United States District Court
Northern District of California

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN JOSE DIVISION

FITBIT INC,

Plaintiff,

v.

ALIPHCOM, et al.,

Defendants.

Case No. 16-cv-00118-BLF

ORDER GRANTING IN PART AND DENYING IN PART DEFENDANTS' MOTION FOR JUDGMENT ON THE PLEADINGS

Defendants AliphCom, Inc. d/b/a Jawbone and Bodymedia, Inc. (collectively, "Defendants") bring this motion for judgment on the pleadings that U.S. Patent Nos. 8,909,543 (the "'543 patent"), 9,031,812 (the "'812 patent"), and 9,042,971 (the "'971 patent") are invalid for failure to claim patent-eligible subject matter under 35 U.S.C. § 101. ECF 74. For the reasons discussed below, the Court GRANTS IN PART and DENIES IN PART Defendants' motion.

I. BACKGROUND

A. The '543 Patent

Fitbit owns the '543 patent, which is entitled "Methods for Detecting and Recording Physical Activity of Person." It was filed on January 27, 2014 and issued on December 9, 2014. It is a continuation of U.S. Patent No. 9,089,760 (the "'760 patent"), which claims priority to several provisional applications, the earliest of which dates September 26, 2006. '543 patent, col. 1 ll. 7-27.

Fitbit currently asserts claims 20 and 25-29 of the '543 patent. These claims generally relate to a method for tracking a person's cumulative amount of movement using a certain wearable band. *Id.*, col. 26 ll. 45-60. The wearable band contains a motion detection component, which detects a person's movement, and a series of LED lights, which light up in a progression to

indicate the total amount of movement. *Id*. Data associated with this movement is also sent to a secondary device, such as a cell phone or computer. *Id*.

Claim 20, the only independent asserted claim, recites:

> 20. A method, comprising:
> providing a band defined to be worn by a person, the band comprising a flexible material, the band including a motion detection component and a series of light emitting diodes;
> detecting and recording movement of the person by use of the motion detection component;
> controlling illumination of the series of light emitting diodes such that individual light emitting diodes of the series of light emitting diodes turn on to emit light in a progression from one end of the series of light emitting diodes toward another end of the series of light emitting diodes, wherein an amount of the progression is based on an amount of movement of the person recorded using the motion detection component; and
> communicating data associated with the amount of recorded movement of the person to a secondary electronic device.

Id., col. 26 ll. 45-60. Claims 25 and 26 add the requirements that (1) the data be transmitted wirelessly, by (2) generating and transmitting radio frequency signals. *Id*., col. 27 ll. 11-17. Claim 27 requires that the secondary device be a computer, *id*., col. 28 ll. 1-2, claim 28 requires that the secondary device be "one or more of a game, a toy, a game controller, a computer interface device, a cell phone, a mobile data communication device, a microprocessor, and a computer," *id*., col. 28 ll. 3-6, and claim 29 requires that the wearable band be removable, *id*., col. 28 ll. 7-9.

B. The '812 Patent

Fitbit also owns the '812 patent, which is entitled "Notifications on a User Device Based on Activity Detected by an Activity Monitoring Device." It was filed on May 6, 2014 and issued on May 12, 2015.

Fitbit currently asserts claims 1-6, 9-15, 18-23, and 25-26. These claims generally relate to methods for generating a notification relating to a person's tracked activity, which gets displayed at a specific date and time. '812 patent, col. 25 ll. 23-66, col. 26 ll. 14-64, col. 27 l. 11-col. 28 l. 5, col. 28 ll. 13-40. In these methods, a mobile device wirelessly communicates with an activity monitoring device, which sends activity data. *Id*. The mobile device then processes this data to create an activity metric for that user, such as "number of steps taken, distance traveled,

steps/floors climbed, calories burned, active minutes, etc." *Id*., col. 9 ll. 6-9. After the activity metric reaches a certain predefined threshold, such as "a threshold number of steps taken, a threshold number of steps/floors (or altitude) climbed, a threshold distance traveled, a threshold number of active minutes achieved, a threshold number of calories burned, etc." or "25%, 50%, 75%, and 100% of [a] goal," a notification message is generated and scheduled for display at a particular date and time. *Id*., col. 9 ll. 62-67, col. 10 ll. 16-17. When that time arrives, the message is displayed, along with "access to an application for interfacing with the activity monitoring device." *Id*., col. 25 ll. 40-42, col. 26 ll. 36-37, col. 27 ll. 31-32, col. 25 ll. 32-33.

One of the independent claims, claim 1, recites:

> 1. A method for generating a notification on a mobile device, comprising:
> establishing a wireless connection to an activity monitoring device;
> receiving activity data from the activity monitoring device via the wireless connection;
> processing the activity data to determine an activity metric for a user of the activity monitoring device;
> comparing the activity metric against a predefined threshold, the predefined threshold being mapped to a notification message;
> in response to determining that the activity metric reaches or exceeds the predefined threshold, scheduling the notification message for display on the mobile device at a specified date and time;
> wherein the notification message is displayed on the mobile device at the specified date and time, the display of the notification message providing access to an application for interfacing with the activity monitoring device;
> wherein the method is executed by at least one processor.

Id., col. 25 ll. 23-42. At a high level, dependent claims add restrictions on types of notification messages, *id.*, col. 25 ll. 44-46, col. 26 ll. 39-41, col. 27 ll. 47-49 (claims 2, 10, and 22), types of activity metrics, *id.*, col. 25 ll. 51-56, col. 26 ll. 49-53, col. 28 ll. 1-5 (claims 4, 13, and 23), how the mobile device and activity monitoring device communicate, *id.*, col. 25 ll. 47-50, col. 26 ll. 42-45 (claims 3 and 11), how the notification message gets triggered or rendered, *id.*, col. 26 ll. 46-48, col. 27 ll. 33-37, 43-46, col. 28 ll. 34-40 (claims 12, 19, 21, and 26), and the content of the notification message, *id.*, col. 25 ll. 58-66, col. 26 ll. 54-63 (claims 5, 6, 14, and 15).

The prosecution history of the '812 patent is relevant to Defendants' motion. During prosecution, the examiner initially rejected the claims of the '812 patent as directed to patent-ineligible subject matter under § 101. Ex. 9 to Mot. at 2, ECF 74-10. In response, the applicant

amended the independent claims to add the requirement that the notification be displayed at a "specified date and time" or within a "time window." Ex. 10 to Mot. at 2, 5, 7, 9, ECF 74-11. The examiner determined that this additional limitation was sufficient to render the claims patent-eligible, explaining in his January 26, 2015 notice of allowance:

> Applicant's amendments to claims 1, 10, 20, and 28 are sufficient to overcome the rejections under 35 U.S.C. § 101 because the limitations add "significantly more" to the claim. By itself, displaying a message may be considered insignificant extra-solution activity, however, displaying a notification message on a mobile device at a specified time and date where the notification message provides access to an application for interfacing with an activity monitoring device where a wireless connection exists between the mobile device and the activity monitoring device is not insignificant. Applicant has added unconventional steps that confine the claim to a particular useful application.

Ex. 11 to Mot. at 2, ECF 74-12.

C. The '971 Patent

Fitbit owns the '971 patent, which is titled "Biometric Monitoring Device with Heart Rate Measurement Activated by a Single User-Gesture." It was filed on January 13, 2014 and issued on May 26, 2015. It claims priority to several provisional applications, the earliest of which was filed on June 22, 2012. '971 patent, col. 1 ll. 8-16.

Fitbit currently asserts claims 1, 22, and 25-28. These claims generally relate to a method and apparatus for on-demand measurement of a person's heart rate, where data collection is activated by a "single user-gesture" on the surface of an "activator" and continues until "a heart rate of a predetermined level of heart rate quality" is obtained. *Id.*, col. 41 ll. 7-35, col. 43 ll. 3-18. The specification gives descriptions of several of these terms. With respect to "activator," the specification explains that "[t]he activator, in general, is a mechanism through which a user input or activation signal may be received or recognized by the device in order to initiate heart rate measurement via the heart rate sensor." *Id.*, col. 8 ll. 63-66. It can be a "biometric sensor, such as an accelerometer," a "button," "pressure or touch sensitive sensor, e.g., capacitive touch, resistive touch, ultrasonic touch, etc., or a proximity sensor, e.g., infrared, capacitive, etc." *Id.*, col. 8 ll. 59-63, col. 14 ll. 50-54. With respect to "single user gesture," the specification states that "a 'single user-gesture' is an action of a user relative to a single part of the apparatus, wherein the action is

interpreted by the apparatus as a single behavioral pattern" and can include "a single command, shaking of the device, moving the device in a certain trajectory, e.g., a 'figure 8' trajectory, staring at the apparatus or a particular portion of the apparatus (when the apparatus has gaze detection function), bringing a body part into proximity with the apparatus, bringing an arm wearing a wristband-type BMD from a downwards-extended position to a viewing position, twisting the wrist wearing a BMD implemented as wrist band, etc." *Id*., col. 13 ll. 41-43, 45-55. The specification also gives examples of the conditions under which data collection stops. For example, "[i]n some embodiments, the device automatically stops data collection after a set period of time, such as about 3 seconds, 5 seconds, 10 seconds, 20 seconds, 40 seconds, 1 minute, or 2 minutes. In some embodiments, the device automatically stops array data collection after a reliable heart rate reading is obtained." *Id*., col. 20 ll. 12-17.

The asserted claims contain two independent claims: claim 1, which is an apparatus claim, and claim 22, which is a method claim. Claim 1 recites:

> 1. An apparatus comprising:
> one or more biometric sensors comprising a heart rate sensor;
> an activator of the heart rate sensor;
> a heart rate sensor surface area through which the heart rate sensor can collect heart rate data from a user;
> an activator surface area through which the activator can receive activation signals from the user;
> at least one processor; and
> a memory,
> wherein:
> the one or more biometric sensors, the activator, the at least one processor, and the memory are communicatively connected, and
> the memory stores computer-executable instructions for controlling the at least one processor to cause the heart rate sensor to:
> start collecting heart rate data through the heart rate sensor surface area in response to the activator receiving an activation signal through the activator surface area caused by a single user-gesture; and
> automatically stop collecting heart rate data when a heart rate reading of a predetermined level of heart rate data quality is obtained and remain in a state that does not collect heart rate data until another activation signal caused by a new user-gesture is received without requiring further user-gestures in addition to the single user-gesture.

Id., col. 41, ll. 8-35. Claim 22 includes similar elements, but also adds the step of providing user feedback on the heart rate data that is collected. It recites, in whole part:

> 22. A method for monitoring heart rate using a biometric monitoring device, comprising:
> receiving, by an activator, an activation signal representing a single user-gesture by a user;
> activating a heart rate sensor, in response to the activation signal, to start collecting heart rate data from the user;
> providing user feedback, through a feedback mechanism, with reference to the collected heart rate data without requiring further user-gestures in addition to the single user-gesture; and
> causing the heart rate sensor to stop collecting heart rate data when a heart rate reading of a predetermined level of heart rate data quality is obtained without requiring further user-gestures in addition to the single user-gesture.

Id., col. 43 ll. 3-18. Claims 25-28, which depend on claim 22, limit user feedback to either an indication that the heart rate data collection was successful or failed, or to certain observations about the heart rate data, such as "average heart rate, minimum heart rate, maximum heart rate, heart rate variability, heart rate relative to target heart rate zone, heart rate relative to resting heart rate, change in heart rate, decrease in heart rate, increase in heart rate, training advice with reference to heart rate, and a medical condition with reference to heart rate." *Id.*, col. 44 ll. 3-21.

II. PROCEDURAL HISTORY

Fitbit initiated this lawsuit on September 3, 2015 in the District of Delaware, alleging that Jawbone's UP line of activity tracking devices infringed the asserted patents. ECF 1. Within that next month, Fitbit initiated three other proceedings: on September 8, 2015, a patent infringement action in the Northern District of California, Case No. 5:15-cv-4073-EJD; on October 29, 2015, a patent infringement action in the District of Delaware, Case No. 1:15-cv-990; and on November 2, 2016, an investigation at the U.S. International Trade Commission (ITC), Inv. No. 337-TA-973. The ITC investigation and second Delaware action involved the same asserted patents, so the second Delaware action was mandatorily stayed pursuant to 28 U.S.C. § 1659. Ex. 6 to Mot., ECF 74-7. On December 22, 2015, the instant suit—the first Delaware action—was transferred to this Court. Ex. 7 to Mot., ECF 74-8.

On October 18, 2016, Defendants filed the instant motion, seeking judgment on the pleadings that the asserted claims of the '543, '812, and '791 patents are invalid for failure to claim patent-eligible subject matter under 35 U.S.C. § 101. ECF 74. The Court heard argument on January 5, 2017. ECF 92.

III. LEGAL STANDARDS

A. Motion for Judgment on the Pleadings Under Fed. R. Civ. P. 12(c)

Rule 12(c) provides that "[a]fter the pleadings are closed—but early enough not to delay trial—a party may move for judgment on the pleadings." Fed. R. Civ. P. 12(c). "A judgment on the pleadings is properly granted when, taking all allegations in the pleadings as true, the moving party is entitled to judgment as a matter of law." *Enron Oil Trading & Transp. Co. v. Walbrook Ins. Co.*, 132 F.3d 526, 528 (9th Cir. 1997) (citing *McGann v. Ernst & Young*, 102 F.3d 390, 392 (9th Cir. 1996)). When ruling on a Rule 12(c) motion, the Court must "accept factual allegations in the complaint as true and construe the pleadings in the light most favorable to the nonmoving party." *Manzarek v. St. Paul Fire & Marine Ins. Co.*, 519 F.3d 1025, 1031 (9th Cir. 2008). Any existing ambiguities must be resolved in favor of the pleading. *Walling v. Beverly Enters.*, 476 F.2d 393, 396 (9th Cir. 1973).

"If, on a motion under Rule 12(b)(6) or 12(c), matters outside the pleadings are presented to and not excluded by the court, the motion must be treated as one for summary judgment under Rule 56." Fed. R. Civ. P. 12(d). A court, however, may "consider certain materials—documents attached to the complaint, documents incorporated by reference in the complaint, or matters of judicial notice—without converting the motion to dismiss into a motion for summary judgment." *United States v. Ritchie*, 342 F.3d 903, 908 (9th Cir. 2003).

B. Patent Validity Challenges Under 35 U.S.C. § 101

35 U.S.C. § 101 provides that "[w]hoever invents or discovers any new and useful process, machine, 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." However, the Supreme Court has recognized that these broad categories contain an implicit exception: "[l]aws of nature, natural phenomena, and abstract ideas are not patentable." *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116, 186 L. Ed. 2d 124 (2013) (internal quotation marks and citation omitted).

To determine whether a claim falls outside this exception, the Supreme Court has established a two-step framework: First, the court must "determine whether the claims at issue are

directed to a patent-ineligible concept." *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, —— U.S. ——, 134 S. Ct. 2347, 2355, 189 L. Ed. 2d 296 (2014). Second, if the claims are directed to patent-ineligible subject matter, the Court must "consider the elements of each claim both individually and 'as an ordered combination' to determine whether the additional elements 'transform the nature of the claim' into a patent-eligible application." *Id.* (quoting *Mayo Collaborative Servs. v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289, 1298, 1297, 182 L. Ed. 2d 321 (2012)). The Supreme Court has described this as a "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.'" *Id.*

In evaluating step one, "the 'directed to' inquiry applies a stage-one filter to claims, considered in light of the specification, based on whether 'their character as a whole is directed to excluded subject matter.'" *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)). The Federal Circuit has also described this inquiry as an evaluation of the "focus" or "basic thrust" of the claims. *See Enfish*, 822 F.3d at 1335-36; *BASCOM Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1348 (Fed. Cir. 2016).

In the software context, claims may fail step one because they are directed to an abstract idea. The Federal Circuit has found this to be true in a number of cases, and some commonalities have emerged. For example, fundamental economic activities and business practices, even if performed on a computer, are often abstract. *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362 (Fed. Cir. 2015), cert. denied, 136 S. Ct. 701, 193 L. Ed. 2d 522 (2015) (collecting cases). In addition, the Federal Circuit has "treated collecting information, including when limited to particular content (which does not change its character as information), as within the realm of abstract ideas." *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (collecting cases); *see also, e.g., In re TLI Commc'ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed. Cir. 2016); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1095 (Fed. Cir. 2016). Further, it has "treated analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea

category." *Elec. Power Grp.*, 830 F.3d at 1353 (collecting cases). It has also found that "merely presenting the results of abstract processes of collecting and analyzing information, without more (such as identifying a particular tool for presentation), is abstract as an ancillary part of such collection and analysis." *Id*. Nevertheless, "precision has been elusive in defining an all-purpose boundary between the abstract and the concrete." *Internet Patents*, 790 F.3d at 1345. Courts must tow the fine line between assessing a claim's "character as a whole" and "describing the claims at such a high level of abstraction and untethered from the language of the claims [such that it] all but ensures that the exceptions to § 101 swallow the rule." *Enfish*, 822 F.3d at 1335, 1337.

To date, the Federal Circuit has provided two examples of software claims that are not directed to an abstract idea. First, in *Enfish*, the Federal Circuit determined that claims directed to a specific type of self-referential table in a computer database were not abstract because they focused "on the specific asserted improvement in computer capabilities (i.e., the self-referential table for a computer database)" instead of "a process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool," they were not directed to an abstract idea. *Id*. at 1335-36, 1339. Second, in *McRO, Inc. v. Bandai Namco Games Am. Inc*., the Federal Circuit found that patents that automated part of a preexisting method for 3-D facial expression animation were not abstract because they "focused on a specific asserted improvement in computer animation, i.e., the automatic use of rules of a particular type." 837 F.3d 1299, 1314 (Fed. Cir. 2016).

However, not all claims relating to computer technologies fall within *Enfish*/*McRO*. Where the focus of the claims is on "certain independently abstract ideas that use computers as tools" instead of "an improvement in computers as tools," claims may fail step one. *See, e.g.*, *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1262 (Fed. Cir. 2016) (claims relating to "deliver[ing] content to a handheld wireless electronic device" were directed to an abstract idea because they claimed "the general concept of out-of-region delivery of broadcast content through the use of conventional devices, without offering any technological means of effecting that concept"); *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1140, 1149 (Fed. Cir. 2016) (claims related to logic circuit design in computer hardware were "drawn to the abstract idea of: translating a functional description of a logic circuit into a hardware component

description of the logic circuit" because "they are so broad as to read on an individual performing the claimed steps mentally or with pencil and paper"); *Tranxition, Inc. v. Lenovo (United States) Inc.*, No. 2015-1907, 2016 WL 6775967, at *3 (Fed. Cir. Nov. 16, 2016) (claims relating to migration of computer settings were directed to an abstract idea because "manual migration is an abstract idea" and the claims merely "automate[d] the migration of data between two computers"). Restricting older, abstract ideas to certain technological environments also does not make them not abstract. *See, e.g.*, *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1094 (Fed. Cir. 2016) (observing that ineligible claims "merely implement an old practice in a new environment"). Thus, non-abstract claims that "improve the functioning of the computer itself," *Alice*, 134 S. Ct. at 2359, or are otherwise "directed to an improvement of an existing technology," *Enfish*, 822 F.3d at 1337, such as those in *Enfish* and *McRO*, remain a narrow class.

In assessing step two, courts must "consider the elements of each claim both individually and 'as an ordered combination'" and assess whether there are any "additional features" in the claims that constitute an "inventive concept." *Alice*, 134 S. Ct. at 2357. This inventive concept "must be significantly more than the abstract idea itself," *BASCOM*, 827 F.3d at 1349, "must be more than well-understood, routine, conventional activity," *DIRECTV*, 838 F.3d at 1262, "and cannot simply be an instruction to implement or apply the abstract idea on a computer," *BASCOM*, 827 F.3d at 1349. For example, it may be found in an "inventive set of components or methods," "inventive programming," or an inventive approach in "how the desired result is achieved." *Elec. Power Grp.*, 830 F.3d at 1355.

The Federal Circuit has found an inventive concept in several cases. First, in *DDR Holdings, LLC v. Hotels.com, L.P.*, the Federal Circuit found that claims that addressed the "Internet-centric problem" of third-party merchant advertisements that would "lure . . . visitor traffic away" from a host website (because clicking on the advertisement would redirect the visitor to the merchant's website) amounted to an inventive concept. 773 F.3d 1245, 1248, 1259 (Fed. Cir. 2014). This was so, the Federal Circuit reasoned, because the claims "specify how interactions with the Internet are manipulated to yield a desired result" such that the interactions are "not merely the routine or conventional use of the Internet." *Id*. at 1259. Second, in

BASCOM, the Federal Circuit found that the claims directed to Internet content filtering recited the inventive concept of "install[ing] a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user." 827 F.3d at 1350. The court reasoned that "an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces." *Id*. The court found this to be the case because the patents claimed a specific type of content filtering that took advantage of an ISP server's ability to associate internet requests with user accounts. *Id*. Third, in *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, the Federal Circuit found that claims relating to solutions for managing accounting and billing data over large, disparate networks recited an inventive concept because they contained "specific enhancing limitation[s] that necessarily incorporates the invention's distributed architecture—an architecture providing a technological solution to a technological problem." 841 F.3d 1288, 1301 (Fed. Cir. 2016). Use of this "distributed architecture" transformed the claims into patentable subject matter. *Id*.

Nevertheless, not all technological aspects of how a patented invention is implemented supply a basis for finding an "inventive concept." A claim that simply takes an abstract idea and adds "the requirement to perform it on the Internet, or to perform it on a set of generic computer components . . . would not contain an inventive concept." *BASCOM*, 827 F.3d at 1350. For example, in *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass'n*, the Federal Circuit found that claims directed to the abstract ideas of extracting data and recognizing patterns did not recite an inventive concept because they simply recited "generic scanner and computer to perform well-understood, routine, and conventional activities commonly used in industry." 776 F.3d 1343, 1348 (Fed. Cir. 2014), *cert. denied*, 136 S. Ct. 119, 193 L. Ed. 2d 208 (2015). Similarly, in *DIRECTV*, the court found there was no inventive concept because "[t]he claim simply recites the use of generic features of cellular telephones, such as a storage medium and a graphical user interface, as well as routine functions, such as transmitting and receiving signals, to implement the underlying idea." 838 F.3d at 1262. Further, limiting the field of use to a particular technological environment does not supply an inventive concept. *Alice*, 134 S. Ct. at 2358 (noting that, under step two, "limiting the use of an abstract idea 'to a particular

technological environment'" "is not enough for patent eligibility"). For example, in *buySAFE, Inc. v. Google, Inc.*, the Federal Circuit found that patent-ineligible claims relating to transaction guarantees could not be saved from ineligibility because they were restricted to online transactions, as "[a]t best, that narrowing is an 'attempt[] to limit the use' of the abstract guarantee idea 'to a particular technological environment,' which has long been held insufficient to save a claim in this context." 765 F.3d 1350, 1355 (Fed. Cir. 2014). Accordingly, the search for an inventive concept remains one that court must approach cautiously, "scrutiniz[ing] the claim elements more microscopically" than in step one. *Elec. Power Grp.*, 830 F.3d at 1354.

In addition to these principles, several other considerations may be helpful in conducting a § 101 analysis: First, the Supreme Court has recognized that the "concern that undergirds [the] § 101 jurisprudence" is preemption. *Alice*, 134 S. Ct. at 2358. If a claim is so abstract so as to "pre-empt use of [the claimed] approach in all fields, and would effectively grant a monopoly over an abstract idea" it is not patent-eligible. *Bilski v. Kappos*, 561 U.S. 593, 612, 130 S. Ct. 3218, 3231, 177 L. Ed. 2d 792 (2010). However, the inverse is not true: "[w]hile preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility." *FairWarning IP*, 839 F.3d at 1098 (internal quotation marks and citation omitted).

Second (and relatedly), "claims that are 'so result-focused, so functional, as to effectively cover any solution to an identified problem' are frequently held ineligible under section 101." *DIRECTV*, 838 F.3d at 1265. For example, in *Elec. Power Grp.*, the Federal Circuit found that claims directed to "any way of effectively monitoring multiple sources on a power grid" instead of "some specific way of enabling a computer to monitor data from multiple sources across an electric power grid" did not contain an inventive concept. 830 F.3d at 1356. The Federal Circuit has noted that this framework "is one helpful way of double-checking the application of the Supreme Court's framework to particular claims—specifically, when determining whether the claims meet the requirement of an inventive concept in application." *Id*.

IV. DISCUSSION

With these principles in mind, the Court turns to the claims at issue. As set forth below, the Court finds that the asserted claims of the '543 and '812 patents are patent-ineligible, but the

asserted claims of the '971 patent are not.

A. '543 Patent

Fitbit currently asserts independent claim 20 and dependent claims 25-29 of the '543 patent. Fitbit maintains that claim 20 is not representative of the remaining asserted claims, Opp. 15, ECF 81, and Defendants provide no response on this point. Accordingly the Court will analyze each of the claims separately.

i. Claim 20

a. Step One

Defendants argue that the "character as a whole" of the asserted claims (including claim 20) is directed to an abstract idea because the claims simply amount to (1) detecting and tracking a user's activity; and (2) notifying the user about the amount of activity, which are routine functions that humans have long performed with pencil and paper. Mot. 10, ECF 74. Defendants also maintain that the asserted claims fall within the universe of data collection, analysis, and presentation subject matter, which the Federal Circuit and other courts have found to be abstract ideas. Mot. 10-11, ECF 74.

Fitbit disagrees, arguing that the claim embodies a specific improvement to portable activity monitoring technology, as its use of LEDs overcomes form factor and cost limitations that are particular to portable activity monitors. Opp. 8-9, ECF 81. It argues that Defendants' conception of the asserted claims is too high-level, and overlooks the fact that they claim a specific structure (e.g., a wearable band with a motion detection component and LEDs) that provides this technological improvement.

The Court agrees with Defendants that claim 20 is directed to an abstract idea. At stage one, the Court must train its inquiry on what the "character as a whole" or "focus" of the claims is "directed to." *Elec. Power Grp.*, 830 F.3d at 1353; *Internet Patents*, 790 F.3d at 1346. Reading claim 20 in its entirety, its focus is on collecting and reporting a person's cumulative amount of physical activity—in other words, data. The method of claim 20 recites four basic elements: (1) "providing" a wearable band with a motion detection component and LEDs, (2) collecting data on a person's movements, (3) displaying a representation of that data through a "progression" of

LEDs, and (4) sending a copy of that data to a secondary device. Assessed together, the weight of the claim rests with the final three elements—they comprise the bulk of the claim and contribute the most in meaning. By contrast, the wearable band is ancillary, simply providing a tool through which the rest of the claim limitations are accomplished. The claim language underscores this fact, as the band limitation adds little to the collective substance of the claim: a wearable band with flexible material, motion detection component, and LEDs are all generic components that existed in the art, and the claim recites no particularities about these components, including particular improvements to the motion detection component or LEDs themselves, or to their arrangement on the wearable band. The specification also supports this conclusion, as it gives examples of a number of different types of motion detection components that could be used, *see, e.g.*, '543 patent, col. 11 l. 62-col. 14 l. 34, col. 14 l. 56-col. 19 l. 16, col. 19 ll. 27-33, col. 19 l. 59-col. 20 l. 57, describes a wide range of variations that could be made to the wearable band, *see, e.g.*, *id.*, col. 11 ll. 9-32, and provides no elaboration on what types of LEDs may be used, *see, e.g.*, *id.*, col. 19 ll. 34-36. Accordingly, the wearable band with a motion detection component and LEDs "merely provide a generic environment in which to carry out the [] idea of [collecting and reporting data on cumulative physical activity]." *In re TLI Communications LLC Patent Litigation*, 823 F.3d 607, 611 (Fed. Cir. 2016). This adds little to the substance of the claim. Instead, the focus remains on the collecting and reporting functions themselves.

So characterized, the "character as a whole" of claim 20 is an abstract idea. As the Federal Circuit has held, data collection, analysis, and reporting—even when limited to particular content—are all abstract ideas. *See, e.g.*, *Elec. Power Grp.*, 830 F.3d at 1354 (claims "focused" on "collecting information, analyzing it, and displaying certain results of the collection and analysis" were directed to an abstract idea); *FairWarning IP*, 839 F.3d at 1093 (claims drawn to "analyzing records of human activity to detect suspicious behavior" were directed to an abstract idea). The focus of claim 20—collecting and reporting data on cumulative physical activity—falls squarely within these precedents.

Further, the same principles that animated the Federal Circuit in these decisions apply here. As the court explained, "information as such is intangible," and the steps of data collection and

analysis are steps that humans can perform in their minds and are "essentially mental processes within the abstract-idea category." *Elec. Power Grp.*, 830 F.3d at 1354-55. In addition, merely presenting results is "abstract as an ancillary part of such collection and analysis." *Id*. at 1355. At base, claim 20 describes nothing more than a mental process, as totaling an activity metric is something that can be done mentally or with pencil and paper. Indeed, humans have been doing this for decades on scoreboards and log sheets. It is also of no import that claim 20 confines its data collection to a particular topic (i.e., activity level)—even so scoped, this is still just a mental process. *Cf. id*. at 1355 (observing that "we have treated collecting information, including when limited to particular content (which does not change its character as information), as within the realm of abstract ideas"). Thus, the "character as a whole" of claim 20—collecting and reporting data on cumulative physical activity—is drawn to an abstract idea.

Claim 20 is distinguishable from the claims at issue in *Enfish* and *McRO*. There, the Federal Circuit found that the claims were not directed to an abstract idea because they constituted a "specific asserted improvement in computer capabilities" rather than "a process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool." *Enfish*, 822 F.3d at 1335. For example, the self-referential tables in *Enfish* were "not simply directed to any form of storing tabular data, but instead [were] specifically directed to a self-referential table for a computer database" that itself constituted an improvement in database technology. *Id*. at 1337. Claim 20 is not this: it recites the relatively general idea of data collection and reporting, but just applied in the narrower context of reporting cumulative activity level as detected by a motion detection component. While it is possible that claim 20 provides certain benefits to the field of portable activity monitoring, this does not mean that it constitutes a "specific asserted improvement in [portable activity monitoring device] capabilities"—the intermediated settlement scheme of *Alice* likely provided benefits to the financial world, the binary conversion method of *Gottschalk* likely provided benefits to the computer world, and the same can likely be said for many other patent-ineligible claims. *See Alice*, 134 S. Ct. at 2352; *Gottschalk v. Benson*, 409 U.S. 63, 67, 93 S. Ct. 253, 255, 34 L. Ed. 2d 273 (1972). Instead, *Enfish* and *McRO* represent a narrower class of patentable subject matter that requires an improvement to technology (e.g., a tool) used in a

technological field, not just incidental benefit to a technological field. This is absent from claim 20.

Fitbit's arguments to the contrary are not persuasive. According to Fitbit, the "structure" of the wearable band with a motion detection component and LEDs constitutes a specific improvement to portable activity monitoring technology that overcomes problems specific to that field. Opp. 8-9, ECF 81. This, however, is a revisionist gloss, which is not reflected in the '543 patent itself. The specific improvements to activity monitoring technology which Fitbit contends that this structure brings—activity level reporting which was cost-effective, not power-hungry, and robust, Opp. at 9, ECF 81—are not recited in claim 20 and receive scant attention in the specification of the '543 patent. *See, e.g.*, col. 11 ll. 52-55 (discussing only size and cost minimization); col. 19 ll. 34-36 (mentioning "conserving battery power" for an embodiment that includes a sleep mode). Further, even when these benefits are mentioned, the specification does not attribute them to the wearable band "structure" itself. *Id*. Moreover, as discussed above, this "structure" adds little to the substance of the claims, so, regardless of its purported benefits to the field, it does not alter the "character as a whole" of the claims and cannot save the claims under step one.

At bottom, the focus of claim 20 is simply data collection and reporting, albeit confined to a certain type of data (e.g., activity level). As such, it "merely implement[s] an old practice in [an allegedly] new environment," *FairWarning IP*, 839 F.3d at 1095, which does not change its "focus" under step one. Accordingly, it is directed to an abstract idea under step one of *Alice*/*Mayo*.

b. Step Two

Having found that claim 20 is directed to a patent-ineligible abstract idea, the Court proceeds to step two. Defendants contend that claim 20 contains no inventive concept because it simply recites using generic components in conventional ways, including using LEDs as a way of communicating information. Mot. 12-13, ECF 74. Fitbit responds that the "ordered combination" of claim elements provides an inventive concept, because the combination of an activity monitoring device with a series of LEDs as a display is a "specific, discrete implementation" of

activity monitoring that was far from conventional at the time of invention. Opp. 13-14, ECF 81. Instead, according to Fitbit, this combination was a "novel optimization" that solved design constraints (e.g., size, power consumption, durability) facing then-existing activity monitors. *Id.*

Before turning to the merits of the parties' arguments, the Court must first determine whether it is proper to resolve them at this stage. Fitbit's arguments appear to raise factual questions regarding the state of the art at the time of the '543 patent's invention, which, if material, would preclude this Court from granting judgment on the pleadings. *Hal Roach Studios, Inc. v. Richard Feiner & Co.*, 896 F.2d 1542, 1550 (9th Cir. 1989) ("[J]udgment on the pleadings is improper when the district court goes beyond the pleadings to resolve an issue; such a proceeding must properly be treated as a motion for summary judgment."); *see also* 5C Charles Alan Wright & Arthur R. Miller, *Federal Practice and Procedure* § 1367 (3d ed. 2008); *cf. FairWarning IP*, 839 F.3d at 1097 ("We have also acknowledged, however, that plausible factual allegations may preclude dismissing a case under § 101 where, for example, 'nothing on th[e] record . . . refutes those allegations as a matter of law or justifies dismissal under Rule 12(b)(6).') (quoting *BASCOM*, 827 F.3d at 1352). Instead, any further consideration of step two would convert this into a decision of summary judgment. *Id.* This is not the case here, however. As the discussion below demonstrates, the Court finds itself able to resolve the issue of whether claim 20 recites an inventive concept without considering disputed facts relating to the state of the art. Accordingly, there is no factual dispute that affects the Court's analysis, and it is appropriate to decide this issue under Rule 12(c).

Turning to the step two inquiry itself, the Court agrees with Defendants that claim 20 does not contain an inventive concept. Examining the elements of claim 20 individually, they recite nothing more than generic components used in conventional ways: the "band" is "worn by a person," the "motion detection component" "detect[s] and record[s] movement," the "light emitting diodes" display, and data is communicated to the secondary electronic device in no specific, non-ordinary manner. '543 patent, col. 26 ll. 45-62. Fitbit does not assert that it invented any of these components, nor does the specification describe them as inventive. There is also nothing inventive about using a progression of LEDs to represent a cumulative activity level: from

scoreboards to appliances, humans have used series of lights for decades to display progress achieved toward a goal. Claim 20's use of LEDs is no different from these traditional implementations. Accordingly, none of the elements of claim 20, by themselves, supply an inventive concept.

The ordered combination of these elements also does not yield an inventive concept. In *BASCOM*, the Federal Circuit held that "an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces." 827 F.3d at 1350. Here, however, there is nothing non-conventional or non-generic about how the elements of claim 20 are arranged. The motion detector and the LEDs are placed on the band, and, working in tandem, each performs its conventional function (monitoring and displaying, respectively). There is also no inventive concept in claim 20's use of a series of LEDs instead of other forms of display. As the specification makes clear, LEDs were one of several known alternatives for displaying information at the time of invention. *See* '543 patent, col. 10 ll. 16-18 (listing "a light emitting diode (LED), liquid crystal display (LCD) or other display device" as possible alternatives for "provid[ing] for display of some type of indicia indicating when the physical activity exceeds a predetermined threshold"). Choosing one conventional component over another to serve its conventional role is not inventive or transformative. Indeed, engineers make dozens of these decisions each day. In this sense, claim 20 stands apart from the claims in *BASCOM* or *AmDocs*, where a *separate* piece of technology (e.g., the ability of at least some of the IPSs to identify which individual account was communicating with it in *BASCOM* or the distributed architecture in *AmDocs*) was unconventionally introduced into the solution (e.g., content filtering in *BASCOM* or accounting and billing data management in *AmDocs*) to "provid[e] a technological solution to a technological problem." *See Amdocs*, 841 F.3d at 1301; *BASCOM*, 827 F.3d at 1350. There is no such unconventional insertion of additional technology here. Accordingly, the ordered combination of elements do not provide an inventive concept.

It is also no answer that claim 20 provides a solution specifically within the portable activity monitoring arts. Although claims that "improve[] an existing technological process" may pass step two, *BASCOM*, 827 F.3d at 1350, this does not mean that all claims that are scoped to a

particular technical field fall within this category. As the Supreme Court has made clear, "the prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of [the idea] to a particular technological environment." *Alice*, 134 S. Ct. at 2358 (quoting *Bilski*, 561 U.S., at 610-611, 130 S. Ct. 3218). Here, claim 20 more closely resembles an abstract idea (activity data collection and reporting) scoped to a technological environment (portable activity monitors), rather than a specific improvement to an existing technical process within that field. Notably, it "do[es] not require an arguably inventive set of components or methods, such as measurement devices or techniques," nor does it "invoke any assertedly inventive programming." *Elec. Power Grp.*, 830 F.3d at 1355. Accordingly, claim 20's close relation to portable activity monitoring does not transform it into patentable subject matter.

At bottom, claim 20 recites generic components that are used and combined in conventional ways within a particular technological environment, none of which rises to an inventive concept. Claim 20 fails step two, and thus, fails to recite patent-eligible subject matter under § 101.

c. Defendants' Claim Construction Position Does Not Warrant a Different Result

Fitbit also contends that Defendants' motion is "fatally undercut" by their claim construction position that "motion detection component" should be construed according to 35 U.S.C. § 112(6). Opp. 14-15, ECF 81. According to Fitbit, this "underscore[s] the specific, concrete (i.e., non-abstract) nature of the claims," and at least favors delaying a decision on patent eligibility until these claim construction issues are resolved. *Id*. at 15.

The Court disagrees. As an initial matter, the posture of this motion requires the Court to interpret the claims in the light most reasonable to the non-moving party (Fitbit), so Defendant's proposed construction does not control its analysis here. *See Manzarek*, 519 F.3d at 1031 (in ruling on a Rule 12(c) motion, a court must "construe the pleadings in the light most favorable to the nonmoving party"); *cf. Ultramercial, Inc. v. Hulu, LLC*, 722 F.3d 1335, 1339-40 (Fed. Cir. 2013), *cert. granted, judgment vacated sub nom. WildTangent, Inc. v. Ultramercial, LLC*, 134 S. Ct. 2870, 189 L. Ed. 2d 828 (2014) ("At summary judgment, the district court may choose to

construe the claims in accordance with this court's precedent, or if not it may choose to give a construction most favorable to the patentee, and to apply the usual rules pertaining to summary judgment from there, and still require clear and convincing evidence of ineligible subject matter.").[1]

Moreover, Defendants' position that "motion detection component" should be construed according to § 112(6) and limited to the disclosed structures in the specification is not inconsistent with its position that claim 20 does not recite an inventive concept. The specification discloses a wide range of motion detection components, including chemical sensors, pendulum-based mechanical sensors, and electrical sensors that use a conductive ball and coil inside a conductive tube. *See* '543 patent, col. 11 l. 62-col. 14 l. 34, col. 14 l. 56-col. 19 l. 16, col. 19 ll. 27-33, col. 19 l. 59-col. 20 l. 57. Far from implicating a specific structure, the breadth of this disclosure underscores how generic the "motion detection component" requirement is. Moreover, even if "motion detection component" were limited to the large universe disclosed in the specification, the "motion detection component" would still be used to detect motion and combined with other elements in claim 20 in the same conventional ways discussed above. Thus, Defendants' claim construction position is not inconsistent with finding a lack of an inventive concept. It does not warrant a different conclusion on patent eligibility.

ii. Claims 25-29

Having concluded that claim 20 does not recite patent-eligible subject matter under § 101, the Court proceeds to determine whether this is also true of the asserted dependent claims.

Applying step one, the Court finds that none of the additional limitations added in these claims is substantial enough to change the "character as a whole" of the claims. Claims 25 and 26 impose additional limitations on how data is communicated to the "second electronic device,"

[1] Although *Ultramercial* has been vacated by the Supreme Court, the Federal Circuit has continued to cite to this portion of the opinion approvingly. *See Bancorp Servs., L.L.C. v. Sun Life Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1273-74 (Fed. Cir. 2012) ("Although *Ultramercial* has since been vacated by the Supreme Court, we perceive no flaw in the notion that claim construction is not an inviolable prerequisite to a validity determination under § 101. We note, however, that it will ordinarily be desirable—and often necessary—to resolve claim construction disputes prior to a § 101 analysis, for the determination of patent eligibility requires a full understanding of the basic character of the claimed subject matter.").

claims 27 and 28 restrict the universe of possible "second electronic device[s]," and claim 29 makes the motion detection component and the LEDs removable from the band. *Id*., col. 27 l. 11-col. 28 l. 9. Even with these additional limitations, the "character as a whole" of each of these claims remains directed to detecting and reporting a person's activity level. The additional limitations simply restrict the universe of possible implementations. Accordingly, the Court finds that each of the asserted dependent claims is also directed to a patent-ineligible abstract idea.

Applying step two, the Court finds that none of the additional limitations adds an inventive concept. Claim 25 limits communication with the "second electronic device" to wireless communication that is "performed using a transmitter located within the band." '543 patent, col. 27 ll. 11-14. A transmitter is a generic component, and claim 25 recites nothing more than using it in a conventional way (i.e., wirelessly transmitting data). There is also nothing that is non-conventional or non-generic about how it is combined with the rest of the method. The same is true of claim 26, which depends on claim 25 and simply recites conventional functions that transmitters perform. *Id*., col. 27 ll. 15-17. Claims 27 and 28 simply restrict the universe of possible "second electronic device[s]." *Id*., col. 28 ll. 1-6. None of these provides an inventive concept or adds "significantly more" than the abstract idea that the claims are directed to. *Cf. Alice*, 134 S. Ct. at 2358 ("[T]he prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of [the idea] to a particular technological environment.") (quoting *Bilski*, 561 U.S. at 610-11, 130 S. Ct. at 3218). Claim 29 adds that the motion detection component and the LEDs must be removable from the band. '543 patent, col. 28 ll. 7-9. The ability to remove components from a wearable band is a relatively routine concept that has been employed with wearable accessories for some time. This too does not rise to the level of an inventive concept. Accordingly, none of the additional limitations in the dependent claims recites an inventive concept, as required by step two. The asserted dependent claims, like claim 20, fail to recite patent eligible subject matter under § 101.

B. '812 Patent

Fitbit currently asserts claims 1-6, 9-15, 18-23, and 25-26 of the '812 patent. Defendants assert that claim 1 is representative of the asserted independent claims (claims 1, 9, 18, and 26),

Mot. 4, ECF 74, and Fitbit does not appear to dispute this point. Regardless, the Court, in comparing the asserted independent claims on its own, does not find that they vary in any way that would be substantial enough to change the patent-eligibility analysis. Accordingly, the Court will analyze the asserted independent claims collectively.

i. Step One

At step one, Defendants argue that the asserted claims are drawn to an abstract idea because they do nothing more than recite several concepts which the Federal Circuit has already deemed abstract: (1) transferring data from one place to another; (2) collecting data; and (3) notifying a user. Mot. 13-14, ECF 74. Defendants argue that the claims' additional requirement of comparing activity data to a predetermined threshold does not make this subject matter more concrete because comparing activity to a "predetermined" level is essentially a mental process that humans have long performed in sporting activities, such as counting the number of "outs" in baseball. *Id*. at 14-15.

Fitbit responds that the asserted claims are not drawn to an abstract idea because they recite a specific improvement in portable activity monitoring devices: a notification solution that ensures that a user will receive the notification at the time he will be able to view and comprehend it. Opp. 16-18, ECF 81. According to Fitbit, this solves problems specific to the world of portable activity monitoring, where a user may not always be able to view notifications at certain times, such as when he is asleep or when he is running. *Id*. at 16.

The Court agrees with Defendants. Although minor differences exist between each of the asserted independent claims, they all contain similar basic elements: (1) receiving activity data (directly or indirectly) from an activity monitoring device; (2) processing the activity data to determine an "activity metric;" (3) comparing the "activity metric" against a "predetermined threshold;" (4) when the threshold is reached and/or exceeded, scheduling a notification that will appear at a particular date and time; (5) so displaying the notification; and (6) providing access to an application for interfacing with the activity monitoring device. *See* '812 patent, col. 25 ll. 23-66, col. 26 ll. 14-64, col. 27 l. 11-col. 28 l. 5, col. 28 ll. 13-40. Assessing their "character as a whole," these claims are directed to collecting and analyzing information to detect a particular

condition, and notifying a user at a particular time when that condition is detected. They are not directed to anything more technically specific—the claims do not focus on (or even recite) specific algorithms or give technical details about structures that must be used to perform the claimed functions. Instead, they focus on the high-level functions of collecting, analyzing, and notifying themselves.

This focus is an abstract idea. As discussed above with respect to the '543 patent, "[c]ollecting information," "analyzing information," and "merely presenting the results of abstract processes of collecting and analyzing information" all fall within the "realm of abstract ideas." *Elec. Power Grp.*, 830 F.3d at 1353. Thus, these aspects of the claims' focus—collecting information, analyzing it to detect a condition, and notifying the user that the condition was detected—are also abstract. The Court also notes that the Federal Circuit's decision *FairWarning IP* is particularly instructive here, as the claims at issue there closely resemble the asserted independent claims. Specifically, in *FairWarning IP*, the claims included the steps of "generating a rule for monitoring audit log data . . . that is indicative of improper access of the patient's [protected health information]," "applying the rule to the audit log data to determine if an event has occurred," and "providing notification if the event has occurred." 839 F.3d at 1092. Here too the claims include the steps of defining a rule (a "predefined threshold" that an "activity metric" is to reach/exceed), applying that rule to data (comparing the "predefined threshold" to an "activity metric" calculated from "activity data"), and triggering a notification when that rule is satisfied (triggering notification when the "activity metric" reaches/exceeds the "predefined threshold"). The *FairWarning IP* court concluded that the claims were abstract because they directed to "a combination of . . . abstract-idea categories," *id*. at 1093-94, and this same reasoning applies here.

The only way in which the character of the asserted independent claims differs from *FairWarning IP* is that it is also directed to displaying the notification at a particular date and time. However, this too is an abstract idea. The idea of waiting until a particular point in time to convey a message is an old concept, used for decades. For example, a secretary would collect phone messages while his boss was in a meeting and provide them at the conclusion of the meeting. Similarly, the front desk of a hotel would collect letters for a guest while he was out

during the day and provide them upon the guest's return. The requirement of displaying a notification at a particular date and time in the asserted independent claims is no less abstract. Accordingly, the Court finds that the entirety of what the asserted independent claims are directed to—collecting and analyzing information to detect a particular condition, and notifying a user at a particular time when that condition is detected—is an abstract idea.

Fitbit nevertheless contends that the asserted claims are not drawn to an abstract idea because, similar to the self-referential tables in *Enfish*, notifying the user at a particular point in time constitutes a specific improvement in portable activity monitoring technology. Opp. 16-18, ECF 81. The Court disagrees. As discussed above with respect to the '543 patent, even if a claim provides benefits to a particular technological field, this does not mean that it is directed to a specific, *Enfish*-like improvement to that technology. The claims at issue in *Enfish* and *McRO* took an existing technology—computer databases and computer facial animation—and recited something that itself improved how that technology worked. *See Enfish*, 822 F.3d at 1335 (self-referential database tables improved computer databases); *McRO*, 837 F.3d at 1314 (specific, automatic rules improved computer facial animation). There is no such analog here. For example, restricting the time at which an activity notification is provided does not improve the way that activity notification system itself works. Instead, this is an external modification that is separate from the functioning of the notification system. The same can be said of other aspects of portable activity monitoring technology: the claims do not focus on something that itself advances the capabilities of an activity monitoring device, any mobile device it works in conjunction with, or any processes they use to monitor physical activity. Instead, they are at most directed to an "asserted advance[] in [a] use to which existing computer capabilities could be put." *Electric Power Grp.*, 830 F.3d at 1354. As such, the claims fall outside the scope of *Enfish* and *McRO*. Accordingly, they are directed to an abstract idea and fail step one of *Alice*/*Mayo*.

Turning to the asserted dependent claims, the Court finds that none of the additional limitations introduced in these claims warrants a different conclusion on step one. These claims add restrictions on certain functional aspects of the independent claims, such as types of notification messages, *id.*, col. 25 ll. 44-46, col. 26 ll. 39-41, col. 27 ll. 47-49 (claims 2, 10, and

22), types of activity metrics, *id.*, col. 25 ll. 51-56, col. 26 ll. 49-53, col. 28 ll. 1-5 (claims 4, 13, and 23), how the mobile device and activity monitoring device communicate, *id.*, col. 25 ll. 47-50, col. 26 ll. 42-45 (claims 3 and 11), how the notification message gets triggered or rendered, *id.*, col. 26 ll. 46-48, col. 27 ll. 33-37, 43-46, col. 28 ll. 34-40 (claims 12, 19, 21, and 26), and the content of the notification message, *id.*, col. 25 ll. 58-66, col. 26 ll. 54-63 (claims 5, 6, 14, and 15). However, none of these restrictions are substantial enough to change the focus of the claims. Accordingly, the Court finds that the asserted dependent claims are also directed to an abstract idea.

ii. Step Two

Turning to step two, Defendants argue that the asserted claims fail to recite an inventive concept that would transform them into patent-eligible subject matter because they do nothing more than recite functions in general terms, which effectively preempt the entire field of activity tracking using thresholds and notifications. Mot. 15-16, ECF 74. Defendants also specifically argue that limiting notifications to a certain date and time—the claim limitation which Fitbit added during prosecution to overcome a § 101 rejection—is not an inventive concept, because it merely restricts how notification (an abstract idea) is carried out, rather than transform it into something patent-eligible. *Id.* Defendants also argue that the examiner's statements in the notice of allowance do not compel a different result because they conflict with current Federal Circuit case law (including *BASCOM* and *AmDocs*, which issued after the notification of allowance). *Id.* at 17.

Fitbit responds that scheduling the notification for a certain date and time supplies an inventive concept, because the examiner's statement, interpreted in the light most favorable to Fitbit, confirms that it was an unconventional addition to the claims at the time. Opp. 18-20, ECF 81. Fitbit also argues that it is an inventive concept under the rationale of *DDR*, because it provides "an improved notification system for portable activity monitoring devices that addresses the problem of notifications going unnoticed," and is thus a solution "rooted in [portable activity monitoring device] technology specifically arising in the realm of [portable activity monitoring device] technology." *Id.* at 20.

The Court begins with the asserted independent claims, examining the claim elements

"more microscopically" to determine whether any individual elements or their ordered combination provides something sufficiently inventive to transform the claims into patent-eligible subject matter. *Elec. Power Grp.*, 830 F.3d at 1354. Analyzed separately, most of the claim limitations do not come close to meeting this bar. They recite generic, black-box computing functions, such as "receiving," "processing," "comparing," and "display" applied to "activity data"—they do not require "a new source or type of information, or new techniques for analyzing it" or "any assertedly inventive programming." *Id*. They also do not recite any new or inventive components. Indeed, the only component(s) they require are "at least one processor" and there is nothing about the recited functions that suggests anything other than the use of generic, off-the-shelf computer components. These are not inventive concepts. *FairWarning IP*, 839 F.3d at 1096 (citing *DDR Holdings*, 773 F.3d at 1256) ("[T]he use of generic computer elements like a microprocessor or user interface do not alone transform an otherwise abstract idea into patent-eligible subject matter."). The claimed "activity monitoring device" is also generic, as the claims simply name an "activity monitoring device" and the specification describes a wide range of exemplary embodiments. *See* '812 patent, col. 6 l. 34-col. 7 l. 46. Finally, the step of "providing access to an application for interfacing with the activity monitor" is generic and insignificant post-solution activity, as this refers to nothing more than allowing a user to open a software application, which is part and parcel to a software-based notification system. Accordingly, these elements also fail to provide an inventive concept.

The only aspect of the claims that presents a closer call is the notification scheduling element. As an initial matter, the Court observes that the specific feature that Fitbit touts—notification at a time when the user is able to appreciate it—is not reflected in the claim language itself. The claims simply require notification at a "specified date and time," not a "date and time when the user is guaranteed to appreciate the message." Instead, the latter largely appears to be reserved for dependent claims 6, 7, 16, 17, 24, and 27—not asserted here—which actually require "delaying presentation of the notification message, based on the identified current state of activity of the user." *Id*., col. 25 l. 67-col. 26 l. 14, col. 26 l. 64-col. 27 l. 10, col. 28 ll. 6-13, 41-48. The specification underscores this point, as it makes clear that scheduling a notification for a particular

date and time and delaying a notification (which may have already been scheduled) until the user can comprehend it are different processes. *See id.*, col. 12 l. 66-col. 13 l. 4.

Nevertheless, it does appear that, when read in light of the specification and in the manner most favorable to Fitbit, the "specified date and time" element does seem broad enough to at least include instances where the "specified date and time" is selected such that it reflects a time when the user is likely to notice the notification. For example, the specification discloses that, when scheduling a notification for a specific date and time, the method can access "data obtained from a calendar associated with the user [which] may indicate that a user is busy or occupied during a specific time period . . . ."[2] *Id.*, col. 13 ll. 9-11. Thus, although the stop-gap of delaying notification (which actually guarantees that, even if notification has been scheduled for a "specified date and time" when the user just so happens to be busy, he will still see the notification at a convenient time) appears to fall outside the scope of the asserted claims, the "specified date and time" element contemplates some awareness about the user's activities.

Scheduling notifications to appear at a certain date and time, in and of itself, does not supply an inventive concept. This limitation simply restricts the manner in which one part of the methods are performed and has no transformative effect on the rest of the method. In addition, it is a relatively conventional and obvious restriction to add, as restricting the time for delivery is a practice that has long been associated with messages and notifications. As such, it amounts to insignificant extra-solution activity, which is insufficient to provide an inventive concept. *Mayo*, 566 U.S. 66, 132 S. Ct. 1289, 1298 ("Purely 'conventional or obvious' '[pre]-solution activity' is normally not sufficient to transform an unpatentable law of nature into a patent-eligible application of such a law."). The Supreme Court and the Federal Circuit have rejected similar elements as insufficiently transformative under step two. *See, e.g.*, *Mayo*, 566 U.S. 66, 132 S. Ct. 1289, 1298 (step to "determine the level of the relevant metabolites in the blood" which was

[2] The Court notes that it is also possible to read this portion of the specification as only describing the mechanisms by which the invention determines whether it should "delay presentation of the notification message"—the subject of unasserted claims 7, 8, 16, 17, 24, and 27. However, viewing this material in the light most favorable to Fitbit, the Court cannot, at this stage, rule out the possibility that this also refers to information that the methods could use when "scheduling the notification message for display . . . at a specified date and time" in the first instance.

"well-understood, routine, conventional activity" that scientists routinely engaged in "as part of their investigations into the relationships between metabolite levels and efficacy and toxicity of thiopurine compounds" was insignificant pre-solution activity); *Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1242 (Fed. Cir. 2016) (limitation restricting a method for generating restaurant menus suitable for mobile/web ordering to certain types of ordering was insignificant post-solution activity).

Further, on close inspection, the Court finds that there is nothing inventive about *how* notification scheduling is implemented. The claims themselves do not require any particular technical structure or algorithm for implementing this limitation, and the specification does not fare better. Instead, the specification simply attributes notification scheduling to a black-box software component, the "notification scheduler," which is only functionally described as something that "schedule[s] the notification for rendering during a specified time window or period of time." '812 patent, col. 12 ll. 61-62. Accordingly, notification scheduling requires nothing more than generic, conventional components. This cannot supply an inventive concept.

Moving away from the individual claim elements, the Court turns to their ordered combination to determine if it provides an inventive concept. The Court finds it does not. Although "an inventive concept can be found in the non-conventional and non-generic arrangement of known, conventional pieces," *BASCOM*, 827 F.3d at 1350, such is not the case here. Instead, the claims follow a conventional order of how data is usually analyzed: data is first received, then processed, then compared against a condition, and the notification is triggered when the condition is met. Further, as with the '543 patent, the claims here are distinguishable from *BASCOM* and *AmDocs* because there is no unconventional insertion of technology. *See Amdocs*, 841 F.3d at 1301 (distributed network architecture inserted into billing data management solution); *BASCOM*, 827 F.3d at 1350 (the ability of ISPs to associate traffic with certain accounts inserted into content filtering solution). The only feature that comes close is the notification scheduling element, if read to include the limited awareness that the "notification scheduler" possibly gains by accessing information in a user's calendar. However, this too is distinguishable because there is no technical feature being inventively harnessed. Instead, it is simply claiming the use of

additional data sources in a scheduling decision. This is not an inventive concept. *See FairWarning IP*, 839 F.3d at 1097 ("The mere combination of data sources, however, does not make the claims patent eligible."). This is especially true in the particular context of the '812 patent, as consulting a calendar to determine an appropriate time to schedule an activity is ordinary activity that one would predictably associate with scheduling. As such, it is most appropriately characterized as "[p]urely 'conventional or obvious' '[extra]-solution activity' [which] is normally not sufficient to transform an unpatentable law of nature into a patent-eligible application of such a law." *Mayo*, 566 U.S. 66, 132 S. Ct. 1289, 1298. Accordingly, the ordered combination of claim elements—including accounting for *how* notification scheduling is implemented—does not supply an inventive concept.

The examiner's statements in the notice of allowance do not compel a contrary conclusion. In considering prosecution history, the Court need not defer to the examiner's conclusions on patent eligibility, nor underlying observations regarding the state of the art. *See Novo Nordisk A/S v. Caraco Pharm. Labs., Ltd.*, 719 F.3d 1346, 1357 (Fed. Cir. 2013) ("The initial determinations by the PTO in determining to grant the application are entitled to no deference . . . . Rather, we treat the issued patent as having a presumption of validity that must be overcome by clear and convincing evidence."); *Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1322 (Fed. Cir. 2005) ("[A] court is not bound by the PTO's actions and must make its own independent determination of patent validity."); *TorPharm, Inc. v. Ranbaxy Pharm., Inc.*, 336 F.3d 1322, 1329 (Fed. Cir. 2003) ("The examiner's reasons for allowance are not beyond challenge."). Instead, deference is paid to the examiner through the presumption of validity, which includes the presumption that the examiner acted properly in determining whether an application was entitled to a patent. *Novo Nordisk*, 719 F.3d at 1357. Here, the Court finds it particularly fitting to depart from the examiner's reasoning, as it pre-dates *BASCOM* and *AmDocs*, both of which provide a more exacting view of what qualifies as an "inventive concept." It also pre-dates Federal Circuit decisions that have rejected step two arguments that seem similar to one component of the examiner's reasoning—that a "particular useful application," Ex. 11 to Mot. at 2, ECF 74-12, qualifies as an "inventive concept." *See, e.g., Tranxition*, No. 2015-1907, 2016 WL 6775967, at

*3 (rejecting step two argument that claimed invention was useful improvement over manual process); *FairWarning IP*, 839 F.3d at 1096, (rejecting step two argument that claimed invention "solve[d] technical problems unique to the computer environment and thus should be patent eligible"). Accordingly, the Court need not bind itself to the examiner's decision.

Fitbit also contends that the claims recite an inventive concept under *DDR Holdings*, as they are "directed to a solution 'rooted in [portable monitoring device] technology in order to overcome a problem specifically arising in the realm of [portable monitoring devices]," specifically, "the problem of notifications going unnoticed." Opp. at 20, ECF 81. However, as discussed above, this falls largely outside the subject matter of the asserted claims. Moreover, as the Federal Circuit has later explained in distinguishing *DDR Holdings*, the claims at issue in *DDR Holdings* "require[d] an arguably inventive device or technique for displaying information." *Elec. Power Grp.*, 830 F.3d at 1355; *see also Synopsys*, 839 F.3d at 1151-52 (describing the *DDR Holdings* claims as "involv[ing] a technological solution" and distinguishing claims relating to logic circuit design as "contain[ing] no such technical solution"). There is no similarly technical solution here. The claims simply limit the timing of the notification by (in their most generous reading) pulling in additional data sources. Accordingly, the Court finds that none of the asserted independent claims recites an inventive concept.

Turning to the asserted dependent claims, the Court concludes that none of the additional limitations introduced in these claims provides an inventive concept. All of these limitations "simply append[] conventional steps specified at a high level of generality," which does not make an abstract idea patentable. *DIRECTV*, 838 F.3d at 1262-63 (quoting *Mayo*, 132 S.Ct. at 1300). For example, claims 2, 4, 5, 6, 10, 13, 14, 15, 22, and 23 simply restrict the universe of information that the claimed methods operate with as either input or output (e.g., types of notification messages, types of activity metrics, content of the notification message), which are conventional modifications to a notification system. In addition, claims 3, 11, 12, 19, 21, and 26 provide further restrictions on how some aspects of the claims work internally (e.g., how the mobile device and activity monitoring device communicate or how the notification message gets triggered or rendered), but none of these restrictions deviates from conventional modifications of

these functions. Accordingly, none of the dependent claims provides an inventive concept.

Because neither the asserted independent nor dependent claims recite an inventive concept, the asserted claims of the '812 patent fail step two. Accordingly, they are not patent-eligible under § 101.

C. '971 Patent

Fitbit currently asserts independent claims 1 and 22, as well as dependent claims 25-28 of the '971 patent. Claim 1 is an apparatus claim which includes a "memory stor[ing] computer-executable instructions" to perform certain actions, all of which are analogous to steps recited in method claim 22. Claim 22, however, additionally includes the step of "providing user feedback . . . ." For simplicity, the Court will begin its § 101 analysis by focusing on the features that claim 1 and 22 have in common. Then, to the extent necessary, the Court will address the impact that the additional "user feedback" limitation in claim 22 and the additional limitations recited in the dependent claims have on the result.

i. Step One

At step one, Defendants argue that the asserted claims are directed to "gathering and storing heart rate data in response to user interaction," which is simply the abstract idea of data collection. Mot. 17, ECF 74. Defendants contend that the claims' limitations on when data collection is started and stopped do not render this less abstract, because they simply amount to content filtering, which is also an abstract idea. *Id*. at 18. Defendants also posit that the claims could be implemented by "putting one's fingers over one's wrist," "counting the pulses, and then stopping counting after thirty seconds or detection of a weaker or hurried heart beat," illustrating that the claims effectively preempt all forms of "taking one's pulse for a set period of time." *Id*. at 18-19.

Fitbit responds that Defendants' characterization of the claims sweeps too broad, and that the claims are instead directed to a "specific improvement to heart rate monitoring hardware and algorithms to address the technical challenges of conserving battery life and allowing easy initiation of a heart rate measurement at any time." Opp. 22, ECF 25. In particular, Fitbit contends that the claims' use of an "activator" that receives a single-user gesture provides an

"unconventional and innovative" addition to the art, which overcame problems that then-existing portable monitoring devices faced of having limited battery capacity (which was ill-suited for continuous monitoring heart rate) and bulky user interfaces to control when heart rate should be measured. *Id*. at 22-23. Fitbit argues that this constitutes a "specific structure" that directs the claims to a "particular tool" for implementing an improvement, rather than an abstract idea itself. *Id*. at 23. Fitbit also disagrees that the claims would preempt all forms of taking a person's pulse for a period of time, as the claims require specific structures—the activator and a heart rate sensor—that are not used in manual pulse-taking methods. *Id*. at 23-24.

The Court agrees with Fitbit that Defendants' characterization sweeps too broad. Evaluating the claims in light of the specification for their "character as a whole," the Court finds that the asserted claims are directed to a particular variant of heart rate data collection: selective heart rate data collection through minimized user interaction (i.e., a "single user-gesture" trigger and an automated "predetermined level of heart rate data quality" halting condition). The claims make clear that, in the claimed apparatus and method, heart rate data is only gathered for a limited period of time and that this time is bounded by specific conditions: a "single-user gesture" on one end and reaching a predetermined level of heart rate data quality on the other. Both of these conditions minimize the need for user input. Unlike the wearable band of the '543 patent discussed above, these restrictions comprise a substantial portion of the collective substance of the claims and color their character as a whole. The specification confirms this, as it summarizes its disclosure as "provid[ing] biometric monitoring devices with [a] [sic] convenient and user-friendly heart rate monitoring function." '971 patent, col. 1 ll. 36-37. Rather than just providing an ancillary tool with which the rest of the claim elements are accomplished, the heart of the claims revolves around these user-input-minimizing conditions. That said, the Court notes that the specification's descriptions of these restrictions are broad—the specification discloses a wide range of possible "single-user gesture[s]"[3] and simply describes the "predetermined level of heart

[3] As discussed in the background section above, the specification states that "a 'single user-gesture' is an action of a user relative to a single part of the apparatus, wherein the action is interpreted by the apparatus as a single behavioral pattern" and can include "a single command, shaking of the device, moving the device in a certain trajectory, e.g., a 'figure 8' trajectory, staring

rate data quality" as "a reliable heart rate reading." *Id.*, col. 20 ll. 12-17. Nevertheless, the universe of embodiments implied by these descriptions still retains distinguishing characteristics such that the claims remain scoped to a specific variant of heart rate data collection that is inextricably bounded by certain user-input-minimizing conditions. Accordingly, the "focus" of the claims should be so limited.

The question then becomes whether this focus—selective collection of heart rate data through certain forms of minimized user interaction—constitutes an abstract idea. As discussed above with respect to the '543 and '812 patents, "[c]ollecting information," "analyzing information," and "merely presenting the results of abstract processes of collecting and analyzing information" all fall within the "realm of abstract ideas." *Elec. Power Grp.*, 830 F.3d at 1353. There can be no doubt that simply collecting heart rate data falls within this category. Further, simply restricting the time during which an activity is performed is an abstract idea. Modifying an activity—including data collection—so that it is only performed for a limited period of time is something that humans have done for years and, as such, is a basic building block of human thought. Thus, the fact that the heart rate data collection here is selective and not continuous does not make the focus of the claims less abstract. Finally, not all forms of minimizing user interaction are non-abstract. Specifically relevant here, confining an "on" or "off" signal to a single gesture is an abstract idea. From light switches to push buttons, many forms of input that have been used for years require a single gesture. Thus, this too does not save the claims from being directed to an abstract idea.

Nevertheless, viewed as a whole, the Court finds that the claims are directed to more than just these abstract concepts. Rather than disembodied heart rate data collection (or similarly abstract variants thereof), the claims are directed to a *particular type* of selective heart rate data collection, which leverages a "single-user gesture" trigger and an automatic "predetermined level of heart rate data quality" halting condition to restrict data collection in a way that minimizes the

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at the apparatus or a particular portion of the apparatus (when the apparatus has gaze detection function), bringing a body part into proximity with the apparatus, bringing an arm wearing a wristband-type BMD from a downwards-extended position to a viewing position, twisting the wrist wearing a BMD implemented as wrist band, etc." '971 patent, col. 13 ll. 41-43, 45-55.

need for user input. In this sense, the claims of the '971 patent are distinguishable from the claims of the '543 and '812 patents, as they focus not just on data collection (and reporting), but a specific, improved form of data collection.

This focus constitutes a "specific asserted improvement in [heart rate monitor] capabilities." *Enfish*, 822 F.3d at 1335. As the specification of the '971 patent describes, then-"existing devices that measure[d] momentary heart rate require[d] cumbersome user interaction to take the measurement . . . ." '971 patent, col. 1 ll. 32-34. By automating the point at which data collection stops and combining that with a single-gesture trigger, the '971 claims focus on an improvement to heart rate monitors as a technological tool, which overcomes the problem of bulky user interfaces and provides a way to more easily and efficiently gather a selective heart rate reading. Rather than requiring multiple clicks through a menu, the '971 claims allow a user to trigger a reading with a single gesture, and then trust that a reliable heart rate reading will be collected. This improvement at least in part stems from an inherently technological feature—the ability of a heart rate monitor to determine when the data it is collecting reaches a certain quality—which is inextricably tied to the mechanisms by which it collects data. And, in turn, it makes it easier for a user to perform selective heart rate readings, which diminishes the need to run the heart rate monitor continuously and saves battery life. *See id.*, col. 20 ll. 9-12 ("the device automatically stops the heart rate sensor from collecting further data after one or more criteria are met, thereby minimizing battery consumption").

So assessed, the claims here parallel those at issue in *Enfish*. In *Enfish*, the Federal Circuit found that the claims at issue were "not simply directed to any form of storing tabular data, but instead [were] specifically directed to a self-referential table for a computer database," which "functions differently than conventional database structures." 822 F.3d at 1337. The same can be said for the claims at issue here. The incorporation of an "activator" to start heart rate data collection when there is a "single user gesture" and logic to stop heart rate data collection when a "predetermined level of heart rate data quality" is reached improve a specific technological tool (a heart rate monitor). Further, the improved tool functions differently than conventional heart rate monitors, which require multiple clicks through bulky user interfaces to start and stop data

collection. *See* '971 patent, col. 1 ll. 32-35. As such, it is more closely characterized as a "specific asserted improvement in [heart rate monitor] capabilities" instead of "on a process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool." *Enfish*, 822 F.3d at 1335-36.

The Federal Circuit's decision in *McRO* also provides helpful guidance. There, the Federal Circuit found that the claims "focused on a specific asserted improvement in computer animation, i.e., the automatic use of rules of a particular type." 837 F.3d at 1314. Helpful to the Court's analysis was that "[i]t is the incorporation of the claimed rules, not the use of the computer, that 'improved [the] existing technological process' by allowing the automation of further tasks." *Id.* The same could be said for the claims here. It is the incorporation of the input-minimizing features—the "single user gesture" trigger and "predetermined level of heart rate data quality" halting condition—that provide the improvement to heart rate monitors, not any particular electronic component with which these features are implemented. This helps illustrate that the invention itself focuses on an improvement in [heart rate monitors], not just the use of [heart rate monitors] as tools in the aid of a process focused on an abstract idea." *DIRECTV*, 838 F.3d at 1262.

The Court notes, however, that this case presents a closer call than *Enfish* or *McRO*. In its § 101 jurisprudence, the Federal Circuit has found that claims fail step one when they are "entirely functional in nature" and are "untethered to any specific or concrete way of implementing it." *DIRECTV*, 838 F.3d at 1258. This is because such result-focused, functional claims are "drawn to the idea [of the result] itself," rather than a specific implementation of that result. *See id.* The claims at issue come dangerously close to this: as noted above, the specification discloses a wide range of possible "single-user gesture[s]" and simply describes the "predetermined level of heart rate data quality" as "a reliable heart rate reading."[4] '971 patent, col. 20 ll. 12-17. In addition,

[4] Defendants contend that the specification's description of "automatically stop[ping] data collection after a set period of time, such as about 3 seconds, 5 seconds, 10 seconds, 20 seconds, 40 seconds, 1 minute, or 2 minutes," *id.*, col. 20 ll. 12-15, also applies to this claim element. The Court disagrees, as the claim language plainly requires a stopping condition based on "data quality" and a stopping condition based on time elapsed is not this.

simply minimizing user interaction is a result. Nevertheless, when viewed collectively and read in light of the specification and in the manner most favorable to Fitbit, the Court finds that the claims provide enough details about how to implement the claimed improvement such that they are more similar to *Enfish* than *DIRECTV*. Specifically, the claims require that the "single user gesture" is detected by an "activator." *Id.*, col. 41 ll. 28-29. The specification ties the activator to a broad but concrete class of structures, which require touch or proximity to be triggered. For example, it can be a "biometric sensor, such as an accelerometer," a "button," "pressure or touch sensitive sensor, e.g., capacitive touch, resistive touch, ultrasonic touch, etc., or a proximity sensor, e.g., infrared, capacitive, etc." *Id.*, col. 8 ll. 59-63, col. 14 ll. 50-54. This class is further restricted for claim 1, which requires that the activating signal is received through "the activator surface area." *Id.*, col. 41 ll. 25-29, col. 43 ll. 8-9. Taken together with the "predetermined level of heart rate data quality" halting condition, these requirements take the focus of the claims out of a more results-oriented realm of minimizing user interaction in heart rate data collection to specifically claim a way of doing this: using a single-user gesture and an automatic, data quality-driven stopping condition. These limitations may be so broad as to raise enablement or novelty concerns, but they do not prevent the claims from being directed to a "specific asserted improvement in [heart rate monitor] capabilities." *Enfish*, 822 F.3d at 1335. Accordingly, the clams are directed to a specific improvement in technology under *Enfish* and are not directed to an abstract idea under step one.

Because the common limitations that the asserted independent claims share are sufficient to find them patent eligible, the Court need not consider the additional "user feedback" limitation in claim 22. For this same reason, the Court also need not consider the additional limitations of dependent claims 25-28. Instead, the character of the whole of all of these claims is at least as concrete as selective collection of heart rate data through certain forms of minimized user interaction; thus, they are not directed to patent-ineligible subject matter.

ii. Step Two

Having found that the claims are not directed to an abstract idea under step one, the Court need not reach step two. It declines to do so here.

V. CONCLUSION

For the foregoing reasons, the Court concludes that the asserted claims of the '543 and '812 patents are patent-ineligible under 35 U.S.C. § 101 because they are directed to abstract ideas and do not recite any inventive concepts. The asserted claims of the '971 patent, however, are not directed to an abstract idea and are not patent-ineligible. Accordingly, the Court GRANTS IN PART and DENIES IN PART Defendants' motion for judgment on the pleadings.

IT IS SO ORDERED.

Dated: March 2, 2017

BETH LABSON FREEMAN
United States District Judge

United States District Court
Northern District of California