IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

VIDEOLABS, INC. and VL COLLECTIVE
IP LLC,

                 Plaintiffs,

     v.

META PLATFORMS, INC., ET AL.

                 Defendants.

CIVIL ACTION
NO. 22-680

OPINION

Slomsky, J.   **April 22, 2024**

I.   INTRODUCTION

On May 24, 2022, Plaintiffs VideoLabs, Inc. and VL Collective IP LLC ("Plaintiffs" or "VideoLabs")[1] filed a Complaint against Defendants Meta Platform Inc., Instagram, Inc., WhatsApp LLC, Facebook Technologies LLC, and GIPHY, Inc. ("Defendants") alleging patent infringement in violation of 35 U.S.C. § 271(a).[2] (Doc. No. 1.) Plaintiffs allege that Defendants infringed five patents: (1) United States Patent No. 8,139,878 ("the '878 Patent") (Count I), (2) United States Patent No. 7,769,238 ("the '238 Patent") (Count II), (3) United States Patent No. 7,970,059 ("the '059 Patent") (Count III), (4) United States Patent No. 7,266,682 ("the '682

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[1]   VL Collective IP LLC was founded in 2019 as a subsidiary of VideoLabs, Inc. (Doc. No. 1 at ¶ 14.) The Court will refer to both Plaintiffs collectively as VideoLabs.

[2]   35 U.S.C. § 271(a) provides:

> Except as otherwise provided in this title, whoever without authority makes, uses, offers to sell, or sells any patented invention, within the United States or imports into the United States any patented invention during the term of the patent therefor, infringes the patent.

Patent") (Count IV), and (5) United States Patent No. 7,436,980 ("the '980 Patent") (Count V).

(See id.)

On August 1, 2022, Defendants filed a Partial Motion to Dismiss the Complaint (Doc. No.

8) and an Opening Brief in Support of their Motion (Doc. No. 9). Defendants assert that Counts

IV and V of the Complaint should be dismissed because the '682 Patent and the '980 Patent

concern ineligible subject matter under 35 U.S.C. § 101.[3] (See Doc. No. 8.) Defendants also move

under Federal Rule of Civil Procedure 12(b)(6) to dismiss Plaintiffs' claims for indirect and willful

infringement present in the infringement claims in all five (5) Counts.[4] (See id.)

On August 29, 2022, Plaintiffs filed a Response to the Partial Motion to Dismiss the

Complaint (Doc. No. 15), and on September 12, 2022, Defendants filed a Reply (Doc. No. 16).

On January 27, 2023, Plaintiffs filed a Notice of Subsequent Authority and Events. (Doc. No. 24.)

On February 8, 2023, Defendants filed a Notice of Supplemental Authority. (Doc. No. 27.) On

February 9, 2023, a hearing was held on the Motion. On March 1, 2023, Defendants filed

Supplemental Authority in support of their Motion to Dismiss (Doc. No. 30), and on March 14,

2023, Plaintiffs filed their Reply (Doc. No. 32). Defendants' Motion is now ripe for disposition.

For the reasons that follow, Defendants' Motion to Dismiss the Complaint (Doc. No. 8) will be

granted in part and denied in part.

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[3]   35 U.S.C. § 101 provides:

> Whoever invents or discovers any new and useful process, machine, manufacture,
> or composition of matter, or any new and useful improvement thereof, may obtain
> a patent therefor, subject to the conditions and requirements of this title.

[4]   Although the claims for indirect and willful infringement, which are alleged in all five (5)
Counts, are being challenged, even if these claims were dismissed, the underlying patent
infringement claims would still remain.

II.   BACKGROUND

VideoLabs is a corporation that seeks to "reduce the cost and risk of technological gridlock associated with diverse patent ownership." (Doc. No. 1 at ¶ 12.) The founders of VideoLabs believe that because various companies played a role in developing the foundational technology for today's digital video, no single company is able to provide a high-quality video experience on its own. (Id. at ¶ 4.) To solve this problem, VideoLabs acquired the rights to patents in video technologies and compiled a portfolio of patents obtained from companies such as Hewlett Packard Enterprise, Siemens AG, and Panasonic. (Id. at ¶ 6.) VideoLabs then created a platform where, in exchange for a membership or licensing fee, companies could gain access to VideoLabs' patent portfolio. (Id. at ¶ 7.)

Defendant Meta is a publicly traded corporation in the technology industry. (Id. at ¶ 16.) Defendants Instagram, WhatsApp, Facebook Technologies, and Giphy are each subsidiaries of Defendant Meta. (Id. at ¶ 17.) Defendants operate popular social media platforms that make use of video technologies. (Id. at ¶ 8.) Defendants are not members of VideoLabs' platform. (Id.)

As noted, on May 24, 2022, Plaintiffs filed a Complaint alleging Defendants infringed five (5) of their patents. On August 1, 2022, Defendants filed the Partial Motion to Dismiss the Complaint. (Doc. No. 8.) At issue in Defendants' Motion to Dismiss are two VideoLab patents, which are described below.

A. The '682 Patent[5]

The '682 Patent relates to transmitting data and seeks to address a "longstanding problem

in the transmission of real-time audio and visual data over the [I]nternet." (Doc. No. 15 at 8.) It

used to be difficult to transmit real-time data over the Internet. (Doc. No. 1 at ¶ 62.) In the mid-

1990s the Real Time Transport Protocol ("RTP") was developed to handle the transmission of

real-time data over the internet in a standard way. (Id.) However, RTP messaging was not secure

and was susceptible to security flaws at the transmitter, during transmission, and at the receiver.

(Id. at ¶ 64.) To address these security issues, a security and authentication layer was introduced

into RTP known as Secure Real-Time Transport Protocol ("SRTP"). (Id. at ¶ 65.)

Before the publication of SRTP, the '682 Patent sought to address the RTP security

problems. (Id. at ¶ 66.) The '682 Patent prevents security flaws by "ensuring, at the receiver, that

data being transmitted is not insecure or unwanted." (Id.) Specifically, at the transmitter,

authentication data is inserted into the data packets being transmitted. (Id.) The authentication

data is then transmitted together with the data packet to the receiver. (Id.) The receiver analyzes

the data to ensure that the transmitter and receiver are known to each other. (Id.) If the receiver

knows the transmitter, the data is processed. If not, the data is rejected. (Id.)

Data transmission networks operate on a variety of levels. (Id. at ¶ 66.) The OSI Reference

Model ("OSI Model"), which is included in the '682 Patent, is a well-known model that breaks

transmission networks into seven layers, each of which has a different functionality. (Id.) At layer

one, data and messages are transmitted from the transmitter to the receiver using a physical

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[5]   The '682 Patent was issued on September 4, 2007 and is titled "Method and System for
Transmitting Data from a Transmitter to a Receiver and Transmitter and Receiver Therefore"
(Doc. No. 1 at ¶ 60.) The original assignee of the '682 Patent is Siemens Corporate Research,
Inc. ("Siemens"). (Id. at ¶ 61.) VideoLabs currently owns all rights and title to the '682 Patent.
(Id. at ¶ 60.)

protocol. (Id.) Each subsequent layer builds on the layer before it. (Id.) The final layer, layer

seven, is an application layer and the '682 Patent optimizes the security of data transmission by

preforming authentication at this layer. (Id.)

Claim 1 of the '682 Patent describes the innovation as:

A method for transmitting data from a transmitter to a receiver, comprising:

providing transmitter-to-receiver authentication at a Real Time Transport
Protocol (RTP) packet level as an application protocol on an application
layer by inserting, at the transmitter, authentication data at end of a whole
RTP packet payload;

ascertaining, by the receiver, whether the receiver knows the transmitter
based on the RTP packet level authentication data; and

accepting, by the receiver, the whole RTP packet payload, if the receiver
knows the transmitter, and otherwise rejecting the whole RTP packet
payload.

(Doc. No. 1 at 89.) In sum, the purpose of the '682 Patent is to transmit data from a transmitter to

a receiver, with the receiver ensuring that the data is not unwanted data.

B. The '980 Patent[6]

The '980 Patent is concerned with object detection. (Id. at ¶ 72.) Object detection is the

process of "determining and tracking what is within images and videos." (Id.) The '980 Patent

describes:

A computer implemented method for object detection [that] includes
providing a spatio-temporal model for an object to be detected, providing a
video including a plurality of images including the object, and measuring
the object as a collection of components in each image. The method further
includes determining a probability that the object is in each image, and
detecting the object in any image upon comparing the probabilities for each
image to a threshold for detecting the object.

(Doc. No. 1-5 at 2.)

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[6] The '980 Patent was issued on October 14, 2008 and is titled "Graphical Object Models for
Detection And Tracking." (Doc. No. 1 at ¶ 70.) The original assignee of the '980 Patent is
Siemens. (Id. at ¶ 71.) VideoLabs currently owns all rights and title to the '980 Patent. (Id.
at ¶ 70.)

According to Plaintiffs, object detection presents fundamental challenges. (Doc. No. 1 at ¶ 73.) In essence, teaching a computer to detect objects requires great computational resources and object detection can suffer when exposed to "partially covered objects, rotated objects, [and] scaled objects." (Id.) As Plaintiffs describe, "[i]t is difficult to program a computer to know a cat from a dog or a car from a boat, and, most importantly, to do so in a way that doesn't require the programmer to manually identify all possible objects." (Id.)

The '980 Patent sought to address these problems by developing a method to detect and track an object within a video quickly and accurately. (Id.)   In particular, the '980 Patent would detect and track an object within a video "by measuring the object as a collection of components in each image and, using a spatio-temporal model, determining the probability that the object is in any given image that make up the video." (Id. at ¶ 74.) Plaintiffs claim that "this approach was completely unheard of in the field of object detection" and although it was "relatively common to 'represent objects as collections of features with distinctive appearance, spatial extent, and position,' it was unknown in the art to use those components in object detection." (Id.) (internal citations omitted).

The "critical insight" of the '980 Patent, Plaintiffs argue, is the use of a spatio-temporal model. (Id. at ¶ 75.) The spatio-temporal model is a "graphical model comprising [of] nodes corresponding to each of the collection of components and to the object." (Id.)   Each node represents either an object or a component of the object. (Id.) This means that "the object…and the components of that object…are mapped using both 'the temporal compatibility of object state between frames'…and 'the spatial compatibility of the object and its components' within a single frame." (Id.)

Claim 1 of the '980 Patent describes the innovation as:

> A computer implemented method for object detection comprising:
> providing a spatio-temporal model for an object to be detected;
> providing a video comprising a plurality of images including the object;
> measuring the object as a collection of components in each image;
> determining a probability that the object is in each image; and
> detecting the object in any image upon comparing the probabilities for each
> image to a threshold for detecting the object.

(Doc. No. 1-5 at 12.) In simple terms, the '980 Patent describes an approach for detecting and

tracking an object within a video by observing that object in space over time.

III.   STANDARD OF REVIEW

Under Rule 12(b)(6), a party may move to dismiss a complaint for "failure to state a claim

upon which relief can be granted." Fed. R. Civ. P. 12(b)(6). To survive the motion to dismiss, the

complaint need not contain "detailed factual allegations," but it must contain sufficient factual

matter to "state a claim to relief that is plausible on its face." Ashcroft v. Iqbal, 556 U.S. 662, 678,

129 S.Ct. 1937, 173 L.Ed.2d 868 (2009) (quoting Bell Atl. Corp v. Twombly, 550 U.S. 544, 555,

570, 127 S.Ct. 1955, 167 L.Ed.2d 929 (2007)). In assessing the plausibility of a claim, a court

must accept all well-pleaded factual allegations in the complaint as true and draw all reasonable

inferences in favor of the plaintiff. In re Rockefeller Ctr. Prop., Inc. Sec. Litig., 311 F.3d 198, 215

(3d Cir. 2002). A court's review is limited to the allegations in the complaint, exhibits attached to

the complaint, and documents incorporated by reference. Mayer v. Belichick, 605 F.3d 223, 230

(3d Cir. 2010); El-Hewie v. Bergen Cty., 348 F. App'x 790, 794 (3d Cir. 2009).

It is well-settled that courts may determine patent eligibility under 35 U.S.C. § 101 at the

Rule 12(b)(6) stage. SAP Am., Inc. v. InvestPic, LLC, 898 F.3d 1161, 1166 (Fed. Cir. 2018)

(stating that patent eligibility "may be, and frequently has been, resolved on a Rule 12(b)(6) or (c)

motion"); FairWarning IP, LLC v. Iatric Sys., Inc., 839 F.3d 1089, 1097 (Fed. Cir. 2016) (stating

that "it is possible and proper to determine patent eligibility under 35 U.S.C. § 101 on a Rule

12(b)(6) motion" (quoting <u>Genetic Techs. Ltd. v. Merial L.L.C.</u>, 818 F.3d 1369, 1373–74 (Fed. Cir. 2016)); <u>see</u> <u>also</u> <u>Voter Verified, Inc. v. Election Sys. & Software LLC</u>, 887 F.3d 1376, 1379 (Fed. Cir. 2018) (affirming Rule 12(b)(6) dismissal based on § 101 patent ineligibility); <u>Maxon, LLC v. Funai Corp.</u>, 726 F. App'x 797, 798 (Fed. Cir. 2018) (same). Determining eligibility at the pleadings stage is possible, however, "only when there are no factual allegations that, taken as true, prevent resolving the eligibility question as a matter of law." <u>Aatrix Software, Inc. v. Green Shades Software, Inc.</u>, 882 F.3d 1121, 1125 (Fed. Cir. 2018).

As noted, Section 101 of the Patent Act provides that anyone who "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. <u>See</u> 35 U.S.C. § 101. The United States Supreme Court has recognized three exceptions to the broad categories of subject matter eligible for patenting under § 101: laws of nature, physical phenomena, and abstract ideas. <u>Alice Corp. Pty. v. CLS Bank Int'l</u>, 573 U.S. 208, 216 (2014). These exceptions "are 'the basic tools of scientific and technological work' that lie beyond the domain of patent protection." <u>Ass'n for Molecular Pathology v. Myriad Genetics</u>, Inc., 569 U.S. 576, 589 (2013) (quoting <u>Mayo Collaborative Servs. v. Prometheus Labs., Inc.</u>, 566 U.S. 66, 77-78 (2012)); <u>see</u> <u>also</u> <u>Alice</u>, 573 U.S. at 216. A claim falling within any one of these exceptions is directed to ineligible subject matter under § 101. "[W]hether a claim recites patent eligible subject matter is a question of law which may contain underlying facts." <u>Berkheimer v. HP Inc.</u>, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

Courts follow a two-step "framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." <u>Alice</u>, 573 U.S. at 217; <u>see</u> <u>also</u> <u>Mayo</u>, 566 U.S. at 77-78. First, at step one, the Court

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determines whether the claims are directed to one of the three patent-ineligible concepts. Alice, 573 U.S. at 217. If the claims are not directed to a patent-ineligible concept, "the claims satisfy § 101 and [the Court] need not proceed to the second step." Core Wireless Licensing S.A.R.L. v. LG Elecs., Inc., 880 F.3d 1356, 1361 (Fed. Cir. 2018). If, however, the Court finds that the claims at issue are directed to a patent-ineligible concept, the Court must then, at step two, search for an "inventive concept" – i.e., "an element or combination of elements that is 'sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.'" Alice, 573 U.S. at 217-18 (alteration in original) (quoting Mayo, 566 U.S. at 72-73). These two steps are discussed in more detail below.

C. Step One of the Alice Framework

At step one of Alice, "the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter." Internet Patents Corp. v. Active Network, Inc., 790 F.3d 1343, 1346 (Fed. Cir. 2015); see also Affinity Labs of Texas, LLC v. DIRECTV, LLC, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (step one looks at the "focus of the claimed advance over the prior art" to determine if the claim's "character as a whole" is to ineligible subject matter). "This 'directed to' inquiry does more than 'simply ask whether the claims involve a patent-ineligible concept'…Instead, we must look to the character of the claims as a whole to determine whether they are 'directed to' patent-ineligible subject matter." AI Visualize, Inc. v. Nuance Commc'ns, Inc., No. 2022-2109, 2024 WL 1449801, at *5 (Fed. Cir. Apr. 4, 2024) (citing Enfish, LLC v. Microsoft Corp., 822 F.3d 1327, 1335 (Fed. Cir. 2016)). In addressing step one of Alice, a court should be careful not to oversimplify the claims or the claimed invention because, at some level, all inventions are based upon or touch on abstract ideas, natural phenomena, or laws of nature. Alice, 573 U.S. at 217; see also McRO, Inc. v. Bandai Namco Games Am. Inc., 837

F.3d 1299, 1313 (Fed. Cir. 2016). "At step one, therefore, it is not enough to merely identify a patent-ineligible concept underlying the claim; [courts] must determine whether that patent-ineligible concept is what the claim is 'directed to.'" Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc., 827 F.3d 1042, 1050 (Fed. Cir. 2016).

D. Step Two of the Alice Framework

At step two of Alice, in searching for an inventive concept, a court looks at the claim elements and their combination to determine if they transform the ineligible concept into something "significantly more." Alice, 573 U.S. at 218; see also McRO, 837 F.3d at 1312. This second step is satisfied when the claim elements "involve more than performance of 'well-understood, routine, [and] conventional activities previously known to the industry.'" Berkheimer, 881 F.3d at 1367 (citation and internal quotation marks omitted); see also Mayo, 566 U.S. at 73. "The inventive concept inquiry requires more than recognizing that each claim element, by itself, was known in the art.... [A]n inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces." Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC, 827 F.3d 1341, 1350 (Fed. Cir. 2016). Whether claim elements or their combination are well-understood, routine, or conventional to a person of ordinary skill in the art is a question of fact. Berkheimer, 881 F.3d at 1368. Further, "[a] claim cannot rest on the patent-ineligible concept alone to transform the invention into something significantly more than that concept." AI Visualize, 2024 WL 1449801, at *5 (citing BSG Tech LLC v. Buyseasons, Inc., 899 F.3d 1281, 1290 (Fed. Cir. 2018)).

At both steps of the Alice framework, courts often find it useful "to compare the claims at issue with claims that have been considered in the now considerably large body of decisions applying § 101." TMI Sols. LLC v. Bath & Body Works Direct, Inc., No. 17-965-LPS-CJB, 2018

WL 4660370, at *5 (D. Del. Sept. 28, 2018) (citing Amdocs (Israel) Ltd. v. Openet Telecom, Inc.,

841 F.3d 1288, 1294 (Fed. Cir. 2016)); see also Enfish, LLC v. Microsoft Corp., 822 F.3d 1327,

1334 (Fed. Cir. 2016).

IV.   ANALYSIS

A. The '682 Patent is not Eligible for Protection Under 35 U.S.C. § 101

In its Partial Motion to Dismiss the Complaint, Defendants argue that the '682 Patent is

unpatentable because it fails under both steps of Alice. (Doc. No. 9 at 16-19.) Defendants submit

first that the '682 Patent is ineligible for patent protection under step one of Alice because it is

directed to the abstract idea of collecting and examining data to enable authentication. (Id. at 16-

18.)   Second, Defendants argue that the '682 Patent is ineligible for patent protection under step

two of Alice because it is not transformative or inventive but instead "merely recite[s] well-known

ways to authenticate and transmit data." (Id. at 18.)

Plaintiffs argue to the contrary that the '682 Patent is eligible for patent protection under

both Alice steps. (Doc. No. 15 at 15-21.) First, Plaintiffs contend that the '682 Patent is not

abstract because it "offers a specific technique to solve the computer-only problem of security and

authentication problems in network-based audio and visual streaming." (Id. at 15.) Second, even

if the '682 Patent is abstract, it nevertheless deserves patent protection because "the claims recite

a specific improvement to conventional audio and video streaming by using [a] more secure

authentication method that prevents unauthorized access and attacks." (Id. at 15-16.)

i. The '682 Patent Fails Step One of Alice

As noted above, to assess whether a claim is patent-eligible, courts engage under Alice in

a two-step analysis. Regarding the first step of the Alice framework, the relevant question is

whether the claims are directed to patent-ineligible subject matter. Here, the relevant inquiry is

whether the claims in the '682 Patent are directed to an abstract idea.

In Prism Technologies LLC v. T-Mobile USA, Inc., the court found that patents relating to

the authentication of data are directed to an abstract idea. 696 F. App'x 1014, 1017 (Fed. Cir.

2017). The court explained:

> the asserted claims are directed to an abstract process that includes: (1) receiving identity data from a device with a request for access to resources; (2) confirming the authenticity of the identity data associated with that device; (3) determining whether the device identified is authorized to access the resources requested; and (4) if authorized, permitting access to the requested resources.

Id. The court found that "[t]he patents-in-suit thus are directed to the abstract idea of 'providing

restricted access to resources.'" Id. (quoting In re TLI Commc'ns LLC Patent Litig., 823 F.3d 607,

613 (Fed. Cir. 2016)).

In Universal Secure Registry LLC v. Apple Inc. ("USR"), the court found patent claims

invalid because they were directed to the abstract idea of authenticating a user before permitting

account access. 10 F.4th 1342, 1349 (Fed. Cir. 2021). The claims at issue were directed to a

method for enabling a transaction between a user and a merchant where the merchant is given a

code instead of the user's credit card information. Id. The code is used to access a database that

indicates restrictions on the user's transactions with the merchant and allows a credit card company

to approve or deny the transaction based on the secure information. Id. Relying on Prism, the

court found that the claims were directed to the abstract idea of obtaining authentication data to

permit access. Id.

Similarly, in Secured Mail Solutions LLC v. Universal Wilde, Inc., the court found that

claims directed to the "idea of communicating information about a [mail object] by use of a

marking" are abstract. Secured Mail Sols. LLC v. Universal Wilde, Inc., 873 F.3d 905, 909 (Fed.

Cir. 2017). The patents at issue in <u>Secured Mail</u> described a method where a sender affixes an identifier to the outer surface of a mail object before the mail is sent. Then, "[c]omputers and networks are used to communicate the information about the mail object's contents and its sender after the mail object is delivered." <u>Id.</u> at 907. The patents recite methods for verifying the authenticity of the mail. <u>Id.</u> In one patent, a QR code, which is a two-dimensional barcode, is affixed to the outside of the mail object. <u>Id.</u> In another patent, a URL link is used. <u>Id.</u> The QR code and the URL are used to store data about the mail object and a recipient can use that information to authenticate the mail object. <u>Id.</u> The court found that the claims were directed to the abstract idea of using a marking affixed to the outside of the mail object to communicate information about the object including the sender and contents. <u>Id.</u> at 911.

These decisions support the argument that the '682 Patent is directed to the abstract idea of ensuring that transmitted data is not unwanted data. The '682 Patent is like the patent in <u>Prism</u> because it is directed to the abstract idea of receiving identifying data, confirming the authenticity of the data, and, if authorized, permitting access to the receiver. Claim 1 of the '682 Patent describes its innovation as a "method for transmitting data from a transmitter to a receiver," "providing transmitter-to-receiver authentication," and accepting or rejecting the information. (Doc. No. 1 at 89.) This language is nearly identical to the patent language in <u>Prism</u>. Moreover, just like in <u>USR</u>, the '682 Patent is "directed to the abstract idea of collecting and examining data to enable authentication." <u>USR</u>, 10 F.4th at 1352.

ii. The '682 Patent Fails Step Two of <u>Alice</u>

Plaintiffs contend that even if the '682 Patent is directed to an abstract idea, it is still patent-eligible under step two of the <u>Alice</u> paradigm. (Doc. No. 15 at 20.) Regarding the second step of the <u>Alice</u> framework, the relevant question is whether the claims in the '682 Patent contain

additional elements that would amount to something "significantly more" that would transform the Patent into a patent-eligible application of the abstract idea. Plaintiffs argue that the '682 Patent achieves this standard because it is inventive. It "recite[s] a specific improvement to conventional audio and video streaming by using [a] more secure authentication method that prevents unauthorized access and attacks." (Id. at 20-21.) But Defendants disagree, asserting that the '682 Patent claims merely recite well-known ways to authenticate and transmit data. (Doc. No. 9 at 18.)

To be an "inventive concept" the patent must "involve more than performance of 'well-understood, routine, [and] conventional activities previously known to the industry.'" Berkheimer v. HP, Inc., 881 F.3d 1360, 1367 (Fed. Cir. 2018). And simply reciting "concrete, tangible components is insufficient to confer patent eligibility to an otherwise abstract idea." In re TLI Communications LLC Patent Litigation, 823 F.3d 607, 613 (Fed. Cir. 2016). Fundamentally, step two "look[s] more precisely to what the claim elements add." Elec. Power Grp., LLC v. Alstom S.A., 830 F.3d 1350, 1353 (Fed. Cir. 2016). Here, Plaintiffs argue that the '682 Patent's inventive concept is authenticating data at the application layer before data is accepted. This, Plaintiffs argue, provides a technical solution to a security problem. (Doc. No. 15 at 21.) But, for the reasons that follow, this alleged addition fails to transform the '682 Patent into a patent-eligible application of an abstract idea.

In Prism, the court rejected plaintiff's argument that a patent was eligible because its claims "cover[ed] a concrete, specific solution to a real-world problem." Prism Technologies LLC, 696 Fed. Appx. at 1017. There, the plaintiff argued that although the patent recited "a host of elements that are indisputably generic computer components," the combinations of those components with identity data hardware transformed the patent's claims to "yield[] a novel, effective solution to

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real-world problems, which industry came to adopt several years after [plaintiff's] inventions." Id. at 1018. The court rejected this argument and found that the purported innovation "did not rise to the level of an inventive concept." Id. The court held that "the asserted claims recite no more than the sort of 'perfectly conventional' generic computer components employed in a customary manner that we have previously held insufficient to transform the abstract idea into a patent-eligible invention." Id. (quoting Intellectual Ventures I LLC v. Symantec Corp., 838 F.3d 1307, 1321 (Fed. Cir. 2016)).

Here, the '682 Patent is not inventive because it, like the patent in Prism, uses known components in a customary manner. Plaintiffs acknowledge that the '682 Patent is comprised of known and conventional parts. Nevertheless, they argue that the '682 Patent is inventive because its inventive concept is found in its "non-conventional and non-generic arrangement of known, conventional pieces" by authenticating data at the application layer. (Doc. No. 15 at 21) (quoting Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC, 827 F.3d 1341, 1350 (Fed. Cir. 2016)). However, "the combination of [] long-standing conventional methods of authentication [that] yields expected results of an additive increase in security" is not an inventive concept that would transform an abstract idea into patentable subject matter. Universal Secure Registry LLC v. Apple Inc., 10 F.4th 1342, 1353 (Fed. Cir. 2021). Although Plaintiffs reference benefits to authenticating data at the application layer, these benefits are from the known application layers' ordinary functions and do not transform the abstract concept into an inventive concept. In sum, the '682 Patent is directed to an abstract idea and the claims contain no additional inventive elements that transform them into a patent-eligible application of the abstract idea. As courts have found, claims lack an inventive concept when they do not "require[] anything other than conventional computer and network components operating according to their ordinary functions."

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Bluebonnet Internet Media Servs., LLC v. Pandora Media, LLC, No. 2022-2215, 2024 WL 1338940, at *2 (Fed. Cir. Mar. 29, 2024) (quoting Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC, 874 F.3d 1329, 1339 (Fed. Cir. 2017)). Therefore, the Defendants' Motion to Dismiss Count IV relating to the '682 Patent will be granted.

B. The '980 Patent is Eligible for Protection Under 35 U.S.C. § 101

Next, Defendants argue that the '980 Patent is unpatentable because it fails under both steps of Alice. First, Defendants claim that the '980 Patent is ineligible for patent protection under step one of Alice because it is directed to an abstract idea of detecting an object in an image. (Doc. No. 9 at 19.) Second, Defendants argue that the '980 Patent is ineligible for patent protection under step two of Alice because it "lacks any 'element or combination of elements' sufficient to provide 'significantly more than a patent upon the ineligible concept itself.'" (Id. at 24) (quoting ChargePoint, Inc. v. SemaConnect, Inc., 920 F.3d 771 at 765 (Fed. Cir. 2019)).

Plaintiffs disagree, arguing that the '980 Patent is eligible for patent protection under both Alice steps. (Doc. No. 15 at 21.) First, Plaintiffs assert that the '980 Patent is not an abstract idea because it "offers a separate technological improvement: optimized computer vision with object detection." (Id.) Second, even if the '980 Patent is abstract, it nevertheless deserves patent protection because it provides a technological improvement and "is unconventional alone and in combination with other claim limitations." (Id. at 25.)

As noted earlier, under the first step of the Alice framework, the relevant question is whether the claims are directed to patent-ineligible subject matter. Thus, the relevant inquiry is whether the claims in the '980 Patent are directed to an abstract idea.

Defendants argue that it does because the '980 Patent is directed to the abstract idea of detecting an object in an image. Claim 1 of the '980 Patent:

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> [M]erely breaks down that [abstract] concept into basic steps using broad, functional terms: (1) <u>providing</u> object and image data, (2) <u>processing</u> ('measuring') that data, and (3) <u>comparing</u> it to 'determine' and 'detect' matches (the 'probability' that the object is present).

(Doc. No. 9 at 19-20) (emphasis in original). In support of this contention, Defendants make three arguments. First, patents directed to the collection, processing, and comparison of information fall into a class of abstract claims that are not patent-eligible. (<u>Id.</u> at 20.) Second, "the claims merely implement commonplace human concepts and mathematical algorithms" and, in essence, simply use a computer to automate human vision, which can detect a familiar object based on observations that are collected while viewing an object's features over time. (<u>Id.</u> at 22.) Third, the claims of the '980 Patent are "unlike the solutions to computer-specific problems that may sometimes satisfy <u>Alice</u>" because "[u]nlike such inventions, the '980 [P]atent uses only conventional technology." (<u>Id.</u> at 23.) Defendants maintain that even the use of a spatio-temporal model is not an improvement, "but instead uses the model for its ordinary, expected purpose." (<u>Id.</u>)

Since <u>Alice</u>, courts have found inventions to be patent-eligible where they have made "non-abstract improvements to existing technological processes and computer technology." <u>Koninklijke KPN N.V. v. Gemalto M2M GmbH</u>, 942 F.3d 1143, 1150 (Fed. Cir. 2019). In <u>Thales Visionix Inc. v. United States</u>, the court found a patent eligible that related to tracking the motion of an object relative to a moving reference frame. 850 F.3d 1343, 1345 (Fed. Cir. 2017). The claims there specified a particular configuration of sensors and a method of using sensor data to more accurately calculate the position and orientation of an object. <u>Id.</u> This, the court held, was not directed to an abstract idea but rather used sensors in a non-conventional manner to reduce errors in measuring the position and orientation of a moving object. <u>Id.</u> at 1349.

Here, the '980 Patent similarly offers a technological improvement by optimizing computer vision with object detection. Central to the '980 Patent's claims are the use of a spatio-temporal

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model. Plaintiffs submit that the use of this model speeds up object detection and is particularly effective in detecting overlapping components or light changes within an image. "The '980 [Patent] claims rely on a spatio-temporal model with a series of nodes representing the object or a component of that object" and those objects and their components are mapped over time to determine the probability that an object is present. (Doc. No. 15 at 22.) Like the sensors in Thales, these nodes collect specific data that the claims process into more accurate object detection. Moreover, the '980 Patent does not simply "automate human vision" as suggested by Defendants. (Doc. No. 9 at 22.) Instead, the '980 Patent "uses a specific model and set of components to provide an improved simulation of object recognition, offering an inventive solution that is reliable for obscured and overlapping objects and for images in varying light conditions." (Doc. No. 15 at 24.) This model goes beyond conventional technology. In sum, the '980 Patent is not directed to an abstract idea. For all these reasons, the claims of the '980 Patent satisfy step one of the Alice framework and are patent-eligible.

As noted above, because the '980 Patent is not directed to patent-ineligible subject matter and satisfies the first step in the Alice framework, the Court need not reach the second step. See Core Wireless 15 Licensing S.A.R.L. v. LG Elecs., Inc., 880 F.3d 1356, 1361 (Fed. Cir. 2018). Therefore, the Defendants' Motion to Dismiss Count V relating to the '980 Patent will be denied.

C. Defendants' Motion to Dismiss Counts IV and V as Representative Claims

Defendants argue that Counts IV and V of Plaintiffs' Complaint should be dismissed because Claim 1 in each challenged patent is representative and therefore directed to the same abstract idea. "Courts may treat a claim as representative in certain situations, such as if the patentee does not present any meaningful argument for the distinctive significance of any claim limitations not found in the representative claim or if the parties agree to treat a claim as representative." Berkheimer v. HP Inc., 881 F.3d 1360, 1365 (Fed. Cir. 2018) (citing Elec. Power

Grp., LLC v. Alstom S.A., 830 F.3d 1350, 1352 (Fed. Cir. 2016); Intellectual Ventures I LLC v.

Symantec Corp., 838 F.3d 1307, 1316 & n.9 (Fed. Cir. 2016)).

Here, Claim 1 of the '682 Patent is representative. As Defendants argue, the remaining

claims of the '682 Patent are substantially similar and linked to the same abstract idea of collecting

and examining data to enable authentication. Courts have held that where claims are "substantially

similar and linked to the same" abstract idea, analyzing a representative claim is proper. Cleveland

Clinic Found. v. True Health Diagnostics LLC, 859 F.3d 1352, 1360 (Fed. Cir. 2017) (citing

Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A., 776 F.3d 1343, 1348 (Fed.

Cir. 2014)).

The Court has found supra that Claim 1 of the '682 Patent relates to the abstract idea of

collecting and examining data to enable authentication. Claim 1 describes the process of inserting

authentication data, analyzing the authentication data, and discarding that unwanted data all

through the use of conventional technology. While Count IV of the Complaint only recites Claim

1 of the '682 Patent, Plaintiffs state that Defendants' accused products "infringe at least claim 1 of

the '682 Patent." (See Doc. No. 1 at ¶¶ 234-35) (emphasis added). Nevertheless, all the '682

Patent claims are directed to the abstract idea of appending authentication data during transmission

to discard unwanted communications through the use of conventional data transmission processes

and conventional authentication.

In addition, Plaintiffs do not argue specifically that Claim 1 in the '682 Patent is not

representative of the twenty-seven (27) remaining claims in the '682 Patent. See Sanderling

Mgmt. Ltd. v. Snap Inc., 65 F.4th 698, 701 n.1 (Fed. Cir. 2023) (finding that generalized objections

to defendant's representative claim arguments do not present a meaningful argument for the

distinctive significance of any claim limitations not found in the representative claim). For these

reasons, because Claim 1 is patent-ineligible, the balance of the claims too are patent-ineligible. Therefore, Count IV will be dismissed because the '682 Patent is patent-ineligible. Realtime Data LLC v. Array Networks Inc., 537 F. Supp. 3d 591 (D. Del.), aff'd, No. 2021-2251, 2023 WL 4924814 (Fed. Cir. Aug. 2, 2023).

Finally, because the claims in the '980 Patent are not abstract and therefore patent-eligible, there is no need to discuss the representational nature of Claim 1 in that Patent. And, as noted supra, Count V will not be dismissed.

D. Defendants' Motion to Dismiss Plaintiffs' Claims for Indirect and Willful Infringement

In the Partial Motion to Dismiss the Complaint, Defendants also argue that Plaintiffs' claims for indirect and willful infringement should be dismissed because the Complaint does not adequately plead pre-suit knowledge. (Doc. No. 9 at 31.) The Court disagrees.

Indirect infringement claims "require proof that the defendant's conduct occurred after the defendant (1) knew of the existence of the asserted patent and (2) knew that a third party's acts constituted infringement of the patent." ZapFraud, Inc. v. Barracuda Networks, Inc., 528 F. Supp. 3d 247, 249 (D. Del. 2021). Claims based on willful infringement "similarly require proof that the defendant knew about the asserted patents and knew or should have known that its conduct amounted to infringement of those patents." Id. However, at the motion to dismiss stage, a plaintiff "need not 'prove its case at the pleading stage.'" Nalco Co. v. Chem-Mod, LLC, 883 F.3d 1337, 1350 (Fed. Cir. 2018) (quoting In re Bill of Lading Transmission & Processing Sys. Pat. Litig., 681 F.3d 1323, 1339 (Fed. Cir. 2012)). Instead, "[t]he complaint must place the 'potential infringer . . . on notice of what activity . . . is being accused of infringement.'" Id. (quoting K-Tech Telecommunications, Inc. v. Time Warner Cable, Inc., 714 F.3d 1277, 1284 (Fed. Cir. 2013).

Here, Plaintiffs adequately pled claims of willful and indirect infringement. The Complaint alleges that VideoLab and Meta representatives spoke to each other on a number of occasions. (Doc. No. 1 at ¶ 140.) On January 30, 2020, the parties met in person and VideoLab representatives presented Meta with a proposal to license VideoLab's platform. (Id.) The Complaint continues to describe additional conversations between the parties. (Id.) Importantly, Plaintiffs allege that their representatives reached out to Defendants and state "[w]ith regard[s] to Facebook, and based on our analysis so far, we have determined that VideoLabs' current patent portfolio is relevant to the majority of [Defendants'] annual revenue in some way and we have 17 unique claim charts completed or in development…related to [Defendants'] backend infrastructure." (Id.) The Complaint also avers that Plaintiffs' sent a letter to Defendants regarding their alleged infringement. (Id. at ¶ 141.) These allegations, viewed in the light most favorable to Plaintiffs at this stage of the litigation, plausibly show that Defendants had pre-suit knowledge and for this reason the claims of indirect and willful infringement are sufficiently pled.

V.   CONCLUSION

For the reasons stated above, Defendants' Partial Motion to Dismiss the Complaint (Doc. No. 8) will be granted in part and denied in part. An appropriate Order follows.