IN THE UNITED STATES DISTRICT COURT

FOR THE DISTRICT OF DELAWARE

SOBER-EYE INC.,

Plaintiff;

v.

BRIGHTLAMP, INC.,

Defendant.

Civil Action No. 20-cv-790-RGA

MEMORANDUM OPINION

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/s/ Richard G. Andrews ANDREWS, UNITED STATES DISTRICT JUDGE:

Before me is Defendant Brightlamp's motion to dismiss for failure to state a claim. (D.I. 16). I have considered the parties' briefing on the issue. (D.I. 17, 19, 21). For the following reasons, Brightlamp's motion to dismiss is DENIED.

I. BACKGROUND

Plaintiff Sober-Eye sued Brightlamp for infringement of Sober-Eye's Patent No.

9,888,845 (the '845 patent). (D.I. 14). The '845 patent describes a system and method of

detecting cognitive impairment by analyzing a pupil's response to light on a device such as a

smartphone. ('845 patent at 1:58-68). Sober-Eye asserts at least claims 1, 3, 14, 17, and 25 of

the '845 patent. (D.I. 14 at ¶¶ 30-32).

Independent method claim 1 recites:

A method comprising:

capturing video of an eye exposed to light stimuli over a predetermined time using a video camera of a portable video capture device (PVCD);

processing the video to locate at least one feature of the eye;

measuring a change in the feature over the predetermined time in response to the light stimuli;

analyzing data from the measured change in the feature, wherein analyzing data includes extracting data from the measured change in the feature, calculating a number of parameters from the extracted data, correlating the calculated parameters against predetermined reference parameters and predicting a degree of cognitive impairment based on the results of the correlation; and

outputting through a user interface in the portable video capture device the degree of impairment to a user.

The other asserted claims (both method and system) are very similar in the way each

describes the steps to capture and process video data of an eye's response to light.

II. LEGAL STANDARD

Section 101 of the Patent Act defines patent-eligible subject matter. It 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." 35 U.S.C. § 101. The Supreme Court recognizes three categories of subject matter that are not eligible for patents—laws of nature, natural phenomena, and abstract ideas. *Alice Corp. Pty. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014).

To distinguish "patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts," the court first determines whether the claims are drawn to a patent-ineligible concept. *Id.* at 217. If the answer is yes, the court must look to "the elements of the claim both individually and as an ordered combination" to see if there is an "inventive concept—*i.e.*, an element or combination of elements that is sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the ineligible concept itself." *Id.* at 217-18 (cleaned up). "A claim that recites an abstract idea must include additional features to ensure that the claim is more than a drafting effort designed to monopolize the abstract idea." *Id.* at 221 (cleaned up). Further, "the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." *Id.* at 223.

Patentability under 35 U.S.C. § 101 is a threshold legal issue. *Bilski v. Kappos*, 561 U.S. 593, 602 (2010). Accordingly, the § 101 inquiry is properly raised at the pleading stage if it is apparent from the face of the patent that the asserted claims are not directed to eligible subject matter. *See Cleveland Clinic Found. v. True Health Diagnostics LLC*, 859 F.3d 1352, 1360

(Fed. Cir. 2017), *cert. denied*, 138 S. Ct. 2621 (2018). This is, however, appropriate "only when there are no factual allegations that, taken as true, prevent resolving the eligibility question as a matter of law." *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1125 (Fed. Cir. 2018).

III. DISCUSSION

The parties dispute both prongs of the *Alice* test. I find that the complaint has plausibly pled an inventive concept in the use of a smartphone or similar device to detect a degree of cognitive impairment based on pupillary light reflex at *Alice* step two.¹ Thus, I need not and do not decide whether the patents are directed to an abstract idea at *Alice* step one.

Brightlamp argues that the claims are not directed toward an improvement in computer technology and do not otherwise disclose an inventive concept. (D.I. 17 at 16-20). Sober-Eye's Amended Complaint, though, alleges, "as of the date of the patent's application, no way existed to make a smartphone or tablet device identify key features of the human eye, make minute measurements in response to light, or analyze a level of impairment." (D.I. 14 at ¶ 11). Thus, Sober-Eye argues, the claimed technology improves the operation of a smartphone and allows for "the tangible and useful prediction of a degree of impairment." (D.I. 19 at 14, 17).

I do not think that the claimed technology improves the operation of a smartphone in the sense that the Court of Appeals uses to describe improvements to computer technology. The

¹ The parties dispute whether the technology for determining impairment was well-known and understood at the time of the invention. Plaintiff argues that Defendant is inferring a lack of inventiveness in this regard from the absence of allegations in the Amended Complaint. (D.I. 19 at 14). I do not see anything in the Amended Complaint or the asserted patent that suggests there is any inventiveness in regard to how to determine impairment using a machine that examines the eyes. If that were Plaintiff's theory, Plaintiff would have to make the requisite allegations, which it does not. If this were the issue, I would at least let Plaintiff make a motion to be allowed to amend its complaint.

invention does not improve cameras in a smartphone. It does not improve processing speed, the hardware, the way the hardware works, or anything else related to the technology in a smartphone. But it does purport to compensate for some inherent limitations of a smartphone due to the smartphone's portability. Thus, the improved operation is simply a useful software program that does something that software programs for smartphones did not do (or, perhaps, did not do well) at the time of the invention. I think these conclusions are entirely consistent with what the patent itself discloses as the invention. "The present disclosure relates generally to a system and method for optical detection of cognitive impairment, and more particularly to an application or software program designed to permit a user to optically detect cognitive impairment using a portable video capture device." '845 Pat., 1:14-18. "The objective of the invention is to provide a non-invasive, portable way to measure pupillary light reflex and other involuntary eye movements and correlate such measurement to an impairment level that can be associated with fatigue, alcohol, drug consumption or trauma." *Id.* at 1:57-62.

I agree with Sober-Eye that it is plausible that the asserted claims of the patent include an inventive concept of using a smartphone or similar device to predict a degree of impairment by writing a program that can do so on a smartphone.

Much of Brightlamp's briefing focuses on the level of generality with which the specification describes the invention. Brightlamp argues, "The specification of the '845 Patent provides no additional details on the implementation of the claimed invention, or the specific timing or measurement of specific pupil properties to determine impairment." (D.I. 17 at 18). For instance, Figures 13A and 13B, which are graphs depicting pupil dilation over time, do not have units on the X or Y axes. (*Id.* at 18-19).

Some courts have found a patent's disclosure to be so lacking that the patent's subject matter was effectively an abstract idea. *See Vehicle Intel. & Safety LLC v. Mercedes-Benz USA, LLC*, 635 F. App'x 914, 917 (Fed. Cir. 2015) ("Much of [plaintiff's] briefing centers on the use of an 'expert system' that improves over the prior art by providing faster, more accurate and reliable impairment testing. But neither the claims at issue nor the specification provide any details as to how this 'expert system' works or how it produces faster, more accurate and reliable results."); *Internet Pats. Corp. v. Gen. Auto. Ins. Servs., Inc.*, 29 F. Supp. 3d 1264, 1269 (N.D. Cal. 2013), *aff'd sub nom. Internet Pats. Corp. v. Active Network, Inc.*, 790 F.3d 1343 (Fed. Cir. 2015) ("The Court finds that by setting out the abstract idea of a known technological challenge without setting out any specific disclosures, the Patent added no elements or combination of elements, sometimes referred to as the inventive concept, sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the natural law or the abstract idea." (cleaned up)).

Unlike the patents in *Mercedes-Benz* and *Internet Pats. Corp.*, where the inventive concept was not supported by "any" details or specific disclosures, the '845 patent includes some level of technical detail in the specification. *See* '845 Pat., 8:39-9:3. The specification describes algorithms that allow for the calculation of a level of impairment on a smartphone or other personal video capture device ("PVCD"). The compensation algorithm, for instance, accounts for the effect of a shaky hand in the video recording process:

[A] compensation algorithm will analyze the change of size of pupil and iris from frame to frame. Any change in size of iris is due to PVCD movement only, while changes in pupil size are due to both to [sic] pupil reaction to light stimuli and PVCD movements. The compensation algorithm will use the change in the size of iris to extrapolate the pupil size change due only to the light stimuli, effectively removing the effect of the PVCD movement of pupil size change due to light stimuli only.

Id. at 8:58-67. The specification further states that this is an advance over the prior art. *Id.* at 9:22-28 ("[I]n prior art approaches to measuring pupil contraction or dilation the camera was required to be fixed relative to the eye. In contrast, [the claimed method is] tolerant of movement during the predetermined time in which video is captured.").

Brightlamp may ultimately be right about the sparse disclosure, but at this stage it appears that Brightlamp's arguments go more to patentability than eligibility. *See Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1354 (Fed. Cir. 2016) (Newman, J., concurring) ("Claims that are . . . unsupported by description or that are not enabled raise questions of patentability, not eligibility."). Sober-Eye has alleged enough to plausibly plead that the '845 patent contains an inventive concept that was not "well-understood, routine, or conventional" in the field. *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018). I will therefore deny Brightlamp's motion to dismiss.

IV. CONCLUSION

An appropriate order will issue.