

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF KANSAS**

LOGANTREE LP,

*Plaintiff,*

vs.

Case No. 17-1217-EFM-ADM

GARMIN INTERNATIONAL, INC. and  
GARMIN USA, INC.,

*Defendants.*

**MEMORANDUM AND ORDER**

Plaintiff LoganTree LP is the owner of U.S. Patent No. 6,059,576, entitled “Training and Safety Device, System and Method to Aid in Proper Movement During Physical Activity” (the “Patent”). The Patent claims an electronic device, system, and method that monitors the movement of an individual’s body parts during physical activity. LoganTree filed this lawsuit against Garmin International, Inc., and Garmin USA, Inc. (“Garmin”) alleging that Garmin’s accelerometer-based activity trackers infringe the Patent.

This matter comes before the Court on the parties’ request that the Court construe certain terms in the Patent’s claims as a matter of law pursuant to *Markman v. Westview Instruments, Inc.*<sup>1</sup> The Court has thoroughly considered the information submitted in the parties’ briefs as well as the

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<sup>1</sup>52 F.3d 967 (Fed. Cir. 1995) (en banc), *aff’d*, 517 U.S. 370 (1996).

oral arguments presented at the *Markman* hearing on December 18, 2020, and construes the disputed terms as set forth below.

## I. Legal Standard

The first step in a patent infringement action is to determine the meaning and scope of the asserted patent's claims.<sup>2</sup> Claim construction is an issue of law for the Court to decide.<sup>3</sup> Only after the Court has properly construed a patent's claims may it determine whether the accused method or product infringes the claim as properly construed.<sup>4</sup>

The Federal Circuit Court of Appeals set forth a comprehensive guide for claim construction in *Phillips v. AWH Corp.*<sup>5</sup> In *Phillips*, the Federal Circuit reiterated that the claims of the patent define the patentee's invention, and to that end, claim construction begins with the claim language itself.<sup>6</sup> "The words of a claim are generally given their ordinary and customary meaning."<sup>7</sup> The "ordinary and customary meaning" is "the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, *i.e.*, as of the effective filing date of the application."<sup>8</sup> "[T]he claims themselves provide substantial guidance as to the meaning of particular claim terms."<sup>9</sup> Both "the context in which a term is used in the asserted

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<sup>2</sup> *Id.*

<sup>3</sup> *Id.* at 979.

<sup>4</sup> *Id.* at 976.

<sup>5</sup> 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

<sup>6</sup> *Id.* at 1312.

<sup>7</sup> *Id.* (citation and quotation marks omitted).

<sup>8</sup> *Id.* at 1313 (citations omitted).

<sup>9</sup> *Id.* at 1314.

claim” and the “[o]ther claims of the patent in question” are helpful for understanding the ordinary meaning of a term.<sup>10</sup>

“The claims . . . do not stand alone, [and] they are part of ‘a fully integrated written instrument.’ ”<sup>11</sup> Therefore, “they ‘must be read in view of the specification, of which they are a part.’ ”<sup>12</sup> The specification “is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.”<sup>13</sup> The specification may reveal a special definition that a patentee has given a claim term that is different from the meaning the term would otherwise possess.<sup>14</sup> In that instance, the patentee’s definition controls. Or, the specification may reveal “an intentional disclaimer, or disavowal, of claim scope” by the patentee.<sup>15</sup> In that instance as well, the patentee’s intention, as expressed in the specification, is dispositive.<sup>16</sup> The fact, however, that the specification includes preferred embodiments or specific examples is not enough to define a term implicitly, and “it is improper to confine the scope of the claims to the embodiments of the specification.”<sup>17</sup>

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<sup>10</sup> *Id.*

<sup>11</sup> *Id.* at 1315 (quoting *Markman*, 52 F.3d at 978).

<sup>12</sup> *MGP Ingredients, Inc. v. Mars, Inc.*, 494 F. Supp. 2d 1231, 1234 (D. Kan. 2007) (quoting *Phillips*, 415 F.3d at 1315).

<sup>13</sup> *Phillips*, 415 F.3d at 1315 (quotation omitted).

<sup>14</sup> *Id.* at 1316.

<sup>15</sup> *Id.*

<sup>16</sup> *Id.*

<sup>17</sup> *Mars*, 494 F. Supp. 2d at 1234 (citing *Phillips*, 415 F.3d at 1323).

A court “should also consider the patent’s prosecution history, if it is in evidence.”<sup>18</sup> This consists of “the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent.”<sup>19</sup> The prosecution history provides “evidence of how the PTO and the inventor understood the patent.”<sup>20</sup> Because, however, the prosecution history is an ongoing negotiation between the patentee and the patent examiner, it “lacks the clarity of the specification and thus is less useful for claim construction purposes.”<sup>21</sup> Regardless, “the prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be.”<sup>22</sup>

Finally, a court may rely on extrinsic evidence, which consists of “all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.”<sup>23</sup> The Federal Circuit has found that technical dictionaries may provide a court “ ‘to better understand the underlying technology’ and the way in which one of skill in art might use the claim terms.”<sup>24</sup> And, extrinsic evidence in the form of expert testimony can provide background on the technology at issue, explain how an invention works, or establish that a

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<sup>18</sup> *Phillips*, 415 F.3d at 1317 (citation omitted).

<sup>19</sup> *Id.*

<sup>20</sup> *Id.*

<sup>21</sup> *Id.*

<sup>22</sup> *Id.*

<sup>23</sup> *Id.*

<sup>24</sup> *Id.* at 1318 (citing *Vitronics Corp. v. Conceptor, Inc.*, 90 F.3d 1576, 1584 n.6 (Fed. Cir. 1996)).

particular term in the patent or prior art has a particular meaning in the pertinent field.<sup>25</sup> But, “conclusory, unsupported assertions by experts as to the definition of a claim term are not useful to a court.”<sup>26</sup> Overall, although “extrinsic evidence can shed useful light on the relevant art, . . . it is less significant than the intrinsic record in determining the legally operative meaning of claim language.”<sup>27</sup>

### III. Analysis

There are four claim construction disputes for the Court to resolve. The disputed terms are found in claims 1 and 20 of the Patent. Claim 1 states as follows, with the disputed terms in bold:

1. A portable, self-contained device for monitoring movement of body parts during physical activity, said device comprising:

a movement sensor capable of measuring data associated with **unrestrained movement in any direction** and generating signals indicative of said movement;

a power source;

a microprocessor connected to said movement sensor and to said power source, said microprocessor capable of receiving, interpreting, storing and responding to said movement data based on user-defined operational parameters, detecting a first user-defined event based on the movement data and at least one of the user-defined operational parameters regarding the movement data, and storing first event information related to the detected first user-defined event along with **first time stamp information reflecting a time at which the movement data causing the first user-defined event occurred**;

at least one user input connected to said microprocessor for controlling the operation of said device;

a real-time clock connected to said microprocessor;

memory for storing said movement data; and

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<sup>25</sup> *Id.*

<sup>26</sup> *Id.*

<sup>27</sup> *Id.* (quotation omitted).

an output indicator connected to said microprocessor for signaling the occurrence of user-defined events;

wherein said movement sensor measures the **angle** and **velocity** of said movement.

Claim 20 states as follows, with the disputed terms in bold:

20. A method to monitor physical movement of a body part comprising the steps of:

attaching a portable, self-contained movement measuring device to said body part for measuring **unrestrained movement in any direction**;

measuring data associated with said physical movement;

interpreting, using a microprocessor included in the portable self-contained movement measuring device, said physical movement data based on user-defined operational parameters and a real-time clock;

storing said data in memory;

detecting, using the microprocessor, a first user-defined event based on the movement data and at least one of the user-defined operational parameters regarding the movement data; and

storing, in said memory, first event information related to the detected first user-defined event along with **first time stamp information reflecting a time at which the movement data causing the first user-defined event occurred**.

In short, the disputed terms are (1) “first time stamp information reflecting a time at which the movement data causing the first user-defined event occurred,” (2) “angle,” (3) “velocity,” and (4) “unrestrained movement in any direction.” To the extent these terms are used in both claim 1 and claim 20, the parties have not offered different constructions depending on the claim. Therefore, the Court’s construction is assigned to each term wherever it appears in the claims at issue.

**A. “First time stamp information reflecting a time at which the movement data causing the first user-defined event occurred”**

Garmin contends that this term should be construed as “first time stamp information reflecting a *system* time at which the movement data causing the first user-defined event occurred.” Initially, LoganTree argued that no construction was necessary but proposed an alternate construction should the Court construe the term. That construction was “first time stamp information reflecting a *system time associated with the movement data occurrence causing the first user-defined event.*” At the *Markman* hearing, LoganTree withdrew its alternate proposed construction and simply asserted that no construction was necessary.

Garmin argues that the term “system” should be included because the Patent explains that the time stamp is a “system time at which” the movement data causing the defined event occurred. In support of this argument, Garmin points to the Abstract, which states that the device is meant to be worn on an individual and that when a specific goal is recognized, the “device records the time and date of the occurrence.”<sup>28</sup> Garmin next points to the specification, which states that the time and date of a specific event come from a real-time clock connected to the microprocessor, which is the clock used by the system.<sup>29</sup> Finally, Garmin argues that precision is also important because the specification states that one of the “significant features” of the invention is that it “gives instant information to the wearer at the moment of incorrect movement and also records the information for future reference and analysis.”<sup>30</sup>

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<sup>28</sup> Doc. 85-2, p. 2.

<sup>29</sup> See Doc. 85-2, p. 14, col. 5, ll. 35-47 and p. 14, col. 6, ll. 6-9.

<sup>30</sup> Doc. 85-2, p. 14, col. 6, ll. 15-19.

At the *Markman* hearing, LoganTree agreed with Garmin that the time stamp information is from the system. LoganTree also agreed that the claims are precise in nature and require the time stamp information to be a time “at which” the movement data causing the defined event occurred. LoganTree argued, however, that the inclusion of the term “system” requires the time to be measured to a precise degree not required by the claims. According to LoganTree, the term “system time” has a certain meaning in the world of technology, and a “system time” is often measured to the millisecond or nanosecond. LoganTree thus argued that while the time stamp information reflects a time at which the movement data occurred, there must be some flexibility in the unit measurement of that time, meaning that the time stamp information could reflect the hour or even the day the movement data occurred.

The Court is not persuaded by LoganTree’s arguments. The use of the term “system time” does not mean that the time is automatically measured to the millisecond or nanosecond. A “system time” is only this precise if the system itself measures time to that degree of particularity. Furthermore, neither the intrinsic nor extrinsic evidence state that there must be flexibility in the unit of time measurement. According to the specification, the time stamp information is a recording of the time obtained from the system’s real time clock.<sup>31</sup> The specification does not specify the unit of measurement for that clock. Thus, the time stamp information is going to be measured based on the unit of measurement that the real-time clock is programmed to obtain, whether that be nanoseconds, seconds, minutes, or some other unit of measurement.

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<sup>31</sup> See Doc. 85-2, p. 7, fig. 4 (noting the clock connected to the microprocessor); *Id.* p. 14, col. 5, ll. 35-37 (“The clock also serves as a real time clock to provide date and time information to the microprocessor”; *Id.* p. 15, col. 5, ll. 44-47 (“If a recordable event occurs, the microprocessor retrieves the date/time stamp from the clock and records the event information along with the date/time stamp in memory.”); *Id.* p. 16, col. 9, ll. 48-51 (“If the first angle limit has been exceeded, the microprocessor . . . records the event along with the date and time.”).



After considering the parties' arguments for construing this term, the Court construes "first time stamp information reflecting a time at which the movement data causing the first user-defined event occurred" to mean "first time stamp information reflecting the time recorded or noted by the system at which the movement data causing the first-user defined event occurred."

**B. "Angle" and "Velocity"**

Garmin proposes that the term "angle" should be construed as "the space between two intersecting planes at the point where they meet." LoganTree argues that no construction is necessary, but if the Court does construe the term, then the Court should use Garmin's definition along with the following definition: "a measure of the amount of turning necessary to bring one line or plane into coincidence with or parallel to another."

Garmin proposes that the term "velocity" should be construed as "the speed of something in a given direction." LoganTree argues that no construction is necessary, but if the Court does construe the term, it should define it as "rate of change of angular position."

Based on the parties' arguments at the *Markman* hearing, the Court understands the parties' dispute to be whether the term "angle" or the term "velocity" encompasses "angular velocity." During the hearing, LoganTree argued that the term "velocity" is not limited to "linear velocity" as Garmin's proposed definition suggests, and that the patent's specification describes the device as measuring the angular velocity of the user's movement. In response, Garmin argued that neither "angle" nor "velocity" include "angular velocity," and if LoganTree intended that the patented device measure "angular velocity" then it should have included it in the claim language. Garmin's position is somewhat confusing, however, because in its reply, Garmin agreed to LoganTree's

alternate proposed construction for the term “velocity,” and that alternate proposed construction incorporates “angular velocity” by definition.<sup>32</sup>

The Court agrees with LoganTree that the term “velocity” in the claim language includes angular velocity. The specification states that the device measures both linear and angular velocity. For example, the specification states that one object of the invention is “to provide a system which monitors, records and analyzes the time, date, angle of movement, and angular velocity of physical movement for subsequent interpretation.”<sup>33</sup> It also states that the device is capable of measuring “the distance the wearer walks and how fast he walked.”<sup>34</sup> And, it states that in a preferred embodiment, the movement sensor on the device is “an accelerometer capable of detecting angles of movement in multiple planes as well as velocity at which the movement occurs.”<sup>35</sup>

The Court understands the parties’ dispute to arise only in the context where the term “velocity” means “angular velocity.” Therefore, the Court limits its construction of the term “velocity” to that usage and not others. Within that usage, the Court adopts the parties agreed-upon construction and defines “velocity” to mean “rate of change of angular position.”

As to the term “angle,” the Court declines to construe this term. Having addressed the “angular velocity” dispute in the construction of the term “velocity,” the Court sees no dispute between the parties regarding the scope of this term. Furthermore, “angle” is not a complicated,

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<sup>32</sup> *Angular Velocity*, Dictionary.com, <http://dictionary.com/browse/angular-velocity> (last visited Jan. 12, 2021) (defining “angular velocity” as “the time rate of change of angular position of a rotating body, usually expressed in radians per second or radians per minute”).

<sup>33</sup> Doc. 85-2, p. 12, col. 2, ll. 38-41.

<sup>34</sup> Doc. 85-2, p. 13, col. 3, ll. 14-16.

<sup>35</sup> Doc. 85-2, p. 13, col. 4, ll. 41-45.

complex term, and it is easily understood by a person of minimal education.<sup>36</sup> Therefore, the Court concludes that no construction is necessary.

**C. “Unrestrained movement in any direction”**

Garmin contends that the term “unrestrained movement in any direction” is indefinite under 35 U.S.C. § 112 because LoganTree has used the term inconsistently before the U.S. Patent Trial and Appeal Board and this Court. LoganTree contends that the term is definite but the Court should defer ruling on this issue until the summary judgment phase of litigation. Both parties agree that if the Court defers ruling on the indefiniteness of the term, then no construction of the term is necessary.

“[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.”<sup>37</sup> “The definiteness standard ‘must allow for a modicum of uncertainty’ to provide incentives for innovation, but must also require ‘clear notice of what is claimed, thereby appris[ing] the public of what is still open to them.’ ”<sup>38</sup> Federal district courts, however, have found that “ ‘several well-settled principles tend to discourage rulings on indefiniteness at the *Markman* stage.’ ”<sup>39</sup> “First, the burden of proof is higher for establishing

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<sup>36</sup> See *Summit 6, LLC v. Samsung Elec. Co., Ltd.*, 802 F.3d 1283, 1291 (Fed. Cir. 2015) (noting that the district court did not err in declining to construe a term when the term was straightforward); cf. *Eon Corp., IP Holdings, LLC v. Silver Spring Network, Inc.*, 815 F.3d 1314, 1320 (Fed. Cir. 2016) (finding that because the scope of the terms at issue was disputed during claim construction, the court improperly left the issue of claim scope to the jury when it construed the terms as having their plain and ordinary meaning).

<sup>37</sup> *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014).

<sup>38</sup> *Interval Licensing, LLC v. AOL, Inc.*, 766 F.3d 1364, 1370 (Fed. Cir. 2014) (quoting *Nautilus*, 572 U.S. at 909).

<sup>39</sup> *Uretek Holdings, Inc. v. YD W. Coast Homes, Inc.*, 2016 WL 3021880, at \*3 (M.D. Fla. 2016) (quoting *CSB-Sys. Int’l, Inc. v. SAP Am., Inc.*, 2011 WL 3240838, at \*17 (E.D. Pa. 2011)); see also *Capstan AG Sys., Inc. v. Raven Indus., Inc.*, 2018 WL 953112, at \*14 (D. Kan. 2018).

indefiniteness than it is for establishing a term’s construction.”<sup>40</sup> “Second, the legal standard for evaluating indefiniteness is different from [the standard] for determining the term’s construction.”<sup>41</sup> This is because, “unlike a *Markman* proceeding that gives meaning to patent claims, indefiniteness invalidates the claims entirely.”<sup>42</sup> Furthermore, the Federal Circuit has stated that it “certainly [has] not endorsed a regime in which validity analysis is a regular component of claim construction.”<sup>43</sup>

Based on these principles, courts often decline to make invalidity determinations at the *Markman* stage.<sup>44</sup> These courts have reasoned that “it would be more appropriate and logical to defer the full consideration of any potential indefiniteness challenge to the summary judgment stage, after all fact and expert discovery has been completed.”<sup>45</sup> This Court adopts the same reasoning here and declines to rule on Garmin’s indefiniteness argument on the term “unrestrained movement in any direction” at this time.

The parties do not otherwise argue that this claim term is in dispute. In fact, at the *Markman* hearing, both parties agreed that if the Court did not rule on the indefiniteness issue at this time, then the Court need not construe the term. Therefore, the Court defines the term “unrestrained movement in any direction” according to its plain and ordinary meaning.

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<sup>40</sup> *Uretek*, 2016 WL 3021880, at \*3 (emphasis omitted).

<sup>41</sup> *Id.* (emphasis omitted).

<sup>42</sup> *CSB-Sys.*, 2011 WL 3240838, at \*18.

<sup>43</sup> *Phillips*, 415 F.3d at 1327.

<sup>44</sup> *Uretek*, 2016 WL 3021880, at \*3 (collecting cases).

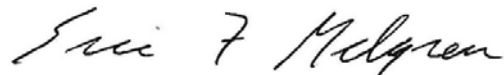
<sup>45</sup> *Id.*

In summary, the Court construes the term “first time stamp information reflecting a time at which the movement data causing the first user-defined event occurred” as “first time stamp information reflecting the time recorded or noted by the system at which the movement data causing the first user-defined event occurred.” The Court concludes that no construction is necessary for the term “angle” and construes the term “velocity” as “rate of change of angular position.” The Court declines to rule on Garmin’s argument that the term “unrestrained movement in any direction” is indefinite and further concludes that no construction is necessary for this term.

**IT IS THEREFORE ORDERED** that the disputed terms of the Patent are construed as set forth in this Order on the 19th day of January, 2021.

**IT IS SO ORDERED.**

Dated this 19th day of January, 2021.



ERIC F. MELGREN  
UNITED STATES DISTRICT JUDGE