IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

STATE FARM MUTUAL AUTOMOBILE INSURANCE CO.,	)))	
Plaintiff,	))	
v.	))	Civil Action No. 22-1447-CJB
AMAZON.COM, INC. and AMAZON.COM SERVICES LLC,	))))	
Defendants.	)	

Kelly E. Farnan and Sara M. Metzler, RICHARDS, LAYTON & FINGER, P.A., Wilmington, DE; Michael W. De Vries, KIRKLAND & ELLIS LLP, Los Angeles, CA; Adam R. Alper (argued), Akshay S. Deoras and Natalie Sinzig, KIRKLAND & ELLIS LLP, San Franciso, CA, Attorneys for Plaintiff.

Jack B. Blumenfeld and Jeremy A. Tigan, MORRIS, NICHOLS, ARSHT & TUNNELL LLP, Wilmington, DE; Douglas E. Lumish (argued), LATHAM & WATKINS LLP, Silicon Valley, CA; Adam M. Greenfield, David A. Zucker, Jessica Lam and Ashley N. Finger, LATHAM & WATKINS LLP, Washington, DC, Attorneys for Defendants.

<u>MEMORANDUM OPINION</u>

September 6, 2024
Wilmington, Delaware

Christopher J. Burke

BURKE, United States Magistrate Judge

Presently pending before the Court in this patent infringement case is Defendants Amazon.com, Inc. and Amazon.com Services LLC's (collectively, "Amazon" or "Defendants") motion to dismiss Plaintiff State Farm Mutual Automobile Insurance Co.'s ("State Farm" or "Plaintiff") First Amended Complaint ("FAC"), filed pursuant to Federal Rule of Civil Procedure 12(b)(6) (the "Motion"). (D.I. 25) Amazon argues that the patents asserted against them (the "asserted patents")—United States Patent Nos. 11,056,235 (the "'235 patent"), 11,107,581 (the "'581 patent"), 11,114,203 (the "'203 patent"), 11,393,585 (the "'585 patent"), 10,825,318 (the "'318 patent") and 11,094,180 (the "'180 patent")—are directed to patent-ineligible subject matter pursuant to 35 U.S.C. § 101 ("Section 101").[1] For the reasons that follow, the Court DENIES the Motion.

I. BACKGROUND

A. Factual Background

The '235, '581, '203 and '585 patents (the "ECSP patents") are all entitled "Senior Living Engagement and Care Support Platforms" and were issued in 2021 and 2022. ('235 patent at 1; '581 patent at 1; '203 patent at 1; '585 patent at 1)[2] These patents recite devices and methods "for using a senior living computer platform to facilitate senior engagement with their daily schedule and caregivers associated with the seniors, and coordinate care between caregivers." (*See, e.g.*, '235 patent, cols. 1:32-36, 1:53-56, 4:18-22; *see also* D.I. 21 at ¶ 47)

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[1] On January 24, 2023, the parties consented to the Court's jurisdiction to conduct all proceedings in this action, including entry of a final judgment. (D.I. 19)

[2] The asserted patents appear on the docket in this action more than once. Herein, the Court will cite to the patents by their patent number.

The '318 and '180 patents (the "SPHERES patents") are entitled "Sensing Peripheral Heuristic Evidence, Reinforcement and Engagement System" and issued in 2020 and 2021. ('318 patent at 1; '180 patent at 1) These patents recite systems and methods for identifying cognitive or health conditions associated with an individual in a home environment, which enable caregivers to determine whether an individual is capable of safely living independently (even if such conditions are subtle or develop slowly). (*See, e.g.*, '180 patent, cols. 1:21-23, 4:7-17)[3]

B.   Procedural Background

State Farm filed this lawsuit on November 3, 2022, (D.I. 1), and the operative FAC on February 9, 2023, (D.I. 21). The instant Motion was filed on February 23, 2023, (D.I. 25), and briefing was completed on March 16, 2023, (D.I. 36). Amazon has submitted several notices of supplemental authority, (D.I. 45; D.I. 52; D.I. 64), and State Farm has filed a response to those notices, (D.I. 68). The Court heard argument on the Motion (along with holding a *Markman* hearing)[4] on November 7, 2023. (D.I. 183 (hereinafter, "Tr."))

II.   LEGAL STANDARD

The Court has often set out the relevant legal standards for review of a Rule 12(b)(6) motion premised on a claim of patent ineligibility, including in *Genedics, LLC v. Meta Co.*, Civil Action No. 17-1062-CJB, 2018 WL 3991474, at *2-5 (D. Del. Aug. 21, 2018). The Court hereby incorporates by reference its discussion in *Genedics* of these legal standards and will

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[3]   The ECSP patents share a common specification, and the SPHERES patents share a common specification. (*See* D.I. 26 at 2 n.4) As such, the Court will cite below only to the '235 and '180 patents, unless otherwise noted.

[4]   The Court has now resolved all previously-presented *Markman* disputes (at least all of those that were then ready for resolution). (D.I. 95; D.I. 124; D.I. 128; D.I. 129)

follow those standards herein. To the extent consideration of the Motion necessitates discussion

of other, related legal principles, the Court will set out those principles below.

III.   DISCUSSION

The Court is not persuaded that the Motion should be granted. The Court will first

explain why that is so with respect to the SPHERES patents, and will then address the ECSP

patents.

A.   SPHERES Patents

For purposes of the Motion, Defendants assert that claim 1 of the '180 patent is

representative with respect to the SPHERES patents. (D.I. 26 at 13; Tr. at 182) Thus, the Court

will focus below on that claim, understanding that if the Motion is not well taken as to it, it will

also not be successful as to the remaining asserted claims with respect to the SPHERES patents.

Claim 1 of the '180 patent recites as follows:

> **1.** A computer-implemented method for identifying a condition
> associated with an individual in a home environment, comprising:
>
> training, by a processor, a neural network model using a plurality
> of datasets associated with a plurality of home environments,
> wherein training a neural network model comprises adding one or
> more layers to the trained neural network model, wherein at least
> one layer of the one or more layers is associated with at least one
> of an activation function, a loss function, and an optimization
> function;
>
> capturing data detected by a plurality of sensors associated with the
> home environment;
>
> analyzing, by processor, the captured data to identify one or more
> abnormalities or anomalies;
>
> determining, by the processor, based upon the identified one or
> more abnormalities or anomalies, the condition associated with the
> individual in the home environment; and

generating, by the processor, to a caregiver of the individual, a
notification indicating the condition associated with the individual,

wherein analyzing the captured data comprises analyzing the
captured data using the trained neural network model to identify a
new behavior pattern,

wherein the one or more abnormalities or anomalies comprise the
new behavior pattern,

wherein determining the condition comprises determining the
condition associated with the individual based at least in part upon
the identified new behavior pattern, and

wherein the notification comprises a snapshot report generated
periodically and the snapshot report includes an indication of the
condition associated with the individual and a change from a prior
snapshot report.

('180 patent, col. 24:30-64)

Here, the Motion can be resolved at *Alice*'s step one with respect to the SPHERES

patents. Defendants argue at step one that the claims of the SPHERES patents are directed to the

abstract idea of "collecting and analyzing data and identifying and/or reporting abnormalities."

(D.I. 26 at 13; D.I. 36 at 6)

The Court finds that Defendants' abstract idea unduly oversimplifies what claim 1 of the

'180 patent is directed to. *See CardioNet, LLC v. InfoBionic, Inc.*, 955 F.3d 1358, 1371 (Fed.

Cir. 2020) (instructing courts to be "careful to avoid oversimplifying the claims[] by looking at

them generally and failing to account for [] specific requirements") (internal quotation marks and

citation omitted); *see also* State Farm's Motion to Dismiss Hearing Slides at Slide 62) In order

to determine what a patent claim is really directed to at step one, the United States Court of

Appeals for the Federal Circuit has indicated that a court may consider the content of the patent's

specification.[5] The specification of the '180 patent identifies the problem at issue as the

difficulty in determining whether aging individuals were capable of safely living independently,

because the signs of certain cognitive and health conditions can be subtle or develop slowly over

time. ('180 patent, cols. 1:27-33, 4:7-14)[6] And it goes on to explain that the claimed systems

and methods utilize sensors associated with the aging individual's home environment to detect

data, and a machine learning module that is trained to identify abnormalities among the data.

(*Id.*, col. 4:15-43) The use of sensors in particular is further highlighted in the patent's title and

Abstract. (*Id.* at 1) The specification notes that the claimed invention offers "numerous

benefits" in "effectively, efficiently, and non-intrusively" keeping a caregiver outside of the

home environment informed about the status of the individual by providing the caregiver with

notifications indicating identified conditions. (*Id.*, col. 4:52-59)

Thus, the specification suggests that the utilization of sensors and the trained machine

learning module are important aspects of the invention that overcome problems in the prior art.

In other words, it is clear that the purported innovation over the prior art is not just the bare acts

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[5]   *Cf. Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016)
(indicating that it is appropriate to look to a patent's specification to determine whether a claim
of the patent is "directed to" a particular concept, and that if a claim contains a particular element
that is described by the patent's specification as what the "present invention comprises[,]" this
suggests that the claim may be directed to that element or concept) (internal quotation marks and
citation omitted); *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1348 (Fed. Cir.
2015) (same, and noting that if a concept is described in the patent as being "the innovation over
the prior art" or the "the essential, most important aspect" of the patented invention, that suggests
that the claim is directed to that concept) (internal quotation marks and citation omitted).

[6]   State Farm's FAC also attaches the declaration of Dr. Stephen B. Wicker (the
"Wicker Declaration"). (D.I. 23; *see also, e.g.*, D.I. 21 at ¶ 38) Dr. Wicker explains that prior
art devices required users to actively wear sensors that would provide only current data about
what the user was doing at that moment in time, which was an intrusive approach that violated
the user's privacy and did not permit comparisons with historical data. (D.I. 23 at ¶ 79)

of collecting and analyzing data and identifying and/or reporting abnormalities. Instead, the

patent is focused on a more *particular* way to make this happen: by relying on systems and

methods that utilize sensors associated with an individual's home environment and by training a

neural network model to identify abnormalities in the data collected by the sensors. And yet

these important concepts are not at all captured in the proffered abstract idea. (D.I. 31 at 15-16;

Tr. at 225, 227-28)[7]

That said, no matter what the specification tells us, claims claim, and a step one analysis

must additionally look to the claim language as part of the "directed to" analysis. Claim 1 of the

'180 patent clearly recites a method for identifying a condition associated with an individual in a

home environment that includes steps for training a neural network model and capturing data

detected by sensors in the home environment (that will then be used by the neural network model

to detect abnormalities). ('180 patent, col. 24:30-64)[8] And as Amazon recognizes, the other

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[7]   Defendants argue that adding physical sensors to a claim like this cannot save the claims from being directed to the abstract idea of gathering, processing and transmitting data. (D.I. 26 at 15-16) They cite in support to *iLife Techs., Inc. v. Nintendo of Am., Inc.*, 839 F. App'x 534 (Fed. Cir. 2021), where the representative claim recited "a motion sensor system that evaluates and communicates the relative movement of a body using static and dynamic acceleration information collected from sensors." 839 F. App'x at 536. The Federal Circuit explained that the claim at issue there was directed to an abstract idea (a system capable of sensing information, processing the collected information, and transmitting processed information) where it failed to provide "any concrete detail for performing the associated functions" and was not focused on a "specific means or method to improve motion sensor systems[.]" *Id.* at 536-37. Here, in contrast, claim 1 recites a particular method for identifying a condition associated with an individual, with some details as to how the steps will be performed utilizing the sensors and trained neural network model (including details **Error! Main Document Only.**about how the neural network model is trained, how the data is analyzed, how the processor determines the condition associated with the individual and how the caregiver is notified about the condition). ('180 patent, col. 24:30-64)

[8]   The claims of the '318 patent recite a "machine learning module" instead of a neural network model, but the terms are used similarly across the patents. (*See, e.g.*, '318 patent, col. 24:29-63)

claims of the SPHERES patents similarly involve these same elements. (D.I. 26 at 16-17) In the Court's view, characterizing claim 1 of the '180 patent as being directed to "collecting and analyzing data and identifying and/or reporting abnormalities" ignores the thrust of the invention, which is about training a neural network model to identify abnormalities in data—data that is detected by sensors that correspond to conditions of an individual in a home environment. (D.I. 31 at 15-16; Tr. at 226); *Nielsen Co. (US), LLC v. TVision Insights, Inc.*, Civil Action No. 21-1592-CJB, 2022 WL 3226318, at *4 (D. Del. Aug. 10, 2022) (denying defendant's Section 101 motion to dismiss at step one because the defendant asserted that the claims were directed to detecting people using two different, specific methods and then counting them, which ignored that the claims were about detecting people "in a *particular* way, using two-dimensional and three-dimensional sensors set up to capture data at two different distances") (emphasis in original).

It is Defendants' burden to articulate an abstract idea that correctly characterizes the claim at issue. *See Sunoco Partners Mktg. & Terminals L.P. v. Powder Springs Logistics, LLC*, Civil Action No. 17-1390-LPS-CJB, 2019 WL 4466766, at *10 (D. Del. Sept. 18, 2019). Defendants have failed to do so here. Thus, the Court DENIES the Motion as to the SPHERES patents.

B.   ECSP Patents

For purposes of the Motion, Defendants assert that claim 1 of the '235 patent is representative with respect to the ECSP patents. (D.I. 26 at 7; Tr. at 182) Thus, the Court will focus below on that claim, understanding that if the Motion is not well taken as to it, it will also not be successful as to the remaining asserted claims with respect to the ECSP patents.

Claim 1 of the '235 patent recites as follows:

1. An engagement and care support platform ("ECSP") computer device comprising at least one processor in communication with a chatbot and at least one memory device, the ECSP computer device in communication with a first client device and at least one second client device, the at least one processor of the ECSP computer device is programmed to:

register a senior user via the first client device, the first client device configured to receive a user interaction and communicate with the chatbot;

register a caregiver associated with the senior user via the at least one second client device;

determine a first expected time of interaction with the chatbot via the first client device for the senior user for a predefined period of time;

continuously monitor for a senior user interaction indicating that the senior user has interacted with the chatbot;

in response to detecting the senior user interaction with the chatbot prior to the first expected time of interaction elapsing, transmit a message to the at least one second client device of the caregiver indicating that the senior user has interacted with the chatbot; and

in response to not detecting the senior user interaction with the chatbot by the first expected time of interaction, transmit a different message to the at least one second client device of the caregiver indicating that the senior user has not interacted with the chatbot by the first expected time of interaction.

('235 patent, col. 39:2-31)

Defendants argue at step one that the claims of the ECSP patents are directed to the

abstract idea of "notifying a third party that a user interacted (or failed to interact) with a device."

(D.I. 26 at 7; *see also* D.I. 36 at 1-2) In light of the Court's analysis of step two (set out below),

the Court will assume for purposes of this Motion that this is an abstract idea and that the claims

are directed to this abstract idea. *See, e.g.*, *Elec. Commc'n Techs., LLC v. ShoppersChoice.com,*

LLC, 958 F.3d 1178, 1181 (Fed. Cir. 2020) (finding that claim was directed to the abstract idea

of "providing advance notification of the pickup or delivery of a mobile thing") (internal quotation marks and citation omitted); *see also Invitae Corp. v. Natera, Inc.*, C.A. No. 21-669-LPS, C.A. No. 21-634-LPS, C.A. No. 21-1147-LPS, 2021 WL 7209516, at *4-5 (D. Del. Nov. 30, 2021) (taking this approach and resolving a Section 101 motion at step two) (citing cases).

At step two, Defendants have failed to persuade the Court that there is not a relevant factual dispute as to whether the ECSP claims add anything inventive to the abstract idea. "While the ultimate determination of eligibility under [Section] 101 is a question of law, like many legal questions, there can be subsidiary fact questions which must be resolved en route to the ultimate legal determination." *Aatrix Software, Inc. v. Green Shades Software, Inc.*, 882 F.3d 1121, 1128 (Fed. Cir. 2018). And "[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact." *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

At step two, the Court must consider what else remains in the claims *aside* from the abstract idea. *BSG Tech LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1290 (Fed. Cir. 2018). Representative claim 1 does not simply claim any manner of notifying a third party as to whether a user interacted with a device; instead, it claims the use of a chatbot that is programmed in a specific and particular way to monitor the senior user by detecting data relating to the user's interactions (or lack thereof) with the chatbot. (*See* '235 patent, claim 1; D.I. 31 at 5-6; Tr. at 214-17) The Court agrees with State Farm that there is at least a fact dispute as to whether the claim's use of chatbot technology in this manner represents an unconventional improvement over the prior art. (D.I. 31 at 2, 13, 20) The specification explains that the exemplary embodiment utilizes a chatbot (and indeed, the claims of the '235, '581 and '203 patents all require chatbots, while the '585 patent claims "include[] the same proactive and reactive functionality by claiming

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the components of the chatbot used in a novel way"), (*see* D.I. 31 at 5 n.1), "that functions as

described" in the patent, ('235 patent, col. 8:12-17). With respect to the prior art, the

specification explains that conventional computer systems simply kept a schedule of coordinated

care for senior users and did not facilitate senior engagement. (*Id.*, col. 1:40-49) The

specification also recognizes a tension that existed between senior users who wished to remain

independent from their caregivers and did not want unnecessary check-ins from caregivers, and

caregivers who needed to stay informed about the status of the senior user. (*Id.*, cols. 4:49-5:5)

The ECSP patents purport to solve these problems with chatbot technology that is programmed

in a particular way to monitor the senior user by detecting data relating to a user's interactions

and/or lack of interactions with the chatbot to notify caregivers. (*See* D.I. 31 at 4, 13)[9] The

Wicker Declaration, *see supra* at 6 n.6, further explains that the claimed functionality (and

particularly the chatbot's notification of a caregiver if the senior user has *not* interacted with the

device by a certain time) was an inventive way of utilizing chatbot technology that improved

upon prior art systems in the field, such as the use of intrusive caregiver check-ins or the use of

invasive cameras or wearable devices. (D.I. 23 at ¶¶ 37-38, 64-68)[10]

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[9]   As Plaintiff points out, in this sense, the claimed invention is not merely doing
something on a computer that humans used to do well; instead, it amounts to doing something
with a computer that humans *could not do* before (i.e., keeping a caregiver notified about the
status of a senior without the need "to intrude on that senior's life invasively"). (D.I. 45 at 7; *see
also* D.I. 23 at ¶¶ 49-50; D.I. 31 at 2, 8-10); *Nielsen Co. (US), LLC*, 2022 WL 3226318, at *5
("The entire reason a claim like claim 9 exists is because technology is being asked to fill a void
that humans reasonably cannot.").

[10]   The Court also notes (though of course it is not dispositive here) that during
prosecution of the '585 patent, the Examiner explained that, in his view, the claimed invention
was patent-eligible under Section 101 because it amounts to an improvement to conventional
technology. (D.I. 31, ex. 1 at SF00005548-49)

Defendants' retort to this is that Plaintiff did not "invent[] or improve[] upon chatbot technology" because the patents allow for any suitable chatbot to be used. (D.I. 36 at 1, 2, 5; *see also* D.I. 26 at 12 (suggesting that chatbot technology cannot supply the inventive concept because a chatbot is just a conventional computer component); Tr. at 190 ("This isn't a new chatbot."); *see also* '235 patent, col. 8:16-17) But it is well-settled that an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional devices. *Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1350 (Fed. Cir. 2016) ("Filtering content on the Internet was already a known concept, and the patent describes how its particular arrangement of [known] elements is a technical improvement over prior art ways of filtering such content."); *Tiare Tech., Inc. v. Whataburger Rests., LLC*, Case No. 2:22-cv-0182-JRG-RSP (Lead Case), 2023 WL 2733348, at *7 (E.D. Tex. Mar. 15, 2023) ("Simply because a claim recites conventional devices does not automatically lead to the conclusion that the conventional devices cannot be used in an unconventional way."), *report and recommendation adopted*, 2023 WL 2716576 (E.D. Tex. Mar. 29, 2023). At this stage, in light of the intrinsic record and the Wicker Declaration, there is at least a factual question as to whether claim 1 of the '235 patent contains an inventive concept. Thus, the Motion must be denied at step two with respect to the ECSP patents.

IV.   **CONCLUSION**

For the above reasons, the Court DENIES the Motion.

An appropriate Order will issue.

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

STATE FARM MUTUAL AUTOMOBILE)
INSURANCE CO.,)
)
      Plaintiff,)
)
     v.)   Civil Action No. 22-1447-CJB
)
AMAZON.COM, INC. and)
AMAZON.COM SERVICES LLC,)
)
      Defendants.)

<u>ORDER</u>

At Wilmington, Delaware this **6th** day of **September, 2024**;

For the reasons stated in the Memorandum Opinion issued this same date, IT IS

HEREBY ORDERED that Defendants Amazon.com, Inc. and Amazon.com Services LLC's

motion to dismiss Plaintiff State Farm Mutual Automobile Insurance Co.'s First Amended

Complaint, filed pursuant to Federal Rule of Civil Procedure 12(b)(6), (D.I. 25), is DENIED.

                                      Christopher J. Burke
                                        Christopher J. Burke
                                        UNITED STATES MAGISTRATE JUDGE