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**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

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

3 Claim 20, the only independent asserted claim, recites:

4 20. A method, comprising:
5 providing a band defined to be worn by a person, the band comprising
6 a flexible material, the band including a motion detection
7 component and a series of light emitting diodes;
8 detecting and recording movement of the person by use of the motion
9 detection component;
10 controlling illumination of the series of light emitting diodes such that
11 individual light emitting diodes of the series of light emitting
12 diodes turn on to emit light in a progression from one end of the
13 series of light emitting diodes toward another end of the series of
14 light emitting diodes, wherein an amount of the progression is
15 based on an amount of movement of the person recorded using
16 the motion detection component; and
17 communicating data associated with the amount of recorded
18 movement of the person to a secondary electronic device.

12 *Id.*, col. 26 ll. 45-60. Claims 25 and 26 add the requirements that (1) the data be transmitted
13 wirelessly, by (2) generating and transmitting radio frequency signals. *Id.*, col. 27 ll. 11-17.

14 Claim 27 requires that the secondary device be a computer, *id.*, col. 28 ll. 1-2, claim 28 requires
15 that the secondary device be “one or more of a game, a toy, a game controller, a computer
16 interface device, a cell phone, a mobile data communication device, a microprocessor, and a
17 computer,” *id.*, col. 28 ll. 3-6, and claim 29 requires that the wearable band be removable, *id.*, col.
18 28 ll. 7-9.

19 **B. The '812 Patent**

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

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

1 steps/floors climbed, calories burned, active minutes, etc.” *Id.*, col. 9 ll. 6-9. After the activity
2 metric reaches a certain predefined threshold, such as “a threshold number of steps taken, a
3 threshold number of steps/floors (or altitude) climbed, a threshold distance traveled, a threshold
4 number of active minutes achieved, a threshold number of calories burned, etc.” or “25%, 50%,
5 75%, and 100% of [a] goal,” a notification message is generated and scheduled for display at a
6 particular date and time. *Id.*, col. 9 ll. 62-67, col. 10 ll. 16-17. When that time arrives, the
7 message is displayed, along with “access to an application for interfacing with the activity
8 monitoring device.” *Id.*, col. 25 ll. 40-42, col. 26 ll. 36-37, col. 27 ll. 31-32, col. 25 ll. 32-33.

9 One of the independent claims, claim 1, recites:

- 10 1. A method for generating a notification on a mobile device,
11 comprising:
12 establishing a wireless connection to an activity monitoring device;
13 receiving activity data from the activity monitoring device via the
14 wireless connection;
15 processing the activity data to determine an activity metric for a user
16 of the activity monitoring device;
17 comparing the activity metric against a predefined threshold, the
18 predefined threshold being mapped to a notification message;
19 in response to determining that the activity metric reaches or exceeds
20 the predefined threshold, scheduling the notification message for
21 display on the mobile device at a specified date and time;
22 wherein the notification message is displayed on the mobile device at
23 the specified date and time, the display of the notification message
24 providing access to an application for interfacing with the activity
25 monitoring device;
26 wherein the method is executed by at least one processor.

19 *Id.*, col. 25 ll. 23-42. At a high level, dependent claims add restrictions on types of notification
20 messages, *id.*, col. 25 ll. 44-46, col. 26 ll. 39-41, col. 27 ll. 47-49 (claims 2, 10, and 22), types of
21 activity metrics, *id.*, col. 25 ll. 51-56, col. 26 ll. 49-53, col. 28 ll. 1-5 (claims 4, 13, and 23), how
22 the mobile device and activity monitoring device communicate, *id.*, col. 25 ll. 47-50, col. 26 ll. 42-
23 45 (claims 3 and 11), how the notification message gets triggered or rendered, *id.*, col. 26 ll. 46-
24 48, col. 27 ll. 33-37, 43-46, col. 28 ll. 34-40 (claims 12, 19, 21, and 26), and the content of the
25 notification message, *id.*, col. 25 ll. 58-66, col. 26 ll. 54-63 (claims 5, 6, 14, and 15).

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

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

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

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

17 **C. The ’971 Patent**

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

22 Fitbit currently asserts claims 1, 22, and 25-28. These claims generally relate to a method
23 and apparatus for on-demand measurement of a person’s heart rate, where data collection is
24 activated by a “single user-gesture” on the surface of an “activator” and continues until “a heart
25 rate of a predetermined level of heart rate quality” is obtained. *Id.*, col. 41 ll. 7-35, col. 43 ll. 3-18.
26 The specification gives descriptions of several of these terms. With respect to “activator,” the
27 specification explains that “[t]he activator, in general, is a mechanism through which a user input
28 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

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

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

- 14 1. An apparatus comprising:
15 one or more biometric sensors comprising a heart rate sensor;
16 an activator of the heart rate sensor;
17 a heart rate sensor surface area through which the heart rate sensor
18 can collect heart rate data from a user;
19 an activator surface area through which the activator can receive
20 activation signals from the user;
21 at least one processor; and
22 a memory,
23 wherein:
24 the one or more biometric sensors, the activator, the at least one
25 processor, and the memory are communicatively connected, and
26 the memory stores computer-executable instructions for controlling
27 the at least one processor to cause the heart rate sensor to:
28 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:

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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.

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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

1 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-
2 ineligible subject matter, the Court must “consider the elements of each claim both individually
3 and ‘as an ordered combination’ to determine whether the additional elements ‘transform the
4 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
5 Supreme Court has described this as a “search for an ‘inventive concept’—i.e., an element or
6 combination of elements that is ‘sufficient to ensure that the patent in practice amounts to
7 significantly more than a patent upon the [ineligible concept] itself.’” *Id.*

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10 In evaluating step one, “the ‘directed to’ inquiry applies a stage-one filter to claims,
11 considered in light of the specification, based on whether ‘their character as a whole is directed to
12 excluded subject matter.’” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016)
13 (quoting *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015)).
14 The Federal Circuit has also described this inquiry as an evaluation of the “focus” or “basic thrust”
15 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).

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17 In the software context, claims may fail step one because they are directed to an abstract
18 idea. The Federal Circuit has found this to be true in a number of cases, and some commonalities
19 have emerged. For example, fundamental economic activities and business practices, even if
20 performed on a computer, are often abstract. *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359,
21 1362 (Fed. Cir. 2015), cert. denied, 136 S. Ct. 701, 193 L. Ed. 2d 522 (2015) (collecting cases). In
22 addition, the Federal Circuit has “treated collecting information, including when limited to
23 particular content (which does not change its character as information), as within the realm of
24 abstract ideas.” *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016)
25 (collecting cases); *see also, e.g., In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 611 (Fed.
26 Cir. 2016); *FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1095 (Fed. Cir. 2016).
27 Further, it has “treated analyzing information by steps people go through in their minds, or by
28 mathematical algorithms, without more, as essentially mental processes within the abstract-idea

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

9 To date, the Federal Circuit has provided two examples of software claims that are not
 10 directed to an abstract idea. First, in *Enfish*, the Federal Circuit determined that claims directed to
 11 a specific type of self-referential table in a computer database were not abstract because they
 12 focused “on the specific asserted improvement in computer capabilities (i.e., the self-referential
 13 table for a computer database)” instead of “a process that qualifies as an ‘abstract idea’ for which
 14 computers are invoked merely as a tool,” they were not directed to an abstract idea. *Id.* at 1335-
 15 36, 1339. Second, in *McRO, Inc. v. Bandai Namco Games Am. Inc.*, the Federal Circuit found that
 16 patents that automated part of a preexisting method for 3-D facial expression animation were not
 17 abstract because they “focused on a specific asserted improvement in computer animation, i.e., the
 18 automatic use of rules of a particular type.” 837 F.3d 1299, 1314 (Fed. Cir. 2016).

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

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

12 In assessing step two, courts must “consider the elements of each claim both individually
 13 and ‘as an ordered combination’” and assess whether there are any “additional features” in the
 14 claims that constitute an “inventive concept.” *Alice*, 134 S. Ct. at 2357. This inventive concept
 15 “must be significantly more than the abstract idea itself,” *BASCOM*, 827 F.3d at 1349, “must be
 16 more than well-understood, routine, conventional activity,” *DIRECTV*, 838 F.3d at 1262, “and
 17 cannot simply be an instruction to implement or apply the abstract idea on a computer,” *BASCOM*,
 18 827 F.3d at 1349. For example, it may be found in an “inventive set of components or methods,”
 19 “inventive programming,” or an inventive approach in “how the desired result is achieved.” *Elec.*
 20 *Power Grp.*, 830 F.3d at 1355.

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

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

14 Nevertheless, not all technological aspects of how a patented invention is implemented
 15 supply a basis for finding an “inventive concept.” A claim that simply takes an abstract idea and
 16 adds “the requirement to perform it on the Internet, or to perform it on a set of generic computer
 17 components . . . would not contain an inventive concept.” *BASCOM*, 827 F.3d at 1350. For
 18 example, in *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat. Ass’n*, the Federal
 19 Circuit found that claims directed to the abstract ideas of extracting data and recognizing patterns
 20 did not recite an inventive concept because they simply recited “generic scanner and computer to
 21 perform well-understood, routine, and conventional activities commonly used in industry.” 776
 22 F.3d 1343, 1348 (Fed. Cir. 2014), *cert. denied*, 136 S. Ct. 119, 193 L. Ed. 2d 208 (2015).
 23 Similarly, in *DIRECTV*, the court found there was no inventive concept because “[t]he claim
 24 simply recites the use of generic features of cellular telephones, such as a storage medium and a
 25 graphical user interface, as well as routine functions, such as transmitting and receiving signals, to
 26 implement the underlying idea.” 838 F.3d at 1262. Further, limiting the field of use to a
 27 particular technological environment does not supply an inventive concept. *Alice*, 134 S. Ct. at
 28 2358 (noting that, under step two, “limiting the use of an abstract idea ‘to a particular

1 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
 2 guarantees could not be saved from ineligibility because they were restricted to online
 3 transactions, as “[a]t best, that narrowing is an ‘attempt[] to limit the use’ of the abstract guarantee
 4 idea ‘to a particular technological environment,’ which has long been held insufficient to save a
 5 claim in this context.” 765 F.3d 1350, 1355 (Fed. Cir. 2014). Accordingly, the search for an
 6 inventive concept remains one that court must approach cautiously, “scrutiniz[ing] the claim
 7 elements more microscopically” than in step one. *Elec. Power Grp.*, 830 F.3d at 1354.

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 9 In addition to these principles, several other considerations may be helpful in conducting a
 10 § 101 analysis: First, the Supreme Court has recognized that the “concern that undergirds [the]
 11 § 101 jurisprudence” is preemption. *Alice*, 134 S. Ct. at 2358. If a claim is so abstract so as to
 12 “pre-empt use of [the claimed] approach in all fields, and would effectively grant a monopoly over
 13 an abstract idea” it is not patent-eligible. *Bilski v. Kappos*, 561 U.S. 593, 612, 130 S. Ct. 3218,
 14 3231, 177 L. Ed. 2d 792 (2010). However, the inverse is not true: “[w]hile preemption may signal
 15 patent ineligible subject matter, the absence of complete preemption does not demonstrate patent
 16 eligibility.” *FairWarning IP*, 839 F.3d at 1098 (internal quotation marks and citation omitted).

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

26 **IV. DISCUSSION**

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

1 asserted claims of the '971 patent are not.

2 **A. '543 Patent**

3 Fitbit currently asserts independent claim 20 and dependent claims 25-29 of the '543
4 patent. Fitbit maintains that claim 20 is not representative of the remaining asserted claims, Opp.
5 15, ECF 81, and Defendants provide no response on this point. Accordingly the Court will
6 analyze each of the claims separately.

7 **i. Claim 20**

8 **a. Step One**

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

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

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

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

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

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

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

12 Claim 20 is distinguishable from the claims at issue in *Enfish* and *McRO*. There, the
13 Federal Circuit found that the claims were not directed to an abstract idea because they constituted
14 a “specific asserted improvement in computer capabilities” rather than “a process that qualifies as
15 an ‘abstract idea’ for which computers are invoked merely as a tool.” *Enfish*, 822 F.3d at 1335.
16 For example, the self-referential tables in *Enfish* were “not simply directed to any form of storing
17 tabular data, but instead [were] specifically directed to a self-referential table for a computer
18 database” that itself constituted an improvement in database technology. *Id.* at 1337. Claim 20 is
19 not this: it recites the relatively general idea of data collection and reporting, but just applied in the
20 narrower context of reporting cumulative activity level as detected by a motion detection
21 component. While it is possible that claim 20 provides certain benefits to the field of portable
22 activity monitoring, this does not mean that it constitutes a “specific asserted improvement in
23 [portable activity monitoring device] capabilities”—the intermediated settlement scheme of *Alice*
24 likely provided benefits to the financial world, the binary conversion method of *Gottschalk* likely
25 provided benefits to the computer world, and the same can likely be said for many other patent-
26 ineligible claims. *See Alice*, 134 S. Ct. at 2352; *Gottschalk v. Benson*, 409 U.S. 63, 67, 93 S. Ct.
27 253, 255, 34 L. Ed. 2d 273 (1972). Instead, *Enfish* and *McRO* represent a narrower class of
28 patentable subject matter that requires an improvement to technology (e.g., a tool) used in a

1 technological field, not just incidental benefit to a technological field. This is absent from claim
2 20.

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

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

22 b. Step Two

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

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

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

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

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

5 The ordered combination of these elements also does not yield an inventive concept. In
6 *BASCOM*, the Federal Circuit held that “an inventive concept can be found in the non-
7 conventional and non-generic arrangement of known, conventional pieces.” 827 F.3d at 1350.
8 Here, however, there is nothing non-conventional or non-generic about how the elements of claim
9 20 are arranged. The motion detector and the LEDs are placed on the band, and, working in
10 tandem, each performs its conventional function (monitoring and displaying, respectively). There
11 is also no inventive concept in claim 20’s use of a series of LEDs instead of other forms of
12 display. As the specification makes clear, LEDs were one of several known alternatives for
13 displaying information at the time of invention. *See* ’543 patent, col. 10 ll. 16-18 (listing “a light
14 emitting diode (LED), liquid crystal display (LCD) or other display device” as possible
15 alternatives for “provid[ing] for display of some type of indicia indicating when the physical
16 activity exceeds a predetermined threshold”). Choosing one conventional component over another
17 to serve its conventional role is not inventive or transformative. Indeed, engineers make dozens of
18 these decisions each day. In this sense, claim 20 stands apart from the claims in *BASCOM* or
19 *AmDocs*, where a *separate* piece of technology (e.g., the ability of at least some of the IPSs to
20 identify which individual account was communicating with it in *BASCOM* or the distributed
21 architecture in *AmDocs*) was unconventionally introduced into the solution (e.g., content filtering
22 in *BASCOM* or accounting and billing data management in *AmDocs*) to “provid[e] a technological
23 solution to a technological problem.” *See Amdocs*, 841 F.3d at 1301; *BASCOM*, 827 F.3d at 1350.
24 There is no such unconventional insertion of additional technology here. Accordingly, the ordered
25 combination of elements do not provide an inventive concept.

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

1 particular technical field fall within this category. As the Supreme Court has made clear, “the
2 prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use
3 of [the idea] to a particular technological environment.” *Alice*, 134 S. Ct. at 2358 (quoting *Bilski*,
4 561 U.S., at 610-611, 130 S. Ct. 3218). Here, claim 20 more closely resembles an abstract idea
5 (activity data collection and reporting) scoped to a technological environment (portable activity
6 monitors), rather than a specific improvement to an existing technical process within that field.
7 Notably, it “do[es] not require an arguably inventive set of components or methods, such as
8 measurement devices or techniques,” nor does it “invoke any assertedly inventive programming.”
9 *Elec. Power Grp.*, 830 F.3d at 1355. Accordingly, claim 20’s close relation to portable activity
10 monitoring does not transform it into patentable subject matter.

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

15 c. Defendants’ Claim Construction Position Does Not Warrant a Different
16 Result

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

22 The Court disagrees. As an initial matter, the posture of this motion requires the Court to
23 interpret the claims in the light most reasonable to the non-moving party (Fitbit), so Defendant’s
24 proposed construction does not control its analysis here. *See Manzarek*, 519 F.3d at 1031 (in
25 ruling on a Rule 12(c) motion, a court must “construe the pleadings in the light most favorable to
26 the nonmoving party”); *cf. Ultramercial, Inc. v. Hulu, LLC*, 722 F.3d 1335, 1339-40 (Fed. Cir.
27 2013), *cert. granted, judgment vacated sub nom. WildTangent, Inc. v. Ultramercial, LLC*, 134 S.
28 Ct. 2870, 189 L. Ed. 2d 828 (2014) (“At summary judgment, the district court may choose to

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

5 Moreover, Defendants’ position that “motion detection component” should be construed
6 according to § 112(6) and limited to the disclosed structures in the specification is not inconsistent
7 with its position that claim 20 does not recite an inventive concept. The specification discloses a
8 wide range of motion detection components, including chemical sensors, pendulum-based
9 mechanical sensors, and electrical sensors that use a conductive ball and coil inside a conductive
10 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
11 l. 59-col. 20 l. 57. Far from implicating a specific structure, the breadth of this disclosure
12 underscores how generic the “motion detection component” requirement is. Moreover, even if
13 “motion detection component” were limited to the large universe disclosed in the specification, the
14 “motion detection component” would still be used to detect motion and combined with other
15 elements in claim 20 in the same conventional ways discussed above. Thus, Defendants’ claim
16 construction position is not inconsistent with finding a lack of an inventive concept. It does not
17 warrant a different conclusion on patent eligibility.

18 **ii. Claims 25-29**

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

21 Applying step one, the Court finds that none of the additional limitations added in these
22 claims is substantial enough to change the “character as a whole” of the claims. Claims 25 and 26
23 impose additional limitations on how data is communicated to the “second electronic device,”
24

25 ¹ Although *Ultramercial* has been vacated by the Supreme Court, the Federal Circuit has
26 continued to cite to this portion of the opinion approvingly. *See Bancorp Servs., L.L.C. v. Sun Life*
27 *Assur. Co. of Canada (U.S.)*, 687 F.3d 1266, 1273-74 (Fed. Cir. 2012) (“Although *Ultramercial*
28 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.”).

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

7 Applying step two, the Court finds that none of the additional limitations adds an inventive
 8 concept. Claim 25 limits communication with the “second electronic device” to wireless
 9 communication that is “performed using a transmitter located within the band.” ’543 patent, col.
 10 27 ll. 11-14. A transmitter is a generic component, and claim 25 recites nothing more than using it
 11 in a conventional way (i.e., wirelessly transmitting data). There is also nothing that is non-
 12 conventional or non-generic about how it is combined with the rest of the method. The same is
 13 true of claim 26, which depends on claim 25 and simply recites conventional functions that
 14 transmitters perform. *Id.*, col. 27 ll. 15-17. Claims 27 and 28 simply restrict the universe of
 15 possible “second electronic device[s].” *Id.*, col. 28 ll. 1-6. None of these provides an inventive
 16 concept or adds “significantly more” than the abstract idea that the claims are directed to. *Cf.*
 17 *Alice*, 134 S. Ct. at 2358 (“[T]he prohibition against patenting abstract ideas cannot be
 18 circumvented by attempting to limit the use of [the idea] to a particular technological
 19 environment.”) (quoting *Bilski*, 561 U.S. at 610-11, 130 S. Ct. at 3218). Claim 29 adds that the
 20 motion detection component and the LEDs must be removable from the band. ’543 patent, col. 28
 21 ll. 7-9. The ability to remove components from a wearable band is a relatively routine concept
 22 that has been employed with wearable accessories for some time. This too does not rise to the
 23 level of an inventive concept. Accordingly, none of the additional limitations in the dependent
 24 claims recites an inventive concept, as required by step two. The asserted dependent claims, like
 25 claim 20, fail to recite patent eligible subject matter under § 101.

26 **B. ’812 Patent**

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

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

5 **i. Step One**

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

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

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

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

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

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

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

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

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

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

9 **ii. Step Two**

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

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

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

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

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

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

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

14 Scheduling notifications to appear at a certain date and time, in and of itself, does not
15 supply an inventive concept. This limitation simply restricts the manner in which one part of the
16 methods are performed and has no transformative effect on the rest of the method. In addition, it
17 is a relatively conventional and obvious restriction to add, as restricting the time for delivery is a
18 practice that has long been associated with messages and notifications. As such, it amounts to
19 insignificant extra-solution activity, which is insufficient to provide an inventive concept. *Mayo*,
20 566 U.S. 66, 132 S. Ct. 1289, 1298 (“Purely ‘conventional or obvious’ ‘[pre]-solution activity’ is
21 normally not sufficient to transform an unpatentable law of nature into a patent-eligible
22 application of such a law.”). The Supreme Court and the Federal Circuit have rejected similar
23 elements as insufficiently transformative under step two. *See, e.g., Mayo*, 566 U.S. 66, 132 S. Ct.
24 1289, 1298 (step to “determine the level of the relevant metabolites in the blood” which was

25
26 ² The Court notes that it is also possible to read this portion of the specification as only describing
27 the mechanisms by which the invention determines whether it should “delay presentation of the
28 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.

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

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

15 Moving away from the individual claim elements, the Court turns to their ordered
16 combination to determine if it provides an inventive concept. The Court finds it does not.
17 Although “an inventive concept can be found in the non-conventional and non-generic
18 arrangement of known, conventional pieces,” *BASCOM*, 827 F.3d at 1350, such is not the case
19 here. Instead, the claims follow a conventional order of how data is usually analyzed: data is first
20 received, then processed, then compared against a condition, and the notification is triggered when
21 the condition is met. Further, as with the ’543 patent, the claims here are distinguishable from
22 *BASCOM* and *AmDocs* because there is no unconventional insertion of technology. *See Amdocs*,
23 841 F.3d at 1301 (distributed network architecture inserted into billing data management solution);
24 *BASCOM*, 827 F.3d at 1350 (the ability of ISPs to associate traffic with certain accounts inserted
25 into content filtering solution). The only feature that comes close is the notification scheduling
26 element, if read to include the limited awareness that the “notification scheduler” possibly gains
27 by accessing information in a user’s calendar. However, this too is distinguishable because there
28 is no technical feature being inventively harnessed. Instead, it is simply claiming the use of

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

11 The examiner’s statements in the notice of allowance do not compel a contrary conclusion.
 12 In considering prosecution history, the Court need not defer to the examiner’s conclusions on
 13 patent eligibility, nor underlying observations regarding the state of the art. *See Novo Nordisk A/S*
 14 *v. Caraco Pharm. Labs., Ltd.*, 719 F.3d 1346, 1357 (Fed. Cir. 2013) (“The initial determinations
 15 by the PTO in determining to grant the application are entitled to no deference Rather, we
 16 treat the issued patent as having a presumption of validity that must be overcome by clear and
 17 convincing evidence.”); *Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1322 (Fed. Cir. 2005)
 18 (“[A] court is not bound by the PTO’s actions and must make its own independent determination
 19 of patent validity.”); *TorPharm, Inc. v. Ranbaxy Pharm., Inc.*, 336 F.3d 1322, 1329 (Fed. Cir.
 20 2003) (“The examiner’s reasons for allowance are not beyond challenge.”). Instead, deference is
 21 paid to the examiner through the presumption of validity, which includes the presumption that the
 22 examiner acted properly in determining whether an application was entitled to a patent. *Novo*
 23 *Nordisk*, 719 F.3d at 1357. Here, the Court finds it particularly fitting to depart from the
 24 examiner’s reasoning, as it pre-dates *BASCOM* and *AmDocs*, both of which provide a more
 25 exacting view of what qualifies as an “inventive concept.” It also pre-dates Federal Circuit
 26 decisions that have rejected step two arguments that seem similar to one component of the
 27 examiner’s reasoning—that a “particular useful application,” Ex. 11 to Mot. at 2, ECF 74-12,
 28 qualifies as an “inventive concept.” *See, e.g., Transition*, No. 2015-1907, 2016 WL 6775967, at

1 *3 (rejecting step two argument that claimed invention was useful improvement over manual
2 process); *FairWarning IP*, 839 F.3d at 1096, (rejecting step two argument that claimed invention
3 “solve[d] technical problems unique to the computer environment and thus should be patent
4 eligible”). Accordingly, the Court need not bind itself to the examiner’s decision.

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

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

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

2 Because neither the asserted independent nor dependent claims recite an inventive concept,
3 the asserted claims of the '812 patent fail step two. Accordingly, they are not patent-eligible under
4 § 101.

5 **C. '971 Patent**

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

14 **i. Step One**

15 At step one, Defendants argue that the asserted claims are directed to “gathering and
16 storing heart rate data in response to user interaction,” which is simply the abstract idea of data
17 collection. Mot. 17, ECF 74. Defendants contend that the claims’ limitations on when data
18 collection is started and stopped do not render this less abstract, because they simply amount to
19 content filtering, which is also an abstract idea. *Id.* at 18. Defendants also posit that the claims
20 could be implemented by “putting one’s fingers over one’s wrist,” “counting the pulses, and then
21 stopping counting after thirty seconds or detection of a weaker or hurried heart beat,” illustrating
22 that the claims effectively preempt all forms of “taking one’s pulse for a set period of time.” *Id.* at
23 18-19.

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

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

9 The Court agrees with Fitbit that Defendants’ characterization sweeps too broad.
10 Evaluating the claims in light of the specification for their “character as a whole,” the Court finds
11 that the asserted claims are directed to a particular variant of heart rate data collection: selective
12 heart rate data collection through minimized user interaction (i.e., a “single user-gesture” trigger
13 and an automated “predetermined level of heart rate data quality” halting condition). The claims
14 make clear that, in the claimed apparatus and method, heart rate data is only gathered for a limited
15 period of time and that this time is bounded by specific conditions: a “single-user gesture” on one
16 end and reaching a predetermined level of heart rate data quality on the other. Both of these
17 conditions minimize the need for user input. Unlike the wearable band of the ’543 patent
18 discussed above, these restrictions comprise a substantial portion of the collective substance of the
19 claims and color their character as a whole. The specification confirms this, as it summarizes its
20 disclosure as “provid[ing] biometric monitoring devices with [a] [sic] convenient and user-friendly
21 heart rate monitoring function.” ’971 patent, col. 1 ll. 36-37. Rather than just providing an
22 ancillary tool with which the rest of the claim elements are accomplished, the heart of the claims
23 revolves around these user-input-minimizing conditions. That said, the Court notes that the
24 specification’s descriptions of these restrictions are broad—the specification discloses a wide
25 range of possible “single-user gesture[s]”³ and simply describes the “predetermined level of heart
26

27 ³ As discussed in the background section above, the specification states that “a ‘single user-
28 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

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

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

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

26 _____
27 at the apparatus or a particular portion of the apparatus (when the apparatus has gaze detection
28 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.

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

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

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

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

5 The Federal Circuit’s decision in *McRO* also provides helpful guidance. There, the Federal
 6 Circuit found that the claims “focused on a specific asserted improvement in computer animation,
 7 i.e., the automatic use of rules of a particular type.” 837 F.3d at 1314. Helpful to the Court’s
 8 analysis was that “[i]t is the incorporation of the claimed rules, not the use of the computer, that
 9 ‘improved [the] existing technological process’ by allowing the automation of further tasks.” *Id.*
 10 The same could be said for the claims here. It is the incorporation of the input-minimizing
 11 features—the “single user gesture” trigger and “predetermined level of heart rate data quality”
 12 halting condition—that provide the improvement to heart rate monitors, not any particular
 13 electronic component with which these features are implemented. This helps illustrate that the
 14 invention itself focuses on an improvement in [heart rate monitors], not just the use of [heart rate
 15 monitors] as tools in the aid of a process focused on an abstract idea.” *DIRECTV*, 838 F.3d at
 16 1262.

17 The Court notes, however, that this case presents a closer call than *Enfish* or *McRO*. In its
 18 § 101 jurisprudence, the Federal Circuit has found that claims fail step one when they are “entirely
 19 functional in nature” and are “untethered to any specific or concrete way of implementing it.”
 20 *DIRECTV*, 838 F.3d at 1258. This is because such result-focused, functional claims are “drawn to
 21 the idea [of the result] itself,” rather than a specific implementation of that result. *See id.* The
 22 claims at issue come dangerously close to this: as noted above, the specification discloses a wide
 23 range of possible “single-user gesture[s]” and simply describes the “predetermined level of heart
 24 rate data quality” as “a reliable heart rate reading.”⁴ ’971 patent, col. 20 ll. 12-17. In addition,
 25

26 ⁴ Defendants contend that the specification’s description of “automatically stop[ping] data
 27 collection after a set period of time, such as about 3 seconds, 5 seconds, 10 seconds, 20 seconds,
 28 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.

1 simply minimizing user interaction is a result. Nevertheless, when viewed collectively and read in
2 light of the specification and in the manner most favorable to Fitbit, the Court finds that the claims
3 provide enough details about how to implement the claimed improvement such that they are more
4 similar to *Enfish* than *DIRECTV*. Specifically, the claims require that the “single user gesture” is
5 detected by an “activator.” *Id.*, col. 41 ll. 28-29. The specification ties the activator to a broad but
6 concrete class of structures, which require touch or proximity to be triggered. For example, it can
7 be a “biometric sensor, such as an accelerometer,” a “button,” “pressure or touch sensitive sensor,
8 e.g., capacitive touch, resistive touch, ultrasonic touch, etc., or a proximity sensor, e.g., infrared,
9 capacitive, etc.” *Id.*, col. 8 ll. 59-63, col. 14 ll. 50-54. This class is further restricted for claim 1,
10 which requires that the activating signal is received through “the activator surface area.” *Id.*, col.
11 41 ll. 25-29, col. 43 ll. 8-9. Taken together with the “predetermined level of heart rate data
12 quality” halting condition, these requirements take the focus of the claims out of a more results-
13 oriented realm of minimizing user interaction in heart rate data collection to specifically claim a
14 way of doing this: using a single-user gesture and an automatic, data quality-driven stopping
15 condition. These limitations may be so broad as to raise enablement or novelty concerns, but they
16 do not prevent the claims from being directed to a “specific asserted improvement in [heart rate
17 monitor] capabilities.” *Enfish*, 822 F.3d at 1335. Accordingly, the claims are directed to a specific
18 improvement in technology under *Enfish* and are not directed to an abstract idea under step one.

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

25 **ii. Step Two**

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

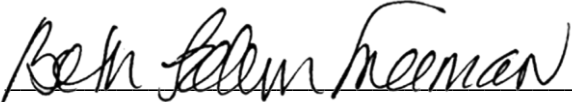
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V. CONCLUSION

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