

allegations. *Iqbal*, 556 U.S. at 678. To be legally sufficient, the complaint must establish more than a “sheer possibility” that the plaintiff’s claims are true. *Id.* The complaint must contain enough factual allegations to raise a reasonable expectation that discovery will reveal evidence of each element of the plaintiffs’ claim. *Lormand*, 565 F.3d at 255–57. If it is apparent from the face of the complaint that an insurmountable bar to relief exists, and the plaintiff is not entitled to relief, the court must dismiss the claim. *Jones v. Bock*, 549 U.S. 199, 215 (2007).

In considering a motion to dismiss for failure to state a claim, a court considers only “the complaint, any documents attached to the complaint, and any documents attached to the motion to dismiss that are central to the claim and referenced by the complaint.” *Lone Star Fund V (US), LP v. Barclays Bank PLC*, 594 F.3d 383, 387 (5th Cir. 2010) (citing *Collins v. Morgan Stanley Dean Witter*, 224 F.3d 496, 498 (5th Cir. 2000) (“In considering a motion to dismiss for failure to state a claim, a district court must limit itself to the contents of the pleadings, including attachments thereto. . . . We note approvingly, however, that various other circuits have specifically allowed that ‘documents that a defendant attaches to a motion to dismiss are considered part of the pleadings if they are referred to in the plaintiff’s complaint and are central to her claim.’”)).

2. Section 101: Patent Eligible Subject Matter

Anyone who “invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof” may obtain a patent. 35 U.S.C. § 101. Because patent protection does not extend to claims that monopolize the “building blocks of human ingenuity,” claims directed to laws of nature, natural phenomena, and abstract ideas are not patent eligible. *Alice Corp. Pty. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014). The Supreme Court instructs courts to distinguish between claims that claim patent ineligible subject matter and those that “integrate the building blocks into something more.” *Id.* First, the Court “determine[s] whether the claims at issue are directed to a patent-ineligible concept.” *Id.* at 2355. If so, the Court

“consider[s] the elements of each claim both individually and ‘as an ordered combination’ to determine whether the additional elements ‘transform the nature of the claim’ into a patent eligible application.” *Id.* at 2355 (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 78–79 (2012)). The second step of the *Alice* test is satisfied when the claim limitations “involve more than performance of ‘well-understood, routine, [and] conventional activities previously known to the industry.’” *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l Ass’n*, 776 F.3d 1343, 1347–48 (Fed. Cir. 2014) (quoting *Alice*, 134 S. Ct. at 2359).

Recently, the Federal Circuit stated that “[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact” that must be “proven by clear and convincing evidence.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018). Something is not well-understood, routine, and conventional merely because it is disclosed in a prior art reference. *Exergen Corp. v. KAZ USA, Inc.*, No. 2016-2315, 2018 WL 1193529 at *4 (Fed. Cir. March 8, 2018). There are many obscure references that may qualify as prior art, but are insufficient to establish something is “well-understood, routine, and conventional activity previously engaged in by scientists who work in the field.” *Mayo*, 566 U.S. at 79; *see also In re Hall*, 781 F.2d 897, 897–900 (Fed. Cir. 1986) (holding that a single copy of a thesis, written in German and located in a German university library, qualified as a printed publication because the thesis was available to the public).

II. DISCUSSION

For the purposes of the Motion, Samsung argues that Claim 1 is representative of United States Patent No. 7,690,556 (“the ’556 Patent”). Claim 1 recites:

1. A step counter system comprising:
 - an accelerometer to detect motion of a user;

a step calculation logic to utilize the motion detected by the accelerometer to detect and count steps; and

an incline logic to utilize the motion detected by the accelerometer to make a calculation of an incline of a surface on which the user moved for one or more of the steps, wherein the calculation is performed for a step based on identifying a vertical travel up portion of the step, identifying a vertical travel down portion of the step, and computing a difference between the vertical travel up portion and the vertical travel down portion of the step.

'556 Patent at 5:14–25.

Samsung argues that the Claim 1 is directed to an abstract idea. Specifically, Samsung asserts that the '556 Patent allegedly improves upon “a step counter, admittedly a well-known and popular device by the time the application which led to the '556 Patent was filed,” by creating “a more accurate accounting of calories expended by measuring the vertical incline of the traversed path . . . precisely the type of concept declared unpatentable by *Alice* and subsequent cases.” (Dkt. No. 24 at 9.) Samsung argues that “[t]he focus of the '556 Patent claims can be broken down to counting the number of steps taken, determining the incline climbed/descended, and measuring calories expended. Humans (individuals, personal trainers, athletes, and coaches) routinely perform those functions without the aid of any device, and based upon perception and performing basic mathematics alone.” (*Id.* at 10.) Samsung sums up its arguments with the following chart:

| Independent Claim 1 | Abstract Idea | Long-Known, Conventional Idea Performed by Human |
|---|--|---|
| A step counter system comprising: | Counting steps. | A personal trainer can count footsteps. |
| an accelerometer to detect motion of a user; | Perceiving motion. | The personal trainer can perceive motion. |
| a step calculation logic to utilize the motion detected by the accelerometer to detect and count steps; | Counting the steps based on the observation. | The personal trainer can perceive motion of a walking individual and count their steps as part of the perceived motion. |

| Independent Claim 1 | Abstract Idea | Long-Known, Conventional Idea Performed by Human |
|--|---|---|
| and an incline logic to utilize the motion detected by the accelerometer to make a calculation of an incline of a surface on which the user moved for one or more of the steps, | Measuring vertical movement. | The personal trainer can perceive motion of a person walking up an incline and use many different variables and corresponding mathematical formulas to calculate the incline traversed. |
| wherein the calculation is performed for a step based on identifying a vertical travel up portion of the step, identifying a vertical travel down portion of the step, and computing a difference between the vertical travel up portion and the vertical travel down portion of the step. | Measuring vertical movement using simple subtraction. | The personal trainer can perceive a person stepping on an incline and calculate the difference in foot step height using simple subtraction methods. |

(*Id.*) In analyzing the claim elements, Samsung argues that “[d]etecting the motion of a user, counting his or her steps, measuring the including of a surface based upon vertical travel up and down, as claimed in claim 1, is no different from collecting and recognizing data which the Federal Circuit has held is an abstract idea.” (*Id.* at 11 (citing *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat’l. Ass’n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014)).) Samsung further asserts that the ’556 Patent is “strikingly similar” to two patents invalidated by the Northern District of California, but Samsung only addressed United States Patent No. 9,031,812 (“the ’812 Patent”):

- A method for generating a notification on a mobile device, comprising:
 - establishing a wireless connection to an activity monitoring device;
 - receiving activity data from the activity monitoring device via the wireless connection;
 - processing the activity data to determine an activity metric for a user of the activity monitoring device;
 - comparing the activity metric against a predefined threshold, the predefined threshold being mapped to a notification message;

in response to determining that the activity metric reaches or exceeds the predefined threshold, scheduling the notification message for display on the mobile device at a specified date and time;

wherein the notification message is displayed on a mobile device at the specified date and time, the display of the notification message providing access to an application for interfacing with the activity monitoring device;

wherein the method is executed by at least one processor.

(*Id.* at 12 (citing *Fitbit, Inc. v. Aliphcom*, No. 16-cv-118-BLF, 2017 U.S. Dist. LEXIS 30721, at *5–6 (N.D. Cal. Mar. 2, 2017)).) There, the court identified the claim as reciting “the relatively general idea that data collection and reporting, but just applied in a narrower context of reporting cumulative activity level as detected by a motion detection component.” (*Id.* (citing *Fitbit*, 2017 U.S. Dist. LEXIS 30721, at *29).)

Uniloc argues that the “Asserted Claims are patent eligible because they are directed to a specific way to calculate in an incline of a surface to enable a more accurate estimation of caloric expenditure, not to an abstract idea,” while also asserting that Samsung has failed to meet its burden to show that the claims are directed to an ineligible concept (Dkt. No. 26 at 6–7.)

The Court finds that in this case, *Thales Visionix, Inc. v. United States*, 850 F.3d 1343 (Fed. Cir. 2017) persuasive. There, the Federal Circuit weighed the patent eligibility of the following claim:

1. A system for tracking the motion of an object relative to a moving reference frame, comprising:

a first inertial sensor mounted on the tracked object;

a second inertial sensor mounted on the moving reference frame; and

an element adapted to receive signals from said first and second inertial sensors and configured to determine an orientation of the object relative to the moving reference frame based on the signals received from the first and second inertial sensors.

Thales, 850 F.3d at 1345. Analogizing to *Diamond v. Diehr*, 450 U.S. 175 (1981), the Federal Circuit “explained that claims are patent eligible under § 101 ‘when a claim containing a mathematical formula implements or applies that formula in a structure or process which, when considered as a whole, is performing the function which the patent laws were designed to protect.’” *Id.* at 1347–48. In upholding the subject-matter eligibility of the asserted claim, the Federal Circuit held:

These claims are not merely directed to the abstract idea of using ‘mathematical equations for determining the relative position of a moving object to a moving reference frame,’ as the Claims Court found. Rather, the claims are directed to systems and methods that use inertial sensors in a non-conventional manner to reduce errors in measuring the relative position and orientation of a moving object on a moving reference frame.


Id. at 1348–49.

The ’556 Patent states that the existing prior art step counters “are not accurate in calculating the amount of calories expended as they do not account for walking on inclines as opposed to flat surfaces.” ’556 Patent at 1:27–30. While Claim 1 solves this problem through the use of “step calculation logic” and “incline logic” elements that undoubtedly involve mathematics, such use “does not doom the claims to abstraction” *Id.* at 5:16–25; *Thales*, 850 F.3d at 1349. Instead, the logic steps are part of the greater whole: an improved step counter system that takes a limited set of hardware, including the accelerometers required by Claim 1, and provides underlying mathematical improvements to create an improved step counter device, one that accounts for not just the number of steps taken (which step counters in the prior art perform) but that dynamically use the motion detected by the accelerometer to determine the precise incline the user is stepping from and on, creating a system and device that provide for a much more accurate representation of the user’s workout and the calories expended.

Contrary to Samsung's position, such precise actions are not routinely performed by personal trainers. Samsung's argument that the "personal trainer can perceive motion of a person walking up an incline and use many different variables and corresponding mathematical formulas to calculate the incline travelled," (Dkt. No. 33 at 10,) is less a description of routine personal training and more an attempt to force the claimed functionality into a hypothetical non-human trainer, capable of gathering all possible inputs and rendering an immediate and exact response. In reality, any attempt at measuring the incline by a personal trainer would fail to provide the precision and benefits associated with Claim 1: the ability to use a step counter to provide not just pace and distance, but also measuring the change in incline in order to determine how far the user travelled and the difficulty of the journey. Such use of a step counter's accelerometers to calculate incline is unconventional and reduces the error of such devices in measuring the key metrics of the step counter.

Drawing all reasonable inferences in favor of Uniloc, the Court finds that Claim 1 of the '556 Patent is directed towards the unconventional use of accelerometers in a step counter in order to measure the incline travelled by the user; accordingly, such use is not directed to an abstract concept under *Alice* Step One. Therefore, the Court **DENIES** the Motion.

So ORDERED and SIGNED this 18th day of September, 2018.



RODNEY GILSTRAP
UNITED STATES DISTRICT JUDGE