, 573 U.S. at 217–18 (quoting *Mayo*, 566 U.S. at 72). That step serves to

ensure that the claim is directed to more than merely implementing an abstract idea using "well-

understood, routine, [and] conventional activities previously known in the industry." *Coop. Ent.,

Inc. v. Kollective Tech., Inc.*, 50 F.4th 127, 130 (Fed. Cir. 2022) (quoting *Alice*, 573 U.S. at 225).

That is, *Alice* step two requires the claimed invention to do more than combine known techniques

that "yield[] only expected results," *Universal Secure Registry*, 10 F.4th at 1353; instead, it must

"focus on a specific means or method that improves the relevant technology," *Weisner v. Google

LLC*, 51 F.4th 1073, 1083 (Fed. Cir. 2022) (citation omitted). In particular, the Federal Circuit has

asked whether the claim or claims at issue are "directed to a technological solution to a

technological problem." *cxLoyalty, Inc. v. Maritz Holdings Inc.*, 986 F.3d 1367, 1378 (Fed. Cir.

2021); *see also BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350–

51 (Fed. Cir. 2016); *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257–58 (Fed. Cir.

2014).[3]

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[3]   The case law suggests that the question whether the claims recite a "technological
solution to a technological problem" may also be considered at step one of the *Alice* test. *See, e.g.*,
Packet Intel. LLC v. NetScout Sys., Inc., 965 F.3d 1299, 1309 (Fed. Cir. 2020); *Universal Secure
Registry*, 10 F.4th at 1352; *CosmoKey Sols. GmbH & Co. KG v. Duo Sec. LLC*, 15 F.4th 1091,
1100 (Fed. Cir. 2021) (Reyna, J., concurring). Nonetheless, *cxLoyalty*, *BASCOM*, and *DDR*

The preemptive effect of the asserted claims is also a relevant consideration at *Alice* step

two. In a recent case, the Federal Circuit explained the relationship between preemption and the

existence of an inventive concept:

> We have explained that claims for methods that "improve[] an existing
> technological process" include an inventive concept at step two. *BASCOM*, 827
> F.3d at 1350–51 (quoting *Alice*, 573 U.S. at 221, 223). And claims that "recite a
> specific, discrete implementation of the abstract idea" rather than "preempt[ing] all
> ways of" achieving an abstract idea using a computer may include an inventive
> concept. *Id.* at 1350. But claims to "an abstract idea implemented on generic
> computer components, without providing a specific technical solution beyond
> simply using generic computer concepts in a conventional way" do not pass muster
> at step two. *Id.* at 1352.

Killian, 45 F.4th at 1382 (cleaned up). Thus, whether the claims recite "a specific, discrete

implementation of the abstract idea" rather than preempting all implementations of that idea is an

appropriate consideration in the step two inquiry. *See id.*

B. Application

1. *Alice* Step One

The *Alice* step one inquiry considers "what the patent asserts to be the focus of the claimed

advance over the prior art." *Yu*, 1 F.4th at 1043 (citation omitted). GeoComply asserts that the

claims of the '805 patent are not directed to an abstract idea, but are directed to the patent-eligible

concept of "improved and unconventional methods of analyzing, verifying, and reporting

geolocation data." Dkt. No. 29 at 7. Xpoint argues that the claims are directed to the abstract idea

of "verifying a person's location to determine whether the person is allowed to engage in a

transaction." Dkt. No. 17 at 7. For the reasons set forth below, I agree with Xpoint that the claims

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Holdings make clear that the existence of a technological solution to a technological problem is an
appropriate consideration at step two of *Alice*. The Federal Circuit has recognized that there is
some overlap between the two steps. *See CareDx, Inc. v. Natera, Inc.*, 40 F.4th 1371, 1379 (Fed.
Cir. 2022) (citing *Elec. Power Grp.*, 830 F.3d at 1353).

of the '805 patent are directed to an abstract idea, but I would characterize the abstract idea as "determining the location of a device based on geolocation information and programs present on the device."

Claim 1 of the '805 patent is extremely broad, and the principal steps of the claim are quite general in nature. First, a device makes a request of undefined nature to the first server. Then, a generically described "module" on the device collects unspecified "geolocation data" relating to the device, together with the identity of one or more unidentified programs located on the device. Finally, based at least in part on the information provided by the device, the second server generates a "geolocation message" pertaining to the device. The claim does not recite how the module collects location-related information or specifically what that information is. Nor does it identify the types of programs that are selected for identification. The claim also does not specify the nature of the "geolocation message" that is generated in response to the data obtained from the device.

The idea underlying the claims of the '805 patent is abstract for several reasons:

First, the idea of verifying a person's location is, at its core, a "method of organizing human activity." *See Alice*, 573 U.S. at 220. Although the claims of the '805 patent are not limited to the context of gaming, analogies from that field are particularly instructive. Prior to the development of online gaming, proprietors of casinos and other betting operations took steps to ensure that persons seeking to place wagers were located within an acceptable location. *See Beteiro, LLC v. BetMGM, LLC*, No. 1:21-cv-20156, 2022 WL 4092946, at *7 (D.N.J. Sept. 7, 2022) (collecting examples). For example, a casino that straddled the state line between Nevada and Utah was required to determine that a person was on the Nevada side of the building before that person could place a bet. *Id.* (citing Howard Hickson, *Wendover Will*, GREAT BASIN COLL.,

https://www.gbcnv.edu/howh/WendoverWill.html (last visited Feb. 7, 2023)). As another

example, a Nevada regulation prohibits "messenger betting," which is the practice of placing a bet

using a proxy bettor. *Id.*; Nev. Gaming Reg. § 22.060(5). In order to comply with that regulation,

sportsbooks must determine "that the person truly placing a bet is located in the state." *Beteiro*,

2022 WL 4092946, at *7.

Even outside the gaming context, the idea of using multiple sources of information to verify

a person's location is a longstanding business practice. State universities often require a student

to submit multiple documents, such as tax returns, proof of home ownership, or bank records, to

establish residency for purposes of obtaining in-state tuition. *See, e.g.*, University of Delaware,

Student Residency Classification for Tuition and Fee Purposes § V.B–C (June 2022),

https://sites.udel.edu/generalcounsel/policies/regulations-governing-the-classification-of-

students-for-tuition-and-fee-purposes/ (last visited Feb. 7, 2023). And some states, such as

Delaware, require a person to submit two different forms of proof of address before that person

can obtain a driver's license. Delaware Division of Motor Vehicles, *Checklist to Obtain a*

FEDERALLY COMPLIANT Driver License or Identification Card in the State of Delaware,

https://www.dmv.de.gov/DriverServices/drivers_license/secureID/pdfs/Driver_License_ID_Che

cklist.pdf (last visited Feb. 7, 2023). The claims of the '805 patent essentially recite a method for

verifying a user's location using multiple sources, namely, geolocation data and the presence of

certain types of programs on the user's device.

Second, the '805 patent does not disclose or claim any meaningful advance in computing

technology. The computer hardware components identified in the asserted claims are all generic;

they consist of "server[s]," "device[s]," "memory," "processor[s]," a "network," "programs," a

"mobile device," a "network browser," and a "non-transitory computer readable storage

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medium." '805 patent, claims 1–10. The specification of the '805 patent does not suggest that any of those components are unique, such that the claims can be said to capture "a specific asserted improvement in computer capabilities" rather than a process "for which computers are invoked merely as a tool." *See Enfish*, 822 F.3d at 1336. The specification even admits that the components used to implement the claimed methods can be "those typically found in computer systems that may be suitable for use with embodiments of the present invention and are intended to represent a broad category of such computer components that are well known in the art." '805 patent, col. 8, ll. 44–48; *see also* '805 patent, col. 9, ll. 55–59 (making similar statements with respect to an embodiment involving mobile devices). And simply applying those generic components in a new context—in this case, to verify a person's location—does not render the claimed advance of the patent any less abstract. *See ChargePoint,* 920 F.3d at 768 (holding that "communication over a network for interacting with a device, applied to the context of electric vehicle charging stations" is an abstract idea); *SAP Am.*, 898 F.3d at 1169 ("[L]imitation of the claims to a particular field of information . . . does not move the claims out of the realm of abstract ideas.").

Third, the asserted claims are directed to the "collection of information, comprehending the meaning of that collected information, and indication of the results," steps that the Federal Circuit has characterized as markers of an abstract idea. *See Zillow*, 50 F.4th at 1378 (citation omitted). The method of claim 1, for example, recites collecting certain information about a person's device (i.e., the person's geolocation data and a list of programs installed on the device), comprehending the meaning of that information (i.e., by generating a geolocation message at the second server), and indicating the results of that analysis (i.e., by sending the geolocation message to the first server). Such claims, the court in *Zillow* explained, have been "repeatedly held . . . to

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be abstract." *Id.* (citing *Killian*, 45 F. 4th at 1380; *Intell. Ventures I LLC v. Cap. One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed. Cir. 2017); and *Elec. Power Grp.*, 830 F.3d at 1255).

Fourth, the method steps of the asserted claims are described mainly in functional terms. For example, claim 1 recites the following steps, at a high level of abstraction: "transmitting a request," "collecting geolocation data," "identifying that one or more programs are present," "transmitting the geolocation data and programs," "receiving a geolocation message," and "providing the received geolocation message." '805 patent, cl. 1. Those steps describe functional results, but do not "sufficiently describe how to achieve th[o]se results in a non-abstract way." *Two-Way Media*, 874 F.3d at 1337; *see also Univ. of Fla. Rsch. Found., Inc. v. Gen. Elec. Co.*, 916 F.3d 1363, 1368 (Fed. Cir. 2019) (Claims are directed to an abstract idea because they do not explain "*how* the drivers do the conversion that [the plaintiff] points to. . . . The mere *function* of converting is not a 'specific improvement to the way computers operate.'" (citation omitted)); *Cap. One Fin. Corp.*, 850 F.3d at 1342 ("[T]he claim language here provides only a result-oriented solution, with insufficient detail for how a computer accomplishes it.").

Fifth, claim 1 by its terms would accord patent protection to any method of verifying a person's location using geolocation data and the presence of certain programs on the person's device. As such, it would result in the preemption of a wide range of activities relating to geolocation, even outside the context of online gaming. The claim requires merely that a first server obtain geolocation data pertaining to a device together with a list of programs found on the device; that the first server send that information to a second server; and that the second server then send a geolocation message to the first server.

Three hypothetical examples illustrate the broad preemptive scope of the asserted claims:

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First, digital streaming services such as Netflix offer different content to users based on the country in which the users are located. Kelly Woo & Mo Harber-Lamond, *The Best Shows Netflix Won't Let Americans Watch (and How to Stream Them)*, TOM'S GUIDE (Aug. 8, 2022), https://www.tomsguide.com/best-picks/best-netflix-shows-outside-us (last visited Feb. 7, 2023). For example, Netflix offers the TV show "Castle Rock" in only a few select countries, such as India, Singapore, and Thailand. *Id.* That fact has motivated users to spoof their location (such as by using a virtual private network) in an attempt to watch that show and others. *See id.* To determine whether a user is allowed to view certain content, Netflix presumably engages in some effort to verify the user's location.

It stands to reason that certain applications installed on a user's device might provide an indication of that user's location. For instance, one might infer that persons who have a banking application associated with a United States bank installed on their phones are located in the United States. Or one might infer that persons who have the HBO Max application installed on their phones are not located in Asia, because that application is available only in certain European, Latin American, and North American countries. HBO Max, *Where Is HBO Max Available?*, https://help.hbomax.com/US/Answer/Detail/000001289 (last visited Feb. 7, 2023). These examples demonstrate the breadth of the '805 patent claims. If, for example, Netflix were to consider the existence of such programs on a user's device when verifying geolocation data from the user's device, that action would likely infringe at least claim 1 of the '805 patent regardless of how Netflix actually implemented that feature.

Second, the U.S. government imposes restrictions on exports of products such as high-technology materials and military equipment to certain countries for national security reasons. *See* 50 U.S.C. §§ 4811(2), 4813(a)(1)–(4), 4817; 15 C.F.R. §§ 730.6, 736.2(b)(8); *see also Fed.*

Express Corp. v. U.S. Dep't of Com., 39 F.4th 756, 759–60 (D.C. Cir. 2022) (outlining the framework for export controls under federal law). Companies seeking to comply with those restrictions would have an interest in ensuring that parties to whom they sell such products are located where they assert they are and not in a country where sales of those products are banned. Any effort by those companies that would seek to detect whether purchasers were concealing their location by gaining access to geolocation data and programs on the purchasers' devices would likely fall within the scope of the '805 patent.

Third, and even farther removed from the field of online gaming, a scenario can be envisioned in which a parole officer provides a parolee with a device that tracks the parolee's location. Suppose that before the parole officer provides the tracking device to the parolee, the officer installs a program on the device that is configured to delete itself if the device is tampered with in any respect. Then, any time the parolee's location is verified, the verification system can check for the presence of that program to ensure that the device has not been tampered with. If the program is not present, the parole officer may be alerted that the parolee's location, as indicated by the tracking device, is not reliable. Such a system would also likely infringe the claims of the '805 patent, regardless of how the program detection feature was implemented. This example, like the Netflix and prohibited exports examples, illustrates just how sweeping the asserted claims of the '805 patent are, and thus lends further support to the proposition that the asserted claims are directed to an abstract idea. *See ChargePoint*, 920 F.3d at 769 ("The breadth with which this claim is written further indicates that the claim is directed to [an] abstract idea . . . .").

A number of Federal Circuit cases have dealt with the question whether software inventions directed to methods of authentication or enhancing security are patent-eligible under section 101. In such cases, "patent eligibility often turns on whether the claims provide sufficient specificity to

constitute an improvement to computer functionality itself." *Universal Secure Registry*, 10 F.4th at 1346.   In *Universal Secure Registry*, the court held each of the asserted claims of four authentication patents to be directed to abstract ideas. The claims of the first patent were directed to a method for conducting a secure transaction between a user and a merchant, where the merchant is given a time-varying code instead of the user's credit card information, and the credit card company is able to approve or deny the transaction without the merchant gaining access to the user's credit card information. *Id.* at 1349. The court held that because the claims "simply recite conventional actions in a generic way" and did not "purport to improve any underlying technology," they were directed to an abstract idea. *Id.* (quoting *Solutran*, *Inc. v. Elavon, Inc.*, 931 F.3d 1161, 1168 (Fed. Cir. 2019)).

The other patents at issue in *Universal Secure Registry* were directed to multi-factor authentication processes involving the use of encrypted authentication information and a combination of two or more inputs, such as a PIN number, other information known to the user, and inputs specific to the user, such as biometric measurements. The court held those claims to be directed to an abstract idea, noting that there was "no description in the patent of a specific technical solution by which the biometric information or the secret information is generated, or by which the authentication information is generated and transmitted." *Id.* at 1352. As a result, the court concluded that the invention did not improve any underlying technology and was therefore directed to an abstract idea. *Id.* The court similarly found the claims of the third patent to be abstract, because the claims directed to multi-factor authentication did not contain sufficient specificity. *Id.* at 1354. The court held that the claims "generically provide[d] for the collection of biometric information to generate a first authentication information, and then authenticating a user using both the biometric-information-derived first authentication and a second authentication

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information." *Id.* Because the claims "broadly recite generic steps and results—as opposed to a specific solution to a technological problem," the court held the claims to be directed to an abstract idea. *Id.* at 1355.

As to the fourth patent, the court in *Universal Secure Registry* recognized that one of the asserted claims contained more detailed limitations than the related claims of one of the other patents, but nonetheless found that the claim was "not sufficiently specific." *Id.* at 1357. The claim, the court observed, did not "focus on a specific means or method that improves the relevant technology," but instead was "directed to a result or effect that itself is the abstract idea." *Id.* (quoting *McRo*, 837 F.3d at 1314).

Several of the authentication cases discussed by the court in *Universal Secure Registry* contained similar analysis and reached a similar result, based on the court's conclusion that the claims in each of those cases did not contain sufficient specificity to be patent-eligible. *Id.* at 1346–47 (citing *Secured Mail Sols. LLC v. Universal Wilde, Inc.*, 873 F.3d 905, 910–12 (Fed. Cir. 2017); *Elec. Commc'n Techs., LLC v. ShoppersChoice.com*, 958 F.3d 1178, 1181–82 (Fed. Cir. 2020); *Solutran*, 931 F.3d at 1167–69; and *Prism Techs. LLC v. T-Mobile USA, Inc.*, 696 F. App'x 1014, 1016–17 (Fed. Cir. 2017)).

Two cases involving network security offer a useful comparison with this case and the cases discussed in *Universal Secure Registry*. In *SRI International, Inc. v. Cisco Systems, Inc.*, 930 F.3d 1295 (Fed Cir. 2019), the claims were directed to a "specific technique" of hierarchical event monitoring to detect hackers and other security threats. The court explained that the claims were "not directed to just analyzing data from multiple sources to detect suspicious activity," but were "directed to an improvement in computer network technology, i.e., using network monitors to detect suspicious network activity based on analysis of network traffic data, generating reports

of that suspicious activity, and integrating those reports using hierarchical monitors." *Id.* at 1303. The focus of the claims, the court noted, was on the specific asserted improvement in computer capabilities, that is, "providing a network defense system that monitors network traffic in real-time to automatically detect large-scale attacks." *Id.*

The court held that the invention was not directed to an abstract idea. The court characterized the claims as being directed to "an improvement in computer technology," noting that the claims "prevent the normal, expected operation of a conventional computer network" to achieve the objectives of the invention. *Id.* at 1303–04. The court added that the representative claim "improves the technical functioning of the computer and computer networks by reciting a specific technique for improving computer network security." *Id.* at 1304.

This case is distinguishable from *SRI* on two grounds. First, unlike the claims in *SRI*, claim 1 of the '805 patent does not recite a specific technological solution to a technological problem. Instead, it is cast in broad terms that would preempt nearly all approaches to determining the location of a computing device that consider geolocation data from the device and programs installed on the device. Second, the court in *SRI* explained that the claims in that case altered the functioning of the computer network by "actually prevent[ing] the normal, expected operation" of the network. *Id.* at 1304. In that respect, the invention at issue in *SRI* differs from the method set forth in claim 1 of the '805 patent, which has no effect on the normal operation of the computing device. It simply provides for the collection of data from the computing device, analysis of that data, and the generation of a report based on that data.

Another case involving security enhancement that presents a useful vehicle for comparison to this case is *TecSec, Inc. v. Adobe, Inc.*, 978 F.3d 1278 (Fed. Cir. 2020). In that case, the Federal Circuit held that claims directed to methods for providing multi-level security in a data network

were not directed to an abstract idea. *TecSec*, 978 F.3d at 1296. The court noted that in prior cases involving software innovations, the Federal Circuit had asked two questions: whether the focus of the claimed advance was on a solution "to a problem specifically arising in the realm of computer networks or computers," and whether the claim was "properly characterized as identifying a specific improvement in computer capabilities or network functionality, rather than only claiming a desirable result or function." *Id.* at 1293 (cleaned up). The *TecSec* court case answered both of those questions in the affirmative with regard to the claims before it.

As the court in *TecSec* explained, the patents at issue in that case described and claimed a method in which a digital object "is assigned a level of security that corresponds to a certain combination of access controls and encryption." *Id.* at 1282. "The encrypted object can then be embedded or 'nested' within a 'container object,' which, if itself encrypted and access-controlled, provides a second layer of security." *Id.* (citation omitted). The invention in *TecSec* provided a software-based mechanism for enhancing the security of information sent over a network, while providing flexibility to the user, *id.*, and was thus fairly characterized as involving a specific improvement in computer capabilities.

In this case, the focus of claim 1 of the '805 patent can be characterized as a solution "to a problem specifically arising in the realm of computer networks or computers," thus satisfying the first inquiry in *TecSec*. *See id.* at 1293 (cleaned up). But the invention recited in the '805 patent fails to satisfy the second inquiry. The invention is not "properly characterized as identifying a 'specific' improvement in computer capabilities or network functionality, rather than only claiming a desirable result or function." *Id.* at 1293. That is because the invention consists of merely gathering information already found on the user's device, analyzing that information, and reporting the results. As discussed above, those steps do not qualify as an improvement in

computer capabilities. *See Zillow*, 50 F.4th at 1378; *Killian*, 45 F.4th at 1380; *Elec. Power Grp.*, 830 F.3d at 1353-54.

At bottom, the process of ascertaining the location of a person by using multiple sources of information is clearly an abstract idea. The fact that the abstract idea is applied to a particular field of information, such as locating the person based on geolocation information associated with the person's communication device and programs installed on that device, does not render the idea non-abstract. *SAP Am.*, 898 F.3d at 1169; *see also Intell. Ventures I LLC v. Cap. One Bank*, 792 F.3d 1363, 1366 (Fed. Cir. 2015); *BSG,* 899 F.3d at 1291; *see generally Bilski*, 561 U.S. at 612 (limiting an abstract idea to one field of use does not make the concept patentable).

A recent district court decision underscored that point with regard to a claim similar to claim 1 of the '805 patent. In *Beteiro, LLC v. BetMGM, LLC*, *supra*, the patent at issue claimed, *inter alia*, employing a global positioning system to determine the location of a device used for placing a bet, and determining whether to allow the bet using that location information. 2022 WL 4092946, at *6, 8. The court held that "the concept of determining bet-eligibility from location-based information using conventional computers" is an abstract idea. *Id.* at *9; *see also CG Tech. Dev., LLC v. FanDuel, Inc.*, 442 F. Supp. 3d 840 (D. Del. 2020), *aff'd*, 858 F. App'x 363 (Fed. Cir. 2021) ("Determining the location of a mobile gaming device" is an abstract idea.).

Furthermore, it is well settled that adding generic computer implementation to an abstract idea does not render the idea patent-eligible. *See Alice*, 573 U.S. at 225–26. And the use of functional language, together with the broad risk of preemption, further illustrates the abstract nature of the asserted claims. *See Two-Way Media*, 874 F.3d at 1337; *ChargePoint*, 920 F.3d at 768–69. Therefore, the '805 patent's use of a computer network and generic hardware components to facilitate the steps of verifying a user's location using multiple data sources is not patent-eligible

subject matter at *Alice* step one. I next turn to the question whether the claims recite an inventive

concept under *Alice* step two.

2. ***Alice* Step Two**

a. ***In general***

Step two of the *Alice* test for patent eligibility requires the court to determine whether the

claim at issue contains an "inventive concept." In a case such as this one, involving computer-

and software-based technology, the court looks to whether the relevant implementation consists of

more than generic computers and networking components executing "well-understood, routine,

[and] conventional activities previously known to the industry." *Content Extraction &*

Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n, 776 F.3d 1343, 1347 (Fed. Cir. 2014).

Rather than arguing that a particular claim limitation provides the required inventive

concept, GeoComply contends that the claimed methods are inventive when viewed as a whole.

Specifically, GeoComply argues that the combination of using raw geolocation data, along with

"a likelihood of accuracy and/or trust score" and the existence of any "undesirable programs" on

the user's device, results in a more reliable and accurate verification of a user's location than other

verification methods previously known in the art. Dkt. No. 29 at 15–16 (quoting '805 patent, col.

1, ll. 34–38).

The first problem with that argument is that the invention recited in claim 1 is largely

generic in nature. At the outset, the claim refers to "collecting geolocation data associated with

the first device," without specifying what that geolocation data is or how it is to be collected. The

claim then recites "identifying that one or more selected programs are present at the first device,"

without specifying, even by category, what those programs are or how they are to be identified.

And finally the claim calls for a "geolocation message" that is "generated at least in part from the

geolocation data and a list of the present selected programs," without specifying what that message will contain or how the second server will use the collected data to generate useful geolocation information.

The specification acknowledges (indeed, touts as an advantage) that the claimed invention can be implemented using generic computer hardware. *See* '805 patent, col. 8, ll. 44–48; col. 9, ll. 55–59. And the "[s]creen sharing protection module" and "proxy detection module" disclosed in the specification are classic "black boxes"; they are described only in functional terms without any disclosure of how to implement those functions. *See id.* at col. 3, ll. 42–53. What is claimed and disclosed, therefore, is no more than the general idea of using generic computer components to obtain geolocation information from a user's device, to consider whether certain programs are present on that device, and to report the results of an unspecified analysis of that information.

The generic implementation of an abstract idea, with no explanation of how the results claimed in the patent are accomplished, is insufficient to provide the requisite inventive concept at *Alice* step two. *See Smart Sys. Innovations, LLC v. Chicago Transit Auth.*, 873 F.3d 1364, 1375 (Fed. Cir. 2017) (Step two is not satisfied when "the claims at issue use generic computer components . . . to carry out the abstract idea."); *Intell. Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1331 (Fed. Cir. 2017) ("Nowhere do the claims recite elements or components that describe *how* the invention overcomes these compatibility issues."); *Cap. One Bank*, 792 F.3d at 1368 ("Instructing one to 'apply' an abstract idea and reciting no more than generic computer elements performing generic computer tasks does not make an abstract idea patent-eligible."). That is, when the claims implement an abstract idea using generic computer components "without providing a specific technical solution," those claims "do not pass muster at step two." *Killian*, 45 F.4th at 1382 (citation omitted).

The second problem with GeoComply's argument regarding step two of *Alice* is that GeoComply has failed to specifically allege what in claim 1 constitutes the inventive concept or concepts underlying the invention. It is true that a defendant who brings a motion to dismiss bears the burden of showing that the plaintiff has not stated a claim. *See Potter v. Cozen & O'Connor*, 46 F.4th 148, 155 (3d Cir. 2022); *In re Plavic Mktg., Sales Pracs. & Prods. Liab. Litig. (No. II)*, 974 F.3d 228, 231 (3d Cir. 2020); *Davis v. Wells Fargo*, 824 F.3d 333, 349 (3d Cir. 2016). But when, as here, the defendant contends that the asserted claim lacks a plausible factual basis in the form of an inventive concept, the patent owner is required to respond with more than "conclusory allegations of inventiveness." *Zillow*, 50 F.4th at 1379; *Simio LLC v. FlexSim Software Prods., Inc.*, 983 F.3d 1353, 1365 (Fed. Cir. 2020).

Rather, what is required are "plausible and specific allegations that aspects of the claims are inventive." *Cellspin Soft, Inc. v. Fitbit, Inc.*, 927 F.3d 1306, 1317 (Fed. Cir. 2019). The point was well summarized by Judge Robart, who noted that although the movant bears the burden of proof under Rule 12(b)(6), "the court must determine whether [the patent owner's] factual allegations give rise to a plausible inference of an inventive concept, and thus whether the Patent claims something more than a well-understood, routine, and conventional method, system, or components. . . . Thus, the fact that [the movant] presents no affirmative evidence does not save [the patent owner's] complaint from dismissal." *Uniloc USA, Inc. v. HTC Am., Inc.*, No. 17-1558, 2018 WL 3008870, at *11 (W.D. Wash. June 15, 2018), *vacated on other grounds*, 776 F. App'x 704 (Fed. Cir. 2019); *see also T-Jat Sys. 2006, Ltd. v. Expedia, Inc. (DE)*, No. 16-581, 2018 WL 1525496, at *6 (D. Del. Mar. 28, 2018) ("Plaintiff makes no 'concrete allegations' to support its allegation that the 'particular characteristics' are not 'well-understood, routine, and conventional,'" and thus "there is no dispute of fact" as to that issue.).

In this case, as in the cited cases, there has been no concrete factual allegation as to the inventive concept, either in the original complaint or in GeoComply's proposed amended complaint, as discussed below.

b.   *The specification*

In support of its contention that claim 1 recites an inventive concept, GeoComply points to several statements in the '805 patent specification that purport to explain the benefits of the claimed invention. Those statements include the following:

- The invention "may have unmatched accuracy as it determines a player location within meters."

- The invention "may use multiple positioning technologies to increase reliability of results across diverse topologies."

- The invention "may use a sophisticated rules based algorithm to deliver intelligent weighting to results."

- The invention "may be easily integrated into gaming applications and services through use of a very simple application program interface (API)."

- The invention "may be highly configurable, and may have location & security parameters which can be configured."

- The invention "may provide high capacity, real-time processing and perform automated data updates with zero downtime."

- The invention "may have multiple integration options, be highly scalable and fault tolerant."

Dkt. No. 29 at 16 (quoting '805 patent, col. 7, ll. 46–59).

The problem for GeoComply is that most of the above benefits are derived from features of improved embodiments of claim 1, rather than from claim 1 itself. For example, claim 1 does not require, or even suggest, the use of "multiple positioning technologies," a "sophisticated rules based algorithm," a "very simple" API, or configurable "location [and] security parameters." *See id.* The recited benefits that are dependent on such components therefore cannot provide the inventive concept at *Alice* step two. *See Yu*, 1 F.4th at 1045 ("[T]he *claim*—as opposed to something purportedly described in the specification—is missing an inventive concept.") (quoting *Two-Way Media*, 874 F.3d at 1338).

Moreover, the assertions that the invention may provide increased precision of location determinations, real-time processing with zero downtime, or high scalability and fault tolerance might well be true of GeoComply's commercial embodiment (or other embodiments) of the claimed invention, but they are not benefits that are plausibly derived from claim 1 itself. As noted, claim 1 is sufficiently broad to encompass nearly all methods of location verification that consider a device's geolocation data and the programs that are present on the device. Put differently, it would be possible for an infringing method to fall within the scope of the claims even if it did not provide any particular level of precision, processing ability, or fault tolerance. Those assertions in the specification are therefore not "specific allegations that aspects *of the claims* are inventive." *See Cellspin*, 927 F.3d at 1317 (emphasis added).

c.   *The allegations of the complaint*

GeoComply also relies on several allegations set forth in the complaint in support of its argument that the claims are patent-eligible at *Alice* step two. Specifically, GeoComply points to paragraphs 11 through 13 of its complaint as support for the proposition that the claims of the '805

patent recite an inventive concept. *See* Dkt. No. 29 at 15. Those paragraphs, however, fail to raise

a factual question regarding *Alice* step two sufficient to defeat a motion to dismiss.

Paragraph 11 recites the conclusory allegation that the patent is "valid, enforceable, and

claims patentable subject matter." Dkt. No. 1 ¶ 11. Paragraph 12 alleges that the patent "provides

an innovative geolocation engine that is highly secure and versatile, allowing gaming providers to

securely and reliably determine a user's playing location." *Id.* ¶ 12. Paragraph 13 describes certain

components of the invention and alleges that "[t]he '805 patent helps to solve" the issue of

geolocation spoofing in a way that is "consistent with applicable legal, regulatory, and commercial

requirements." *Id.* ¶ 13. Although the Federal Circuit has held that plausible factual allegations

of an inventive concept can defeat a motion to dismiss, *see, e.g.*, *Aatrix Software, Inc. v. Green*

Shades Software, Inc., 882 F.3d 1121, 1130 (Fed. Cir. 2018), a plaintiff cannot defeat a motion to

dismiss merely by including conclusory allegations of inventiveness*, see Simio*, 983 F.3d at 1365

("We disregard conclusory statements when evaluating a complaint under Rule 12(b)(6)."); *Bridge*

& Post, Inc. v. Verizon Commc'ns, Inc., 778 F. App'x 882, 894 (Fed. Cir. 2019) (district court

"was not required to accept [the plaintiff]'s legal conclusions as true," including "repeated

characterizations of its inventions as 'technical innovations'").

The Federal Circuit in *Dropbox, Inc. v. Sychronoss Techs., Inc.*, 815 F. App'x 529 (Fed.

Cir. 2020), made the same point in some detail. It wrote:

> [Plaintiff's] allegations claim that each of the patents solves given technological
> problems, but never provide more support than a conclusory statement that "the
> inventions described and claimed . . . solved these problems, improved the art,
> "represented a significant advance over existing approaches[,] and were not well-
> known, routine, or conventional in the field at the time of patenting." . . . These
> pleadings provide no more than a series of legal conclusions about the § 101
> analysis.

Id. at 538. For that reason, the court held, the complaints in all three patents before it "failed to allege fact questions that cannot be resolved on a Rule 12 motion." *Id.* at 537–38.

Here, GeoComply's complaint similarly provides only conclusory and undetailed allegations as to the inventiveness of the asserted claims. And those allegations similarly do not relate to any particular limitations of the claims. *See Cellspin*, 927 F.3d at 1317. The allegations in GeoComply's complaint are therefore not sufficient to defeat Xpoint's motion to dismiss.

d.   The proposed amended complaint

GeoComply argues that if Xpoint's motion is granted, GeoComply should be granted leave to amend its complaint to further "allege[] facts directed to the inventive concepts in its claimed invention." Dkt. No. 29 at 20 (citation omitted). GeoComply did not provide any proposed amendments along with its response to Xpoint's motion to dismiss, but upon inquiry from the court, GeoComply set forth the content that it would include in an amended complaint if needed to cure any inadequacies in it is original complaint. Dkt. No. 41-1.

Leave to amend a complaint should be freely granted "when justice so requires." Fed. R. Civ. P. 15(a)(2). However, leave need not be granted if the amendments would be "futile," that is, "if the proposed [amended] complaint could not 'withstand a renewed motion to dismiss.'" *City of Cambridge Ret. Sys. v. Altisource Asset Mgmt. Corp*, 908 F.3d 872, 878 (3d Cir. 2018) (citation omitted). The court concludes that the amendments to the complaint proposed by GeoComply would be futile with respect to the issue of patent eligibility under 35 U.S.C. § 101.

GeoComply's proposed amended complaint offers several new allegations related to the issue of infringement, but very little with respect to the patent eligibility issue. The only new paragraphs that appear to be directed to section 101 are six paragraphs that cite various articles about the problem of verifying a user's location and GeoComply's solution to that problem. *See*

Dkt. No. 41-1 ¶¶ 12–17. Those allegations and the underlying cited materials are insufficient to overcome the section 101 ground for dismissal.

First, GeoComply points to a law review article by Professor Marketa Trimble in which she observes that geolocation spoofing is the "seminal problem of geolocation." Marketa Trimble, *The Future of Cybertravel: Legal Implications of the Evasion of Geolocation*, 22 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 567, 599 (2012). That article does not help GeoComply's case. As Professor Trimble explains, the key challenge associated with geolocation spoofing is that "[p]roviders of geolocation tools are constantly searching for ways to eliminate evasion," because "it may take just a few weeks or months for the creators of evasion techniques to respond to improvements in geolocation tools." *Id.* at 604. That is to say that GeoComply, Xpoint, and their competitors are engaged in an ongoing cat-and-mouse game with location spoofers who are often able to quickly circumvent improvements in geolocation tools.

GeoComply, however, has not claimed or disclosed in the '805 patent any specific implementation of a technique for eliminating geolocation spoofing or evasion; it has claimed merely the idea of using the existence of certain programs on a user's device in determining the user's location, regardless of how that idea is implemented. As the Federal Circuit explained in *Electric Power Group*, "one helpful way of double-checking" the application of *Alice* step two is to consider whether the patentee has claimed a "particular concrete solution to a problem" or "the abstract idea of a solution to the problem in general." *Elec. Power Grp.*, 830 F.3d at 1356 (citation omitted). GeoComply's claims fall on the abstract-idea side of that line, as any geolocation provider seeking to circumvent the actions of location spoofers would need to "first licens[e] the abstract idea" of the '805 patent from GeoComply if the provider's solution involved considering in any respect the programs that are installed on the spoofer's device. *See id.*

Second, GeoComply points to an Internet article from 2013 describing the launch of legal online poker in Nevada. Cyrus Farivar, *State-by-State, America Keeps Betting on Online Poker and Gambling*, Ars Technica (May 9, 2013), https://arstechnica.com/information-technology/2013/05/state-by-state-america-keeps-betting-on-online-poker-and-gambling/ (last visited Feb. 7, 2023). In that article, the author makes the unremarkable observation that, as of the date of that article, "Nevada has not said precisely how it will determine a poker player's geographic location." *Id.* Even apart from the hearsay problem with that statement, the article provides no significant support for GeoComply's position as to the section 101 issue. The author's statement establishes no more than that the author has not been advised by Nevada authorities how they plan to deal with the problem of determining poker players' locations. As such, that evidence sheds little light on whether the '805 patent contains an innovative concept sufficient to overcome Xpoint's motion to dismiss.

Third, GeoComply points to another Internet article, which profiles the inventor, Anna Sainsbury, and describes the founding of GeoComply. Karen van Kampen, *How Anna Sainsbury Built GeoComply–A Global Leader in Cybersecurity*, Women of Influence+ (May 6, 2022), https://www.womenofinfluence.ca/2022/05/06/how-anna-sainsbury-built-geocomply-a-global-leader-in-cybersecurity/.   That article, however, describes the substance of Ms. Sainsbury's innovation in only the most general terms. For example, the article explains that GeoComply seeks to "use technology to confirm someone's true location when they are interacting online," and that GeoComply attempts to "provide solutions to a problem that many clients weren't yet aware of." *Id.* Those sorts of general assertions of inventiveness, wholly divorced from the elements of the claims of the '805 patent, add nothing to GeoComply's argument that the asserted claims are eligible at *Alice* step two.

In sum, neither in its original complaint nor in its proposed amended complaint has GeoComply alleged that the '805 patent recites a "specific means or method that improves the relevant technology" such that the claims would be patent-eligible at *Alice* step two. *See Weisner*, 51 F.4th at 1083. As discussed above with respect to *Alice* step one, the '805 patent also recites broad preemptive claims rather than "a specific, discrete implementation of the abstract idea." *See Killian*, 45 F.4th at 1382. Accordingly, claim 1 fails to contain an inventive concept and therefore is invalid under 35 U.S.C. § 101.

e.   *The dependent claims*

GeoComply has not argued that the dependent claims of the '805 patent contain inventive concepts that satisfy step two of the *Alice* test. Any argument that the dependent claims satisfy the inventive concept requirement independently of claim 1 has therefore been waived. *See Clock Spring, L.P. v. Wrapmaster, Inc.*, 560 F.3d 1317, 1328–29 (Fed. Cir. 2009) (plaintiff failed to assert in opposition to defendant's summary judgment motion that dependent claims needed to be separately addressed and therefore waived that argument); *Affinity Labs*, 838 F.3d at 1264 n.4 ("Affinity has not separately argued the patent eligibility of the dependent claims and thus has waived any argument that those claims should be analyzed separately from claim 1."); *Brit. Telecomms. PLC v. IAC/InterActiveCorp*, 813 F. App'x 584, 587–88 (Fed. Cir. 2020) ("Because British Telecom did not present any meaningful argument for the distinctive significance of any claim limitation not found in claim 1, the district court did not err in finding that British Telecom had forfeited its ability to argue that other claims are separately patent eligible.") (cleaned up); *3form, Inc. v. Lumicor, Inc.*, 678 F. App'x 1002, 1010 (Fed. Cir. 2017) (plaintiff did not argue in the district court against anticipation of the dependent claims and therefore "waived its separate arguments on these claims").

In any event, an examination of the dependent claims shows that they add nothing of consequence to the claimed invention and do not overcome the infirmities identified with respect to claim 1. To begin with, claims 2 and 3 add very little to what is recited in claim 1. Claim 2, rewritten to avoid the nonsensical language of the text as drafted, specifies that the device is a mobile device and that "[the module that collects] the geolocation data . . . is a mobile application installed on the mobile device."[4] Claim 3, as similarly rewritten, specifies that "[the module that collects] the geolocation data . . . is a network browser plug-in installed on a network browser on the first device."[5] There is no suggestion in the patent that the recitation of generic computer components to perform the task of collecting geolocation information is by itself inventive, or that identifying the first device as a mobile device converts what is recited in claim 1 into an inventive concept. The only feature added by claim 9 is that the geolocation message "is in the form of a binary message indicating" that the first device has either passed or failed the geolocation requirement. That limitation contributes nothing of consequence by way of an inventive concept; at most, it constitutes "insignificant post-solution activity." *Diehr*, 450 U.S. at 191–92 & n.14; *see Bilski*, 561 U.S. at 610–11; *Ameranth,* 842 F.3d at 1242. And claim 10, as noted, is essentially the same as claim 1 except that it is directed to a storage medium rather than a method, a difference that does not change the eligibility analysis.

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[4] The text of claim 2 provides: "The method of claim 1, wherein the first device is a mobile device and the geolocation data collected by the module is a mobile application installed on the mobile device." As written, the second limitation of that claim makes no sense. Context suggests that the intended meaning of the claim language is what appears in the text above.

[5] The text of claim 3 provides: "The method of claim 1, wherein the geolocation data collected by the module is a network browser plug-in installed on a network browser on the first device." As written, that claim, like claim 2, makes no sense. Context suggests that the intended meaning of the claim language is what appears in the text above.

The only two dependent claims that appear to limit the scope of claim 1 in a material way are claims 7 and 8, in which the programs recited in claim 1 include "a proxy application" and "a screen sharing program," respectively. To that extent, those claims are limited to a narrower universe of collected information than is claim 1. But the claims nevertheless remain directed to the "collection, analysis, and display of available information in a particular field," using generic computers that together constitute an abstract idea. *See Elec. Power Grp.*, 830 F.3d at 1351. And a claim is not patent-eligible "merely because it applies an abstract idea in a narrow way." *BSG*, 899 F.3d at 1287 & n.1 ("Although the[] [dependent] claims cover a narrower range of data input than claim 1, the claims' focus remains on the abstract idea . . . .").

Notably, while the references to "proxy application" and "screen sharing program" provide some specificity as to the types of programs that may be detected, those categories are still quite broad. As Professor Trimble explains in her previously cited law review article, even as of 2012 there were several mechanisms by which users could employ a proxy to mask their true location. Trimble, *supra*, at 602–04. Those mechanisms, she explains, varied in terms of their susceptibility to detection. *See id.* Presumably, the phrase "proxy application," which is not limited in any meaningful way by the specification of the '805 patent, would cover each of those approaches as well as any future approaches to using proxies that may be even less susceptible to detection. Likewise, a "screen sharing program" would appear to include any form of software that allows the user of a first device to view the screen of a second device on the first device's screen. The terms "proxy application" and "screen sharing program" are thus entirely functional and would cover any software that could perform the described functions. In view of the breadth and functional nature of those terms, it is clear that claims 7 and 8 merely recite a somewhat narrower version of the abstract idea of claim 1 and therefore do not provide an inventive concept.

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As it relates to claims 7 and 8, GeoComply's complaint refers to proxy applications and screen sharing programs in only a single paragraph, in which GeoComply describes the general invention of the '805 patent. *See* Dkt. No. 1 ¶ 13. That paragraph, like the '805 patent itself, contains no allegations regarding the structure or operation of the proxy detection module or the screen sharing module. And there are no new allegations in GeoComply's proposed amended complaint that are directed to proxy applications or screen sharing programs.

In defining what is needed to satisfy the "inventive concept" requirement, the Federal Circuit has distinguished between claims in which "[t]he essential advance is . . . a functionally described" result, and claims that provide an advance in the underlying technical process or a "further specification of a particular technology" for achieving the abstract result. *See Affinity Labs*, 838 F.3d at 1263. If, for example, the claims in this case had recited an improved method for detecting the presence of a proxy application on a user's device, that advance might well have satisfied the inventive concept requirement. But claims 7 and 8 recite only the functional result of detecting a proxy application or a screen sharing program, respectively, without any "further specification of a particular technology" for doing so. *See id.* Such recitations "do[] not cross out of the abstract idea category" at *Alice* step two. *Id.*

There is also no suggestion in the intrinsic record that the idea of looking for proxy applications or screen sharing programs on a person's device amounts to "significantly more" than the abstract idea to which the claims are directed. *See Alice*, 573 U.S. at 218 (citation omitted). The specification contains only cursory references to a "proxy detection module" and a "screen sharing protection module" that may be used to detect those types of programs, and it provides no detail as to what those "modules" are or how they would be implemented. '805 patent, col. 3, ll. 42–53. There is thus no basis in either the intrinsic record or the pleadings from which one could

conclude that the recitation of proxy applications and screen sharing programs in claims 7 and 8 amounts to an inventive concept, even if GeoComply had raised claims 7 and 8 in its response to Xpoint's motion to dismiss.

IV.   Infringement

Xpoint next argues that GeoComply's complaint should be dismissed because it is legally insufficient to allege infringement of the '805 patent. Although it is not strictly necessary to reach the issue of infringement given my ruling on the section 101 issue above, I reach that issue in the interest of completely resolving the disputes before me, in the event there are any further proceedings in this case.

GeoComply's complaint contains two counts alleging patent infringement. In Count I, GeoComply alleges that Xpoint directly infringes the claims of the '805 patent by directing and controlling the actions of PlayStar and PlayStar's customers. In Count II, GeoComply alleges that Xpoint contributorily infringes the claims of the '805 patent by providing software to PlayStar, and that PlayStar in turn directs and controls the actions taken by both PlayStar's customers and Xpoint in performing the steps of the asserted method claims. Xpoint's motion is GRANTED IN PART with respect to Count II. GeoComply will not be granted leave to amend the complaint with respect to the infringement allegations set forth in Count II.

As an initial matter, both counts alleging infringement rely on a theory of direct infringement known as "divided infringement." Under a divided infringement theory, one entity may be considered responsible for others' performance of method steps when either (1) "that entity directs or controls [the] others' performance" or (2) "the actors form a joint enterprise." *Akamai Techs., Inc. v. Limelight Networks, Inc.*, 797 F.3d 1020, 1022 (Fed. Cir. 2015) (en banc). The "direct[ion] or control[]" condition, on which GeoComply relies in this case, is satisfied when "an

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alleged infringer conditions participation in an activity or receipt of a benefit upon performance of a step or steps of a patented method and establishes the manner or timing of that performance." *Id.* at 1022–23. To plausibly allege divided infringement, the complaint must offer allegations sufficient to "form the basis of a reasonable inference that each claim step was performed by or should be attributed to Defendants." *Lyda v. CBS Corp.*, 838 F.3d 1331, 1340 (Fed. Cir. 2016).

A.   Count I

With respect to Count I, Xpoint argues that the complaint is insufficient because it fails to allege that Xpoint directs or controls PlayStar's customers, i.e., the individuals who access the PlayStar online casino. Specifically, Xpoint argues that the first method step of claim 1, "transmitting a request to a first server by a first device," is performed by PlayStar's customers, and that there are no allegations in the complaint that Xpoint directs or controls those customers' completion of that step of claim 1. Dkt. No. 17 at 17–18.

GeoComply's complaint alleges that the "transmitting" step of claim 1 is performed by PlayStar's customers when those customers attempt to access the PlayStar online casino and place a wager. Dkt. No. 1 ¶ 24. The complaint further alleges that the customers' actions are "attributable to Xpoint" because PlayStar may be legally accessed only from New Jersey and thus a customer's "geolocation and participation in the PlayStar online casino, for example, are . . . conditioned on the user transmitting a request to a first server." *Id.* ¶¶ 21, 25.

GeoComply argues that the customers' actions are attributable to Xpoint because Xpoint sets the terms that a customer must satisfy in order to begin placing wagers with the PlayStar online casino. Xpoint responds that the customer's initial "request" to place wagers with PlayStar is not controlled or directed by Xpoint; under Xpoint's characterization of the customer's actions, the

customer's agreement to the conditions imposed by Xpoint occurs only after the customer makes the initial request to place wagers with PlayStar.

Resolving this issue would likely require the court to construe the term "request" in the first limitation of claim 1. If that term is understood to include the customer's undertaking to place wagers with PlayStar in accordance with the conditions imposed by PlayStar (and designed by Xpoint), a finder of fact could conclude that the customer is acting, at least indirectly, at the direction of Xpoint. On the other hand, if the term "request" is understood to encompass only the initial contact by the customer with PlayStar, it may be that as a factual matter the customer's action would not at that point include any agreement to the conditions imposed by PlayStar (and indirectly by Xpoint), and that the customer would not be considered to be acting under Xpoint's direction or control. Because of the potential for a dispute at claim construction regarding the meaning of the term "request" that could have an effect on the scope of the claims, Count I is not subject to dismissal on the ground that the complaint cannot be read to allege that Xpoint directs or controls the "transmitting a request" limitation of claim 1.

B.   Count II

With respect to Count II, Xpoint argues that the complaint is insufficient because it fails to allege that PlayStar directs or controls Xpoint's completion of the final step of claim 1, "providing the received geolocation message to the first server." Dkt. No. 17 at 19–20. Specifically, Xpoint argues that it is "facially implausible" that Xpoint is directed or controlled by its customer. *Id.* at 20. In any event, Xpoint argues, the complaint offers no more than a threadbare allegation that Xpoint's actions are attributable to PlayStar. *Id.* Xpoint does not argue that the complaint fails to allege each of the elements of contributory infringement; rather, it argues that the complaint does

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not sufficiently allege the underlying direct infringement that is necessary to support a claim of contributory infringement.

GeoComply alleges in its complaint that the "providing" step of claim 1 is performed by Xpoint. Dkt. No. 1 ¶¶ 59–60. The complaint further alleges that Xpoint's actions "are done at the direction and control of PlayStar." *Id.* ¶ 58. GeoComply also alleges that "Xpoint has 'partnered' with PlayStar to provide geolocation services for PlayStar's online casino," and cites an article in which employees of Xpoint and PlayStar discuss the relationship between the two companies. *Id.* ¶ 42 (citing Dkt. No. 1-6). A natural inference can be drawn from those allegations that PlayStar conditions the payment or other consideration it provides to Xpoint under their "partnership" with respect to Xpoint's provision of geolocation services to PlayStar. The complaint's allegations, when viewed as a whole, are thus sufficient to support a plausible assertion that PlayStar directs or controls Xpoint's performance of the "providing" step of claim 1.

Xpoint's suggestion that it is "facially implausible" for a customer to direct or control its contractor, *see* Dkt. No. 17 at 20, is unpersuasive. For example, if a homeowner instructs a painting contractor to use a particular type of paint on the house, the homeowner is directing or controlling the contractor. And if a person who requests a ride from Uber tells the driver to take a particular route, that person is clearly directing or controlling the driver even though the rider is a customer.

In the context of online gaming, it is plausible that a customer such as PlayStar may direct or control the actions of a vendor such as Xpoint. As a regulated casino, PlayStar is obligated under New Jersey law to ensure that its customers are located in New Jersey. *See* Dkt. No. 1 ¶ 25. Although PlayStar has contracted with Xpoint to obtain Xpoint's services in verifying the locations of PlayStar's users, PlayStar could certainly dictate the terms of their agreement with regard to

how Xpoint provides its geolocation messages to PlayStar. And if the agreement between the two

is to work as intended, PlayStar would clearly need for Xpoint to provide information regarding

the location of PlayStar's customers in a form that could be used by PlayStar's software. Whether

that information would be in the form of a "geolocation message" would be a possible subject for

claim construction and could give rise to a factual dispute to be resolved by the finder of fact. But

it is not an issue that calls for the dismissal of Count II under Rule 12(b)(6).

Xpoint separately argues that even if its motion to dismiss Count II is denied with respect

to claim 1, the motion should be granted as to claim 10 because GeoComply has failed to plausibly

allege infringement of that claim. Claim 10 of the '805 patent recites an apparatus: "[a] non-

transitory computer readable storage medium having embodied thereon a program, the program

being executable by a processor to perform" the steps of claim 1. Xpoint notes that GeoComply's

theory of infringement of Count II posits that PlayStar is the direct infringer, but that the complaint

fails to allege that PlayStar made, used, sold, or imported any such apparatus. Instead, Xpoint

argues, GeoComply alleges infringement "based on a multi-platform, multi-user arrangement—

not a single apparatus as required by claim 10." Dkt. No. 17 at 20.

In its opposition to Xpoint's motion to dismiss, GeoComply did not respond to Xpoint's

argument regarding claim 10. GeoComply's failure to respond to that argument constitutes a

concession that Xpoint does not infringe claim 10 of the '805 patent, at least under the infringement

theory of Count II. *See In re Wilmington Trust Sec. Litig.*, 2017 WL 2467059, at *2 (D. Del. June

7, 2017) ("When a responding party fails to defend against an issue which is the subject of a

motion, courts consistently construe the failure to respond as an abandonment of the issue or a

concession that the moving party is correct."); *see also Noramco LLC v. Dishman USA, Inc.*, No.

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21-1696, 2022 WL 2817876, at *5 (D. Del. July 19, 2022); *Blakeman v. Freedom Rides, Inc.*, No. 12-0416, 2013 WL 3503165, at *13 (D. Del. July 10, 2013).

Even apart from that procedural default, the allegations in GeoComply's complaint fail to address how Xpoint could be liable for infringement of claim 10 under the theory presented in Count II. GeoComply explains in its complaint that different entities are responsible for performing the method steps of claim 1: the "transmitting" step is performed by PlayStar's customers, the "providing" step is performed by Xpoint, and the intermediate steps are performed by PlayStar. Dkt. No. 1 ¶¶ 50–60. That division of functions is inconsistent with the language of claim 10, which recites a single "non-transitory computer readable storage medium" containing a program that performs each of the steps recited in claim 1. '805 patent, cl. 10. To illustrate, if Xpoint performs the step of providing a geolocation message to PlayStar's server, then the program responsible for completing that step would presumably be present on Xpoint's server, while the program responsible for completing the other steps would presumably be present on PlayStar's server. GeoComply has offered no allegations in its complaint that suggest otherwise.

Accordingly, Xpoint's motion to dismiss Count II is therefore GRANTED as to claim 10 but is otherwise DENIED, because the complaint alleges plausible theories of both divided direct infringement and contributory infringement as to the remaining asserted claims under both counts.

C.   Leave to Amend

In its opposition to the motion to dismiss, GeoComply has requested leave to amend in the event that Xpoint's motion is not denied in full. Dkt. No. 29 at 20. As noted, leave to amend need not be granted if the amendments would be "futile," that is, "if the proposed [amended] complaint could not 'withstand a renewed motion to dismiss.'" *City of Cambridge*, 908 F.3d at 878. I

conclude that amendment of the complaint in this case would be futile with respect to the portion of the complaint that has been dismissed.

As previously discussed, the allegations of infringement in GeoComply's complaint fail to allege facts sufficient to show that Xpoint infringes claim 10 of the '805 patent under the theory set forth in Count II of the complaint. And GeoComply's proposed amended complaint, Dkt. No. 41-1, does not supplement the allegations relating to claim 10 under that theory of infringement. Leave to amend the complaint would therefore be futile with respect to the portion of the complaint that has been dismissed both for forfeiture and for failure to plausibly allege infringement.

V.   Conclusion

Xpoint's motion to dismiss for ineligibility under 35 U.S.C. § 101 is GRANTED. Xpoint's motion to dismiss for non-infringement is GRANTED as to the allegation of infringement of claim 10 of the '805 patent under the theory set forth in Count II of the complaint. Xpoint's motion to dismiss for non-infringement is DENIED with respect to the remainder of GeoComply's allegations of infringement. Leave to amend will not be granted with respect to either patent eligibility or the infringement of claim 10 under the theory set forth in Count II of the complaint. A corresponding judgment will be filed contemporaneously with this order.

In light of the decision granting Xpoint's motion to dismiss under 35 U.S.C. §101, GeoComply's motion for a preliminary injunction, Dkt. No. 62, is DENIED as moot.

IT IS SO ORDERED.

SIGNED this 10th day of February, 2023.

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WILLIAM C. BRYSON
UNITED STATES CIRCUIT JUDGE