UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MISSOURI
EASTERN DIVISION

FACETOFACE BIOMETRICS, INC.,	)	
	)	
Plaintiff,	)	
	)	
vs.	)	Case No. 4:22 CV 429 CDP
	)	
APPLE, INC.,	)	
	)	
Defendant.	)	

MEMORANDUM AND ORDER

FacetoFace Biometrics alleges that Apple infringes its patent directed to sending and receiving messages using dynamic emoticons. Defendant moved to dismiss the complaint under Fed. R. Civ. P. 12(b)(6) on the ground that plaintiff's patent is invalid for failing to claim a patentable subject matter. ECF 16. In opposition to dismissal, plaintiff submitted the declaration of an expert witness attesting to the patent eligibility of the patent at issue in this case. ECF 22-3. For that reason, I converted defendant's motion to one for summary judgment under Fed. R. Civ. P. 12(d) and provided the parties with an opportunity to submit additional arguments and evidence for the Court's consideration. ECF-27. After additional briefing by both parties, the motion is now ripe for resolution.

The claims recite an abstract idea devoid of instructions or algorithms for accomplishing claimed steps, which are carried out using generic computers,

cameras, and messaging applications used in a conventional manner. As such, the patent fails the eligibility requirements of 35 U.S.C. § 101 and is invalid. Defendant's motion for summary judgment is granted for the reasons set out below.

Standards Governing Summary Judgment

Summary judgment is appropriate if, after viewing the facts and all reasonable inferences in the light most favorable to the nonmoving party, the record "shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a); *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 587 (1986). "Once a party moving for summary judgment has made a sufficient showing, the burden rests with the non-moving party to set forth specific facts, by affidavit or other evidence, showing that a genuine issue of material fact exists." *Nat'l Bank of Comm. v. Dow Chem. Co.*, 165 F.3d 602, 607 (8th Cir. 1999).

The non-moving party "must do more than simply show that there is some metaphysical doubt as to the material facts." *Matsushita*, 475 U.S. at 586. "They must show there is sufficient evidence to support a jury verdict in their favor." *Nat'l Bank*, 165 F.3d at 607 (citing *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 249 (1986)).

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Background Facts

Plaintiff filed its complaint against defendant on April 13, 2022, alleging infringement of claims 1–5, 7, 8, 11, 14, 15, 17, and 18 of U.S. Patent No. 11,042,623 ("the '623 patent"). ECF 1 at 5. The '623 patent, attached to the complaint as Exhibit 1 and reviewed by me in its entirety, is titled "Expression Recognition in Messaging Systems," and issued on June 22, 2021. ECF 1-1 at 2. [1] The claims of the '623 patent recite generating and transmitting a message containing a dynamic emoticon.[2] Independent claim 1 of the '623 patent claims:

> 1. A computer device comprising at least one processor in communication with at least one memory device, wherein the at least one processor is programmed to:
>
> receive a selection of an emoticon;
>
> monitor a sensor feed provided by one or more sensors of the computer device to detect a plurality of human facial expression states;
>
> automatically generate a dynamic emoticon that simulates the detected plurality of human facial expression states on the selected emoticon based on the sensor feed of the plurality of human facial expression states; and
>
> route a message with the dynamic emoticon to a second computer device.

[1] On its face, the '623 patent claims priority to a provisional application filed on March 10, 2014. ECF 22-1 at 2.

[2] In their briefing, the parties do not discuss the independent claims separately or argue that the dependent claims change the outcome of the patent-eligibility analysis. Instead, they just refer to all claims collectively as "the claims," so the Court does not separately determine the patent-eligibility of the asserted claims. *See Am. Axle & Manufacturing, Inc. v. Neapco Holdings LLC*, 967 F.3d 1285, 1299 (Fed. Cir. 2020).

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ECF 1-1 at 17. Independent claim 11 of the '623 patent claims:

> 11. A computer-implemented method of operating a messaging application, the method comprising:
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> receiving a selection of an emoticon;
>
> monitoring a sensor feed provided by one or more sensors of a computer device to detect a plurality of human facial expression states;
>
> automatically generating a dynamic emoticon that simulates the detected plurality of human facial expression states on the selected emoticon based on the sensor feed of the plurality of human facial expression states; and
>
> route a message with the dynamic emoticon to a second computer device.

ECF 1-1 at 17.

The specification states that "the disclosed technology can implement expression recognition process in addition to the biometric recognition process to provide additional contextual information associated with a user's emotional state and mood when using a messaging application." ECF 1-1 at 13. It provides:

> For another example, the messaging application can use the expression recognition process to add context to conversations between users of the messaging system. In some cases, the recognized expression of a sender user can be added as an emoticon to a message. In some cases, the recognized expression of a viewer user can be fed back to the sender as a status update.

ECF 1-1 at 14. In the "RELATED FIELD" section, the specification explains how "at least one embodiment of this disclosure relates generally to an electronic messaging system, and in particular to privacy and security of an electronic

messaging system." ECF 1-1 at 12. The asserted dependent claims add limitations to Claims 1 and 11. Claims 2 and 7 recite embedding the emoticon or dynamic emoticon in a message or messaging interface. Claim 3 adds a facial recognition feature. Claims 4, 5, 14 and 15 relate to specific types of facial expressions that can be detected. Claims 8 and 17 require facial expressions to be detected in real time. Claim 18 requires continuous detection of facial expressions.

Plaintiff alleges that defendant infringes its patent by selling various versions of the Apple iPhone and iPad in the United States with the ability to create and send "Memojis," which allows users to send an emoticon capturing a user's facial expression and voice. Plaintiff's complaint asserts claims for induced and contributory infringement.

Defendant contends that plaintiff's patent is invalid for failing to claim a patentable subject matter. Defendant asserts that the claims recite purely functional, results-oriented steps to generate, process, and transmit information using well-known, conventional, off-the-shelf devices and messaging applications and are devoid of any instructions or algorithms for accomplishing these steps. For this reason, defendant argues that the claims merely recite an abstract idea and fail the patent eligibility requirements of 35 U.S.C. § 101.[3]

[3] Defendant also seeks dismissal under Rule 12(b)(6) on the ground that plaintiff has not adequately alleged the elements of induced and contributory infringement. To state a claim for induced infringement, plaintiff must plead facts that plausibly show direct infringement and that

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Plaintiff opposes the dismissal of its complaint, contending that its patent is not an abstract idea because it adds to or improves the functionality of a computer system. Plaintiff asserts that the '623 Patent offers a novel method of incorporating an end user's dynamic emotional state to provide emotional context both in the direct use of the messaging application as well as for use in authentication of and advertising to those users. According to plaintiff, because the asserted claims are not results-oriented and are instead directed toward adding to the functionality of computer-based messaging applications, they are not abstract under 35 U.S.C. §101.

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the accused infringer "knowingly induced infringement and possessed specific intent to encourage another's infringement." *Minn. Mining & Mfg. Co. v. Chemque, Inc.*, 303 F.3d 1294, 1304–05 (Fed. Cir. 2002); 35 U.S.C. § 271(b). Specific intent requires a "showing that the alleged infringer's actions induced infringing acts and that he knew or should have known his actions would induce actual infringements." *DSU Med. Corp. v. JMS Co., Ltd.*, 471 F.3d 1293, 1304 (Fed. Cir. 2006) (cleaned up).

To state a claim for contributory infringement, plaintiff must plead facts plausibly showing that the accused infringer sells or offers to sell a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process. The "material or apparatus" must (1) constitute a material part of the invention, (2) not be a staple article or commodity of commerce suitable for substantial non-infringing uses, and (3) be known to the infringer to be especially made or especially adapted for use in the infringement. 35 U.S.C. § 271(c); *see also In re Bill of Lading Transmission & Processing Sys. Patent Litig.*, 681 F.3d 1323, 1337 (Fed. Cir. 2012).

Since I am dismissing this case for lack of a patentable subject matter, I do not reach these alternative arguments for dismissal.

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Evidence Submitted in Opposition to Summary Judgment

In opposition to summary judgment, plaintiff has offered the expert declaration of Dr. Ioannis A. Kakadiaris,[4] which appears in the record as ECF 22-3. Dr. Kakadiaris's opinion totals three pages in length and attaches two exhibits: his curriculum vitae and the '623 Patent. His opinion is as follows:

> 5. The invention of the '623 Patent includes elements that specifically apply the invention rather than dictating a result.
>
> 6. The '623 Patent recites an addition to the functionality of computer devices. Independent claim 1, for example, states in the relevant part that the computer device will "automatically generate a dynamic emoticon that simulates the detected plurality of human facial expression states on the selected emoticon based on the sensor feed of the plurality of human facial expression states."
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> 7. The above claim recites a method for incorporating various inputs of computer devices (e.g., phones) to solve an issue that has frustrated users of digital messaging applications. Although computer devices have included libraries of emoticons for users to attach to messages, those emoticons had to be created by an artist, and the user would have to find an included emoticon that approximated how they were feeling.
>
> 8. The invention of the '623 Patent addresses this by incorporating information from a sensor attached to a computer device to detect a plurality of human facial expression states. The invention allows a computer device to automatically generate a dynamic emoticon that simulates the detected plurality of human facial expression states on the selected emoticon based on the sensor feed of the plurality of human facial expression states. The invention then allows the computer device to route a message with the dynamic emoticon to a second computer device. This allows the user receiving the message to understand the emotional context of the one sending them a message to avoid issues resulting from a lack of dynamic emotional context in digital messaging.

[4] Dr. Kakadiaris has a Ph.D. in Computer Science from the University of Pennsylvania.

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> 9. Based on my expertise, I conclude that the claims of the '623 Patent are directed toward improving the functionality of computer-based messaging.
>
> 10. Further, the '623 Patent's claims contain an inventive concept that was not well-understood, routine, or conventional in the field prior to the priority date of March 10, 2014.
>
> 11. Claim 1 includes "automatically generating a dynamic emoticon that simulates the detected plurality of human facial expression states." Prior to the priority date of March 10, 2014 for the '623 Patent, this was not well-understood, routine, or conventional in the field of digital messaging applications. The inventive concept is the idea of using established techniques to do something (i.e., simulates the detected plurality of human facial expression states on the selected emoticon based on the sensor feed of the plurality of human facial expression states; and route a message with the dynamic emoticon to a second computer device) that no one had previously thought of doing.
>
> 12. The invention of the '623 Patent simulates the detected plurality of human facial expression states on the selected emoticon. It then routes a message with the dynamic emoticon to a second computer device. This was not well-understood, routine, or conventional in the field at the time of the invention of the '623 Patent.
>
> 13. Based on my expertise, I conclude that the claimed invention of the '623 Patent includes an inventive concept that was not well-understood, routine, or conventional in the field prior to March 10, 2014.

ECF 22-3. This declaration is insufficient to create a disputed issue of fact on patentability, as Dr. Kakadiaris provides nothing more than a conclusory opinion unsupported by any facts or evidence. *See, Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1320, 1325-26 (Fed. Cir. 2016) (holding that even the "existence in the record of dueling expert testimony does not necessarily raise a genuine issue of material fact."). As such, I do not rely on it in my determination

of patent-eligibility and refer instead to the claims and the specifications of the '623 patent in reaching my decision. *Id.* at 1325 (concluding that district court properly disregarded expert opinions in finding subject matter patent ineligible based upon claims and specifications).

Plaintiff also filed a video announcement made by defendant at an Apple event held in September of 2017, during which an Apple employee discussed the latest iPhone and "Memojis," calling them new and innovative. ECF 32, 33. This evidence does not create a disputed issue of fact on patentability, as what an Apple employee said about the "Memojis" feature on an iPhone is not probative of whether the '623 patent claims a patentable subject matter. I do not consider it in my evaluation of the claims.

Finally, in opposition to summary judgment plaintiff submitted a portion of the '623 Patent prosecution history from the Patent and Trademark Office ("PTO"). ECF 22-2. The Patent and Trademark Office determined the '623 Patent claimed eligible subject matter under 35 U.S.C. §101. ECF 22-2 at 4–5. The PTO issued an Office Action Summary that evaluated the patent eligibility of the '623 Patent under 35 U.S.C. § 101. ECF 22-2 at 4–5. The PTO found that the '623 Patent "applies the abstract idea in some other meaningful way beyond generally linking [it] to a particular technological environment." ECF 22-2 at 4–5. The PTO pointed to "the step of automatically modifying a previously-selected

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emoticon based on the detected human facial expression to generate a modified emoticon which simulates the detected facial expression," in reaching its determination. ECF 22-2 at 4–5. The PTO therefore found that the '623 Patent's claims, "are not directed to an abstract idea" under step one of the United States Supreme Court's two-step test set out in *Alice Corp. Pty v. CLS Bank Int'l*, 573 U.S. 208 (2014), "and it is not necessary to reach step 2B." ECF 22-2 at 4–5.

This evidence does not create a disputed issue of fact on patentability as "all patents must be approved by an examiner at the USPTO in order to become a patent. The fact that a patent was not rejected by an examiner is not enough to support its argument that the patent is directed to a patent-eligible concept." *Glasswall Solutions Ltd. v. Clearswift Ltd.*, 2017 WL 5882415, at *5 (W.D. Wash. Nov. 29, 2017) (cleaned up); *see also Gabara v. Facebook, Inc.*, 484 F. Supp. 3d 118, 128 n.6 (S.D.N.Y. 2020), *aff'd*, 852 F. App'x 541 (Fed. Cir. 2021) (granting motion to dismiss under 35 U.S.C. §101 and finding claims were patent ineligible and directed toward an abstract idea where the PTO examiner stated that all claims of the patent "are directed to processing a conversation, which is not an abstract idea"). Therefore, I do not consider the PTO's findings as probative evidence on the issue of patent eligibility.

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Legal Standards

Section 101 of the Patent Act provides that "[w]hoever invents or discovers a 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. However, "[l]aws of nature, natural phenomena, and abstract ideas are not patentable." *Alice*, 573 U.S. at 216 (cleaned up). These exceptions are "reserved exclusively to none." *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012) (cleaned up).

Whether patent claims are drawn to patent-eligible subject matter under 35 U.S.C. § 101 is an issue of law for the court to decide. *See Microsoft Corp. v. I4I Ltd. P'ship,* 564 U.S. 91, 96 (2011). Patents are presumed valid, and each claim of a patent is presumed valid independently of the validity of other claims. 35 U.S.C. § 282 (a). Defendant has the burden of proving the '623 Patent is abstract and invalid by clear and convincing evidence. *Microsoft Corp*, 564 U.S. at 95.

In *Alice*, the Supreme Court established a two-step analytical framework for "distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts." *Alice*, 573 U.S. at 217. First, the Court must determine "whether the claims at issue are directed to one of those patent-ineligible concepts," such as an abstract idea. *Id*. at

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217. Second, if the claims are directed to an abstract idea, the Court must "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." *Id*. at 221. An "inventive concept" includes 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 (cleaned up).

The first step of the *Alice* inquiry examines "the focus of the claims, their character as a whole." *SAP Am., Inc. v. InvestPic, LLC*, 898 F.3d 1161, 1167 (Fed. Cir. 2018) (cleaned up). The second step requires the Court to "look more precisely at what the claim elements add — specifically, whether, in the Supreme Court's terms, they identify an 'inventive concept' in the application of the ineligible matter to which the claim is directed." *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (cleaned up).

Discussion

At *Alice* step 1, the court must "first determine whether the claims at issue are directed to a patent-ineligible concept." *Alice*, 573 U.S. at 217. In this step, "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). The Supreme Court has not

established a definitive rule to determine what constitutes an "abstract idea." *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016). Instead, the Court must rely on comparisons between the claims at issue and prior rulings. *See id.*

Under *Alice* step 1, I find that the asserted claims of the '623 patent are directed to the abstract idea of sharing facial expressions. Claims 1 and 11 recite the results-oriented steps of "receiving," "monitoring," "generating," and "rout[ing]" facial expressions through a messaging system using emoticons. These well-known concepts are abstract "because they consist of generic and conventional . . . acquisition and organization steps that are connected to, but do not convert, the abstract idea" of sharing facial expressions "into a particular conception of how to carry out that concept." *Interval Licensing LLC v. AOL, Inc.*, 896 F.3d 1335, 1346 (Fed. Cir. 2018).

Claims 1 and 11 provide no rules or algorithms for performing the generic, claimed steps. Although these claims recite the generic steps of "monitoring a sensor feed . . . to detect a plurality of human facial expression states" and "automatically generating a dynamic emoticon . . . based on the sensor feed of the plurality of human facial expression states," they are devoid of any rules or instructions for how to accomplish these steps. "At that level of generality, the claims do no more than describe a desired function or outcome, without providing

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any limiting detail that confines the claim to a particular solution to an identified problem. The purely functional nature of the claim confirms that it is directed to an abstract idea, not to a concrete embodiment of that idea." *Affinity Labs of Texas, LLC v. Amazon.com Inc.*, 838 F.3d 1266, 1269 (Fed. Cir. 2016).

The Federal Circuit has found similar claims abstract because they were directed to collecting, processing, and transmitting data using conventional and well-known technologies. *See Universal Secure Registry LLC v. Apple Inc.*, 10 F.4th 1342, 1349 (Fed. Cir. 2021) (finding abstract claims involving user authentication to facilitate an economic transaction because they "simply recite conventional actions in a generic way" and "do not purport to improve any underlying technology"); *Elec. Power Grp.*, 830 F.3d at 1354 (claims directed to an abstract idea because "[t]he advance they purport to make is a process of gathering and analyzing information of a specified content, then displaying the results, and not any particular assertedly inventive technology for performing those functions"); *West View Research, LLC v. Audi AG*, 685 F. App'x 923, 926 (Fed. Cir. 2017) (unpublished) (claims directed to an abstract idea that "do not go beyond receiving or collecting data queries, analyzing the data query, retrieving and processing the information constituting a response to the initial data query, and generating a visual or audio response to the initial data query").

Like the patents in those cases, the asserted claims of the '623 patent are directed to the abstract idea of sharing facial expressions by collecting and transmitting a particular type of data using conventional cameras, computers, and digital messages. The asserted independent claims recite no more than generic data analysis and transmission. The asserted dependent claims fail to remedy these deficiencies, as they merely recite more results-oriented steps and particular applications, rather than providing any rules or algorithms for carrying out the abstract ideas. Claim 3 narrows claim 1 to "detect[ing] a facial profile," "match[ing] the facial profile against a known facial profile utilizing a facial recognition process," and "utilizing a facial recognition process to authenticate an operating user," but it fails to recite instructions or algorithms for how to detect or match a facial profile or how to authenticate a user with a nondescript "facial recognition process." Claims 4 and 5 describe particular expressions to be detected, but without providing any rules or algorithms for how this might be done. Claims 2 and 7 involve embedding emoticons in messages, but they lack any description of how this occurs. Claim 8 recites capturing facial expressions in real time using a sensor like a camera, but that is how a camera operates. Each of the dependent claims fails to provide any explanation of how the results-oriented steps of "receiving," "monitoring," "generating," and "rout[ing]" digital facial expressions are accomplished.

Plaintiff argues that the asserted claims of the '623 patent are directed towards patent-eligible subject matter because they add to the functionality of computers. Plaintiff argues that the asserted claims of the '623 patent are similar to those found patentable by the Federal Circuit in *Enfish* and *McRo Inc., v. Bandai Namco Games Am., Inc.*, 837 F.3d 1299 (Fed Cir. 2016). In *Enfish*, the court found that the self-referential table method was not directed to an abstract idea but a specific improvement to the way computers operate because the self-referential table functioned differently than conventional database structures and achieved benefits over conventional databases, such as increased flexibility, faster search times, and smaller memory requirements. 822 F.3d at 1337.

In *McRO*, the Federal Circuit found that the claimed method for automating facial animation with computers was directed toward a specific asserted improvement in computer animation. 837 F.3d at 1314. The court found that although the rules are embodied in computer software that is processed by general-purpose computers, there was no evidence the process was the same process used by human animators. *Id*. "[T]he automation goes beyond merely 'organizing existing information into a new form' or carrying out a fundamental economic practice." *Id*. at 1315. The court therefore held that the claim was not directed to an abstract idea and was patentable under §101. *See id*. at 1316.

According to plaintiff, the '623 Patent's claims are not directed to an abstract idea under these authorities because they address the lack of dynamic emotional context of users when sending messages using computer-based messaging applications. Plaintiff argues that the '623 Patent offers a means of adding to the use of a computer by providing the dynamic emotional context of a user through incorporation of biometrics data to morph an emoticon into one that reflects the true-to-life emotion exhibited by the user's facial expression.

"Generally, claims that contain improvements in computer functionality, and thus are patentable under *Enfish* and *McRO*, include instructions on 'how to implement' the abstract idea." *Procter & Gamble Co. v. QuantifiCare Inc.*, 288 F. Supp. 3d 1002, 1022 (N.D. Cal. 2017) (cleaned up). Unlike the claims in *McRO* and *Enfish*, the claims in the '623 patent lack any instructions or specific rules on how to implement the abstract idea. Instead, they only link the idea of sharing a facial expression to the technological environment of messaging over mobile devices without any rules or algorithms for how the technological environment is manipulated. The asserted claims do not teach how to improve the underlying technology or how to dynamically generate an emoticon from a plurality of facial expressions. *See Universal Secure Registry*, 10 F.4th at 1356 (claims directed to multi-factor authentication of a user's identity using biometric information passed between two devices not patent-eligible because they "simply recite conventional

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actions in a generic way without purporting to improve the underlying technology") (cleaned up); *W. View Rsch.*, 685 F. App'x 923, 926 (Fed. Cir. 2017) (claims directed to a "computerized apparatus capable of interactive information exchange with a human user" via "a microphone," "one or more processors," a "touch-screen input and display device," a "speech synthesis apparatus" with "at least one speaker," an "input apparatus," and a "computer program" that receives the user's input and generates an audible or visual result are abstract because "collecting information, analyzing it, and displaying certain results of the collection and analysis are a familiar class of claims directed to a patent-ineligible concept.") (internal citations omitted).

Moreover, "mere automation of manual processes using generic computers," such as automatically generating an emoticon, "does not constitute a patentable improvement in computer technology." *Credit Acceptance Corp. v. Westlake Servs.*, 859 F.3d 1044, 1055 (Fed. Cir. 2017). In this case, the claims are focused on the abstract idea of sharing facial expressions, and the recited generic technological elements "are invoked merely as a tool." *See Enfish*, 822 F.3d at 1335-36.

Even if I look to the patent specification to determine whether the claims' "character as a whole is directed to excluded subject matter," *see Enfish,*, 822 F.3d at 1335, the specification cannot save these claims as it does not describe how to

perform the claimed step of "generating a dynamic emoticon," instead merely declaring that "[i]n some cases, the recognized expression of a sender user can be added as an emoticon to a message." ECF 1-1 at 14. The figures are also devoid of any technical means for performing the claimed functions. Figure 2 shows a collection of connected schematic boxes with generic names including "sensor(s)," "messaging platform," and "biometric security engine." ECF 1-1 at 7. No rules or algorithms are provided for detecting any expression.

Although the specification describes a biometric security mechanism that detects biometric patterns and compares them to a user profile model using a variety of potential algorithms and machine learning techniques, these embodiments are not claimed by the '623 patent and are therefore irrelevant as to step 1 of the *Alice* analysis. *See Am. Axle*, 967 F.3d at 1293 ("Features not claimed are irrelevant as to step 1 or step 2 of the *Alice* analysis [as] any reliance on the specification must always yield to the claim language.") (cleaned up). Any means for accomplishing the generic, result-oriented steps actually claimed by the '623 patent are absent from the intrinsic record.

Under *Alice* step 1, the asserted claims are directed to the abstract idea of sharing facial expressions and are carried out using functional and results-oriented steps devoid of specific instructions or algorithms. I must therefore proceed to step 2 of the *Alice* analysis to determine whether the claims embody some "inventive

concept" by asking whether they contain "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 (cleaned up).

Under *Alice* step 2, I find nothing in the claims which would qualify them as an "inventive concept" sufficient to transform them into patent eligible matters. The asserted claims are "recited at a high level of generality and merely invoke[] well-understood, routine, conventional components to apply the abstract idea identified above." *Yu v. Apple Inc.*, 1 F.4th 1040, 1045 (Fed. Cir. 2021); *see also W. View Research*, 685 F. App'x at 926 ("If a patent uses generic computer components to implement an invention, it fails to recite an inventive concept under *Alice* step two.").

The claims recite only generic, well-known, and off-the-shelf computer components and messaging applications. Claim 1 discloses "at least one processor in communication with at least one memory device," without describing any special properties of the claimed "processor" or "memory device." No special properties are attributed to the claimed processor, which is simply "programmed to" carry out the claimed steps. The specification states that the invention uses a well-known "messaging application" "installed on a general-purpose operating system (e.g., Windows android, iOS, etc.)." ECF 1-1 at 12. The claims further

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recite "one or more sensors of the computer device to detect" facial expressions, but fail to describe any new sensor or novel aspect of known sensors. Instead, the specification identifies generic and well-known sensors, "such as a camera" used conventionally to "detect" facial expression. ECF 1-1 at 13. Sensors that "are disclosed as simply conventional sensors being used conventionally" are "insufficient to transform the abstract idea into patent-eligible subject matter." *ICON Health & Fitness, Inc. v. Polar Electro Oy*, 243 F. Supp. 3d 1229, 1239 (D. Utah 2017), *aff'd*, 717 F. App'x 1005 (Fed. Cir. 2018).

The independent claims recite processors that are "programmed" and sensors that "detect" in carrying out results-oriented steps such as "receiving," "monitoring," "generating," and "rout[ing]" without reciting any unconventional aspects of these generic components. The dependent claims are application-oriented and fail to recite any particular components for carrying out the claimed steps, either. For this reason, the claims fail *Alice* step 2. *See Two-Way Media Ltd. v. Comcast Cable Commc'ns, LLC*, 874 F.3d 1329, 1337 (Fed. Cir. 2017) (no inventive concept where clams use "generic functional language" to achieve purported solution).

Plaintiff argues that the '623 Patent uses computer hardware and sensors in a novel way which confers patentability. Although "an inventive concept can be found in the non-conventional and non-generic arrangement of known,

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conventional pieces," *see BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016), no such non-conventional or non-generic arrangement is found here. The claims recite performing the steps in a conventional and expected order by first detecting a facial expression using a sensor like a camera, and then generating and transmitting a version of that facial expression to a second device. Plaintiff does not cite any portion of the intrinsic record describing why the arrangement is non-conventional. Features recited in an ordinary and expected order do not provide an inventive concept. *Two-Way Media*, 874 F.3d 1329, 1339 (Fed. Cir. 2017) (no inventive concept where claim "use[d] a conventional ordering of steps—first processing the data, then routing it, controlling it, and monitoring its reception—with conventional technology to achieve its desired result"); *see also TDE Petroleum Data Sols., Inc. v. AKM Enterprise, Inc.*, 657 F. App'x 991, 993 (Fed. Cir. 2016) (no inventive concept where steps were "the most ordinary of steps in data analysis and were recited in the ordinary order.") (cleaned up). The '623 patent specification even states that "[w]hile processes or methods are presented in a given order, alternative embodiments may perform routines having steps, or employ systems having blocks, in a different order." ECF 1-1 at 16. Thus, the ordering of steps cannot save the asserted claims at *Alice* step 2.

According to plaintiff, "[t]he lack of fidelity to incorporate the degree of a dynamic emotion a user is experiencing as well as the limited selection of potential emotions is the problem the '623 Patent claims solve." ECF 1-1 at 15. But the claims do not actually say this, and Dr. Kakadiaris's conclusory declaration in support of this assertion does not create a disputed issue of fact which precludes summary judgment on the issue of patentability. Moreover, plaintiff's barebones assertion that a "claim construction issue" over whether "a dynamic emoticon" is conventional should preclude summary judgment on patentability is equally unavailing as plaintiff fails to offer any construction that might make the "dynamic emoticon" allegedly unconventional. This is insufficient to create a genuine claim construction dispute requiring postponement of the § 101 inquiry. *See Cleveland Clinic Found. v. True Health Diagnostics LLC*, 859 F.3d 1352, 1360 (Fed. Cir. 2017) (explaining that the Federal Circuit "ha[s] repeatedly affirmed § 101 rejections before claim construction or significant discovery has commenced," and concluding that "it was appropriate for the district court to determine that the [asserted] patents were ineligible under § 101 at the motion to dismiss stage" where the patentee failed to offer a construction that would change the eligibility analysis) (cleaned up); *Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1273 (Fed. Cor. 2012) ("claim construction is not an inviolable prerequisite to a validity determination under § 101.").

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Because the '623 patent claims are directed to an abstract idea implemented in a conventional manner by well-known components, the patent is invalid and this case must be dismissed.

Accordingly,

IT IS HEREBY ORDERED that defendant's motion to dismiss [15], which was converted to a motion for summary judgment, is granted, and plaintiff's complaint is dismissed with prejudice.

IT IS FURTHER ORDERED that the motions for oral argument [23, 29] are denied as moot.

A final Judgment in accordance with this Memorandum and Order is entered this same date.

CATHERINE D. PERRY
UNITED STATES DISTRICT JUDGE

Dated this 17th day of March, 2023.

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