

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

Civil Action No. 11-cv-00301-DME-CBS

ALCOHOL MONITORING SYSTEMS, INC., a Colorado Corporation,  
Plaintiff/Counterclaim-Defendant,

vs.

BI INCORPORATED, a Colorado Corporation,  
Defendant/Counterclaim-Plaintiff,

and

GEO CARE, INC., a Florida Corporation,  
Defendant.

---

**ORDER GRANTING SUMMARY JUDGMENT ON PATENT ‘884  
AND CONSTRUCTING CLAIMS IN PATENTS ‘149 AND ‘611**

---

This order addresses two matters pending before the Court: (1) the issue of claim construction with respect to the ‘149, ‘611, and ‘884 patents—an issue thoroughly briefed by the parties and addressed at the June 7-8, 2012, hearing before the Court; and (2) plaintiff/counterclaim-defendant Alcohol Monitoring Systems, Inc.’s (“AMS”), Motion for Summary Judgment of Non-Infringement Regarding the ‘884 Patent (Doc. 61) (the “Summary Judgment Motion”), also thoroughly briefed and addressed at the aforementioned hearing.

For the reasons discussed below, and exercising jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a), the Court first GRANTS AMS’s Summary Judgment Motion. Consequently, it is unnecessary for the Court to engage in claim construction vis-à-vis the

'884 patent. Next, the Court ENTERS the claim constructions identified below for the disputed terms of the '149 and '611 patents. In light of these rulings, the parties are ORDERED promptly to confer with each other about next steps in this litigation, and to submit a joint status report or separate status reports, not to exceed ten pages in length, to this Court and to the magistrate judge no later than July 19, 2012.

### I. RELEVANT BACKGROUND

On February 4, 2011, AMS filed suit in this Court against defendant/counterclaim-plaintiff BI Incorporated ("BI"), alleging infringement of three of its patents: U.S. Patent Nos. 7,462,149 ("149"), 7,641,611 ("611"), and 7,611,461 ("461"). The '461 patent is no longer at issue in this case, the parties having stipulated to the dismissal of claims involving that patent. The '149 and '611 patents both describe devices that attach to a person's leg to detect alcohol consumption as indicated by the person's perspiration, along with the associated networks through which data are transmitted, analyzed, and reported. AMS alleges that BI's "BI TAD" system infringes its "SCRAM" system. On March 21, 2011, BI counterclaimed against AMS, alleging that SCRAM infringes one of its patents, U.S. Patent No. 5,298,884 ("884"). The '884 patent describes a tamper-detecting ankle strap that secures a device to a person's leg.

On June 10, 2011, AMS moved to amend its complaint to include another one of its patents, U.S. Patent No. 5,220,919 ("919"), and to name as an additional defendant GEO Care, Inc. ("GEO Care")—a sister company with BI, both owned by GEO Group, Inc. That motion was granted on December 9, 2011. (For ease of reference, the Court hereinafter refers to co-defendants BI and GEO Care simply as "BI," as the addition of

GEO Care does not affect the Court’s analysis in this order.) The parties have agreed that the ‘919 patent will not require construction by this Court, as they have stipulated to accepting the claim constructions on that patent in another case in which AMS and the ‘919 patent are involved.

On August 1, 2011, the parties submitted a joint exhibit identifying disputed claim terms. That list of disputed terms has narrowed considerably since then, as the parties subsequently stipulated to the meaning of many terms. On November 4, 2011, the parties submitted claim construction briefs regarding the ‘149, ‘611, and ‘844 patents, in anticipation of a Markman<sup>1</sup> hearing. Also on November 4, 2011, AMS filed its Summary Judgment Motion on the ‘884 patent, seeking a judgment of non-infringement. On November 14, 2011, BI moved this Court to continue the Markman hearing—then scheduled for December 14, 2011—pending the U.S. Patent and Trademark Office’s (“PTO”) reexaminations of the ‘149 and ‘611 patents. The Court conducted a hearing on that motion on December 14, 2011, in place of the Markman hearing, and continued the Markman hearing until May 2012. The Markman hearing was later rescheduled for June 7-8, 2012. On May 17, 2012, AMS submitted a supplement to its Summary Judgment Motion, to which BI responded on May 29. Meanwhile, on May 21, 2012, BI submitted a supplemental claim construction brief, to which AMS responded on May 29. On May 22, the Court ordered the parties to be prepared to argue the Summary Judgment Motion following the Markman hearing, effectively rendering the hearing a dual-purpose hearing.

---

<sup>1</sup> See Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996).

Subsequently, on May 31 and June 6, the parties submitted new stipulations to claim constructions of formerly disputed terms.

At the hearing on June 7-8, 2012, the Court first heard argument regarding claim construction of the ‘149, ‘611, and ‘884 patents. During the course of argument, the parties clarified and narrowed certain points of dispute, and further stipulated to constructions of certain disputed terms. Also, as it appeared that the parties agreed on constructions of other disputed terms, the parties were ordered to confer and to file with the Court, among other matters ordered for briefing, any additional stipulations reflecting further agreements. The Court then heard argument regarding the Summary Judgment motion.

The Court now rules on the Summary Judgment motion and on claim construction, having reviewed the record and the applicable law, and having considered the arguments made at the hearing.

## **II. THE SUMMARY JUDGMENT MOTION**

AMS argues that, under the undisputed material facts on the record, its SCRAM technology does not infringe BI’s ‘884 patent. Specifically, AMS argues that the SCRAM strap, with its “Schmitt Trigger” electrical circuit, contains neither (1) the “first conductive region” nor (2) the “impedance detection means” set forth in claim 8 of the ‘884 patent.<sup>2</sup> The parties agree that both of these elements are indispensable components

---

<sup>2</sup> Claim 8 reads as follows (Doc. 63-12, Col. 17, ll 40-57 (emphasis added)):

An apparatus for detecting a violation comprising:  
- a wearable tag;

of an independent claim of the '884 patent, such that a determination of non-infringement of either one would warrant granting summary judgment to AMS on BI's entire counterclaim.

As explained below, the Court determines that summary judgment is warranted based on non-infringement of the "impedance detection means." Accordingly, the Court does not address the question of infringement of the "first conductive region."

#### **A. Legal standards**

##### *i. Summary judgment*

"The court shall grant summary judgment if the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. Pro. 56(a). Parties must "cit[e] to particular parts in the record," including affidavits or admissions, in order to show the absence or presence of a genuine dispute of fact. Id. 56(c)(1)(A); see also id. 56(c)(3) ("The Court need consider only the cited materials, but it may consider other materials in the record."). "The evidence of the non-movant is to be believed, and all justifiable inferences are to be drawn in his favor."

- 
- a coupling means for connecting a strap to said wearable tag;
  - said strap having a conductor imbedded therein;
  - said imbedded conductor not being readily accessible to a wearer of said wearable tag;
  - a tamper means including:
    - o a first electrode coupled to a first part of said imbedded conductor via a first conductive region of said strap;
    - o a second electrode coupled to a second part of said imbedded conductor; and
    - o an impedance detection means for detecting a change in the impedance between said first and second electrodes.

Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 255 (1986). Only admissible evidence is considered on motions for summary judgment. Adams v. Am. Guar. & Liab. Ins. Co., 233 F.3d 1242, 1246 (10th Cir. 2000).

*ii. Patent infringement*

“Determining whether a claim has been infringed requires a two-step analysis: First, the claim must be properly construed to determine its scope and meaning. Second, the claim as properly construed must be compared to the accused device or process.” Stumbo v. Eastman Outdoors, Inc., 508 F.3d 1358, 1361 (Fed. Cir. 2007) (citation, internal quotation marks omitted). In this case, the parties agree that the “impedance detection means” of Claim 8 of the ‘884 patent is a means-plus-function claim governed by 35 U.S.C. § 112 ¶ 6,<sup>3</sup> and AMS stipulates to BI’s construction of the claim for the purposes of summary judgment.<sup>4</sup> Here, the Court need only engage in the second, device-comparing step of infringement analysis. See Stumbo, 508 F.3d at 1361.

---

<sup>3</sup> Means-plus-function claims involve terms that are delineated by way of reference to the function of a thing, instead of being described by structural limitations. These terms usually use a generic, function-referencing term such as a “means” as their name. See Kemco Sales, Inc. v. Control Papers Co., Inc., 208 F.3d 1352, 1361 (Fed. Cir. 2000). Paragraph 6 of 35 U.S.C. § 112 provides:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

<sup>4</sup> For the purposes of summary judgment, AMS accepts BI’s proposed construction of the structure in the ‘884 patent that corresponds to the particular function of the claim limitation. See, e.g., Cardiac Pacemakers, Inc. v. St. Jude Med., Inc., 296 F.3d 1106, 1113 (Fed. Cir. 2002). BI’s proposed construction of that structure is “a

Literal infringement of a claim with a means-plus-function clause requires that the accused device perform a function identical to that identified in the means clause. If it performs the identical function, an accused device literally infringes a claim element under § 112 ¶ 6 only if it is insubstantially different from the corresponding structure in the patent specification. The “insubstantial difference” analysis requires a determination of “whether the ‘way’ the accused structure performs the claimed function, and the ‘result’ of that performance, are substantially different from the ‘way’ the claimed function is performed by the ‘corresponding structure . . . described in the specification,’ or its ‘result.’”

The doctrine of equivalents might come into play to determine infringement of a means-plus-function claim element if the accused device features technology that has arisen since the time of patent issuance. In that instance, the insubstantial difference analysis once again determines infringement, and again requires comparison of the structure corresponding to the function—the literal meaning of the claim element—with the accused structure.

Ishida Co. v. Taylor, 221 F.3d 1310, 1316-17 (Fed. Cir. 2000) (citations omitted); see also Hearing Components, Inc. v. Shure Inc., 600 F.3d 1357, 1370 (Fed. Cir. 2010). In this case, nothing indicates that SCRAM features technology, relevant to the present comparison, that has arisen since the issuance of the ‘884 patent, so the following infringement analysis falls under the framework of literal means-plus-function infringement. See Ishida, 221 F.3d at 1317. In any event, the same “insubstantial difference analysis” would apply under the doctrine of equivalents, too. See id.

## **B. Analysis**

The Court determines that summary judgment in favor of AMS is appropriate on the ‘884 patent because the Court discerns no evidence in the record showing that

---

comparator circuit having two input voltages and an output voltage, where the output voltage of the comparator circuit changes when there is a change in one input voltage, or equivalents thereto.”

SCRAM performs a “function identical to that identified in the means clause.” Id. at 1316. Alternatively, even if SCRAM performs a function identical to that of Claim 8’s “impedance detection means,” the Court concludes SCRAM does not perform that function in substantially the same way.<sup>5</sup> See id. at 1317.

First, the Court finds no evidence on the record that SCRAM performs the identical function of Claim 8’s “impedance detection means.” Crucially, the relevant “function” being compared here is not the overall function of the invention (e.g., detecting an attempt to violate the strap), but rather is the “function . . . identified in the means clause.” Id. In this instance, the function of the “impedance detection means” of Claim 8 is, by the language of the claim, “detecting a change in the impedance between said first and second electrodes.” See Minks v. Polaris Indus., Inc., 546 F.3d 1364, 1379 (Fed. Cir. 2008) (lifting definition of the relevant “function” of a means-plus-function claim, for purposes of this infringement inquiry, from the claim language itself). The Court cannot identify any evidence indicating that SCRAM detects changes in impedance.

---

<sup>5</sup> To the extent that BI suggests that summary judgment declaring non-infringement is categorically inappropriate with means-plus-function claims—reasoning that the question of infringement turns on equivalency under 35 U.S.C. § 112 ¶ 6, and that such equivalency is always a question of fact reserved for the jury—such a proposition is incorrect. See, e.g., Kemco Sales, 208 F.3d at 1364-65 (agreeing “with the district court that no reasonable jury could have found that [the structure associated with a means-plus-function claim] infringes, either literally or under the doctrine of equivalents,” with the court comparing the patent to the accused device and making judgments regarding similarity of function, manner of operation, and result); Ishida, 221 F.3d at 1317 (substantially the same); cf. Gen. Protecht Grp., Inc. v. Int’l Trade Comm’n, 619 F.3d 1303, 1313 (Fed. Cir. 2010) (reviewing the record, engaging in similarity analysis, and reversing a determination of infringement, “hold[ing] that substantial evidence does not support the Commission’s finding”).



In this case, in AMS’s favor, there is an expert’s affirmative statement that the “SCRAM devices do not monitor electrical impedance” and “SCRAM does not measure impedance.” (Wojcik Decl., Doc. 61-4 ¶¶ 13, 16.) Meanwhile, drawing reasonable inferences in favor of BI, the rest of the expert affidavits address questions that are inapposite to whether SCRAM functions identically, i.e., by detecting a change in the impedance between the first and second electrodes. These other questions have to do with structural equivalency and broader functional identity.<sup>6</sup> However, the question of whether the accused device effectively achieves the same ultimate practical result (e.g., detecting an attempt to violate the strap) is not the same question as whether it performs the “function identical to that identified in the means clause.” Ishida, 221 F.3d at 1316. Therefore, given the lack of a genuine factual dispute in the record that SCRAM does not detect a change in impedance, like the “impedance detection means” of Claim 8, summary judgment of non-infringement is warranted on this ground. See Fed. R. Civ. Pro. 56(a).

Second, assuming *arguendo* SCRAM and the “impedance detection means” of Claim 8 perform identical functions, the Court determines, viewing the facts in the light

---

<sup>6</sup> See Melton Decl. I, Doc. 68-1 ¶ 22 (stating that “[t]he function of [SCRAM’s] circuit chip . . . is the very same function as the circuit specifically described in the ‘884 patent—they both compare an input to a reference and providing [sic] an output based on that computation” (emphasis added); but not stating that SCRAM does that by way of detecting impedance—the relevant “function” in the present identity inquiry); De Simone Decl., Doc. 68-2 ¶ 27 (stating that “SCRAM performs . . . the very same function as the circuit specifically described in the ‘884,” but having just defined that function to be “comparing the input signal with a reference voltage and determining the output based on that comparison”); Melton Decl. II, Doc. 110-1 ¶ 16 (substantially the same as his earlier affidavit on this point); Laurent Decl., Doc. 101-4.

most favorable to BI, see Anderson, 477 U.S. at 255, that SCRAM’s corresponding structure does not “perform[] the claimed function in substantially the same way to achieve substantially the same result,” Hearing Components, 600 F.3d at 1370. To frame the issue once again, no infringement occurs when an accused structure performs the same function as the corresponding structure referenced by the means-plus-function claim of the patent, yet does so in a substantially different way and/or with a substantially different result. Compare Gen. Protecht, 619 F.3d at 1313 (reversing a finding of infringement, in the means-plus-function context, where mechanical latches and magnetic latches performed the same function with the same result because the respective latches did so “in fundamentally different ways” (citation omitted)), with Minks, 546 F.3d at 1379 (upholding a jury determination that circuitry that was responsive to the frequency of AC current, and that was interchangeable with circuitry responsive to the voltage of AC current, accomplished the same function as the latter circuitry, in substantially the same way with substantially the same result).

In this case, according to BI’s own expert opinions, SCRAM’s Schmitt Trigger implements a digital circuit that compares an input voltage to a reference voltage and renders an output voltage of ‘0’ or ‘1’.<sup>7</sup> In contrast, Claim 8 implements an analog circuit that “is capable of measuring the amount of voltage,” which is akin to “determin[ing] whether [a light bulb] is dimmed,” as opposed to “on or off” like the Schmitt Trigger’s digital circuit. (De Simone Decl., Doc. 68-2 ¶ 24.) BI’s expert

---

<sup>7</sup> See De Simone Decl., Doc. 68-2 ¶¶ 24-25; Melton Decl. II, Doc. 110-1 ¶ 13; Melton Decl. I, Doc. 68-1 ¶ 6.

asserted that this difference is immaterial because in either case, “the output signal is a binary determination that is either ‘tamper event’ or ‘no tamper event.’” (Id. ¶ 25; see also Melton Decl. II, Doc. 110-1 ¶¶ 14-17.) However, while BI’s experts may be right that the respective technologies are functionally equivalent insofar as they both identify tamper events through an output signal, that does not mean that the respective ways in which the technologies compare inputs and generate an output are substantially same—the relevant legal question. The Court concludes that this case is analogous to the case of mechanical versus magnetic latches performing an identical retention function in substantially different ways, see Gen. Protecht, 619 F.3d at 1313, or to the case of purely mechanical versus part-computerized machines performing an identical stripping and sealing function in substantially different ways, see Ishida, 221 F.3d at 1314, 1317. Notably, there is no evidence that the different circuits would be interchangeable on the SCRAM and ‘844 devices; and evidence of interchangeability has been considered important to the present inquiry. See Minks, 546 F.3d at 1379; see also Hearing Components, 600 F.3d at 1370-71. In sum, assuming arguendo that the corresponding structures of SCRAM and the “impedance detection means” of Claim 8 perform the same function, the Court determines that they do not perform it in substantially the same way, such that summary judgment of non-infringement is warranted on this basis.

### **III. CLAIM CONSTRUCTION**

#### **A. Construction methodology**

The meaning of patent claim language is a question of law for the Court to decide. See Markman v. Westview Instruments, Inc., 517 U.S. 370, 388 (1996). The “objective baseline from which to begin” is the “inquiry into how a person of ordinary skill in the art understands a claim term.” Phillips v. AWH Corp., 415 F.3d 1303, 1313 (Fed. Cir. 2005) (en banc). “Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent . . . .” Id. Sometimes, if the ordinary meaning of claim language is obvious, claim construction “involves little more than the application of the widely accepted meaning of commonly understood words.” Id. at 1314. However, if the meaning is

not immediately apparent, and because patentees frequently use terms idiosyncratically, the court looks to “those sources available to the public that show what a person of skill in the art would have understood claim language to mean.” Those sources include “the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.”

Id. (citation omitted).

To begin with, “the claims themselves provide substantial guidance as to the meaning of particular claim terms.” Id. For instance, “the context in which a term is used in the asserted claim can be highly instructive.” Id. (noting that the term “‘steel baffles[]’ . . . strongly implies that the term ‘baffles’ does not inherently mean objects made of steel”). Also, “the usage of a term in one claim can often illuminate the meaning of the same term in other claims.” Id. (observing that “claim terms are normally used consistently throughout the patent”).

However, because claims “do not stand alone” but rather “are part of a ‘fully integrated written instrument,’ . . . claims ‘must be read in view of the specification, of which they are a part.’” Id. at 1315 (citations omitted); see also Medrad, Inc. v. MRI Devices Corp., 401 F.3d 1313, 1319 (Fed. Cir. 2005) (“We cannot look at the ordinary meaning of the term . . . in a vacuum.” (citation omitted)). As a result, “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.’” Phillips, 415 F.3d at 1315 (citation omitted). In that vein, if the specification “reveal[s] a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess[,] . . . the inventor’s lexicography governs.” Id. at 1316. Similarly, any “intentional disclaimer, or disavowal, of claim scope by the inventor . . . as expressed in the specification, is regarded as dispositive.” Id.

Additionally, “a court ‘should also consider the patent’s prosecution history,’” which is “part of the ‘intrinsic evidence’” and “consists of the complete record of the proceedings before the PTO and includes the prior art cited during the examination of the patent.” Id. at 1317. The prosecution history “often lacks the clarity of the specification and thus is less useful for claim construction purposes,” but it “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 the prosecution, making the claim scope narrower than it otherwise would be.” Id. at 1317. Also, the prosecution history can be cited “to ‘exclude any interpretation that was disclaimed

during prosecution.”” Chimie v. PPG Indus., Inc., 402 F.3d 1371, 1384 (Fed. Cir. 2005) (citation omitted). Thus, ““where the patentee has unequivocally disavowed a certain meaning to obtain his patent, the doctrine of prosecution disclaimer attaches and narrows the ordinary meaning of the claim congruent with the scope of the surrender’[,] [which] ensures that claims are not construed one way in order to obtain their allowance and in a different way against accused infringers.” Id. (citation omitted).

Finally, although the aforementioned types of intrinsic evidence have prime interpretive value, courts may also look to “extrinsic evidence, which ‘consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises.’” Phillips, 415 F.3d at 1317 (citation omitted). However, while 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.” Id. (internal quotation marks, citations omitted). Extrinsic evidence may not unduly expand or contradict the meaning demonstrated by the intrinsic evidence, see id. at 1318-19, but it may be consulted insofar as it “help[s] educate the court regarding the field of the invention and . . . help[s] the court determine what a person of ordinary skill in the art would understand claim terms to mean,” id. at 1319.

## **B. Analysis**

### **a. Patent ‘149**

(1) “*predetermined time intervals according to a first schedule*” (claim 1, row 4<sup>8</sup>)

---

<sup>8</sup> Row numbers refer to the numbers in spreadsheet in Exhibit B (Doc. 112-2), which the parties have used to identify disputed terms. (There are gaps between row

- AMS's proposed construction: “selected points in time according to a first schedule”
- BI's proposed construction: “a predetermined schedule of pre-selected points in time ranging between every 30 minutes to once a day”
- The Court's construction: **(no construction required)**

A person of ordinary skill in the art would understand this term to mean exactly what it says, in the context of the claim language and the specification; and the prosecution history does not compel a different construction.

With respect to AMS's proposed construction, the Court discerns no meaningful difference between “predetermined time intervals” and “selected points in time” in this context. Indeed, at the Markman hearing, counsel for AMS used the terms “selected” and “preselected” interchangeably; and “predetermined” is synonymous with “preselected.” AMS's proposed change adds nothing to the current, clear meaning.

BI's suggested addition of “pre-selected” is similarly unnecessary. With respect to BI's proposed limitation to the specified time range, the Court finds BI's arguments unpersuasive. First, the language in the specification that “[t]esting schedules may range from as frequent as every 30 minutes or as infrequent as once per day” (Doc. 63-5, Col. 3, ll 51-53) appears to be merely illustrative; it does not disavow any time intervals outside that range. See Conoco, Inc. v. Energy & Env'tl. Int'l, L.C., 460 F.3d 1349, 1357-58 (Fed. Cir. 2006). Rather, “30 minutes” and “[a] day” are simply commonly referenced

---

numbers because the spreadsheet once contained more disputed terms, yet after the parties subsequently stipulated to many constructions, the parties retained the original numbers.)

periods of time, invoked in the specification as examples of how frequently readings “may” (not “must,” “will,” “do,” etc.) be taken, according to a first schedule. Nothing in the patent suggests that time range is required by the technology or that it is necessary to distinguish the invention from prior art. One skilled in the art would not understand the specification to preclude a first schedule from calling for testing every 29 minutes, or every 24 hours and one minute. Second, the prosecution history referenced by BI—in which AMS distinguished prior art by asserting that a “window is clearly not a predetermined time interval according to a schedule”<sup>9</sup>—is inapposite. The current language does not allow for readings to occur at random times within a “window” (nor has AMS argued that it should). Rather, the communication of readings occurs “at predetermined time intervals according to a first schedule” (emphasis)—language that denotes specific points in time, not mere windows at any point during which a reading might occur. The prosecution history thus does not undermine the claim language. See Chimie, 402 F.3d at 1384.

(2) “*wherein said plurality of transdermal alcohol concentration readings stored in said first memory are communicated from said monitor device to said modem at predetermined time intervals according to said first schedule*” (claim 1, row 6)

- AMS’s proposed construction: “wherein said plurality of transdermal alcohol concentration readings stored in said first memory may be transmitted from said monitoring device to said modem at predetermined time intervals according to said first schedule”
- BI’s proposed construction: “the communication of the transdermal alcohol concentration readings from the monitor device to the modem occurs according to the same first schedule by which the monitor device takes the transdermal alcohol concentration readings from the subject”

---

<sup>9</sup> See Joint Exh. 2, Doc. 63-6, at 165.



- The Court's construction: **(no construction required)**

The Court concludes that no construction of this term is necessary, as a person of ordinary skill in the art would understand this term, in context, to mean what it says. At the Markman hearing, the parties focused their dispute on whether or not the readings taken by the device from the device-wearer are communicated immediately to the modem. AMS argued that the claim does not require that the readings be passed through immediately, and that a single first schedule could dictate separate times for wearer-to-device communications and device-to-modem communications. BI argued that the pass-through of readings, from wearer to device to modem, is a single sequence (one that is not simultaneous, but is uninterrupted) triggered by the same points in time under a single first schedule. The Court understands the parties' respective contentions but rejects both proposed constructions as failing to develop the true meaning of the term beyond the current language, which is clear.

AMS's proposed construction, which simply substitutes "may be transmitted" for "are communicated," is not warranted. For one, the proposed change from the affirmative "are" to the permissive "may be" is unsupported by anything in the claim language or the specification. The language consistently uses the affirmative "are," see Phillips, 415 F.3d at 1314, and construing the communication of readings according to the predetermined time intervals to be a mere possibility would distort the claim. Also, AMS's argument that a first schedule could set forth different sub-schedules for the wearer-to-device communication and the device-to-modem communication—in the way that a single train schedule might be said to contain multiple, unique sub-schedules for

specific trains—lacks a basis in the patent language. Moreover, that notion is undermined by the claim’s later identification of a “second schedule”: the claim’s distinction between time intervals according to a first schedule and time intervals according to a second schedule militates against the conclusion that the first schedule contains unique sub-schedules. Cf. id. Next, there is no reason (and AMS has offered none) to substitute “transmitted” for “communicated.”

BI’s proposed construction is also unwarranted, as it merely rephrases the claim without adding any meaning or clarification (e.g., “said first schedule” and “same first schedule” mean the same thing). In sum, the Court determines that the current claim language best encapsulates the meaning of the claim.<sup>10</sup>

(3) *“TAC [transdermal alcohol concentration] readings stored in said second memory are communicated from said modem to said monitor network at predetermined time intervals according to a second schedule”* (claim 1, row 8)

- AMS’s proposed construction: “transdermal alcohol concentration readings stored in said second memory may be communicated from said modem to said monitor network at predetermined time intervals according to a second schedule”
- BI’s proposed construction: “the transdermal alcohol concentration readings stored in the modem memory are communicated according to a schedule of pre-selected points in time, rather than being communicated to the monitor network immediately upon receipt”
- The Court’s construction: **(no construction required)**

The Court concludes that no construction is necessary. Once again, as the parties made clear at the Markman hearing, the dispute focuses on the immediacy of the communication of data. With respect to this term, AMS desires to avoid a construction

---

<sup>10</sup> The Court also notes, without relying on, an expert’s opinion that neither party’s proposed construction properly captures the meaning of this term. (Hawthorne Decl., Doc. 63-2 at 10.)

that would preclude the possibility that data is communicated from the modem to the monitor network immediately upon receipt of that data from the monitor device. AMS explained, emphasizing the specification,<sup>11</sup> that the modem may sometimes immediately communicate data to the monitor network, namely anytime it perceives an alert condition from the data it has received (whereas absent an alert condition, data is communicated at the predetermined time intervals of the second schedule). BI, meanwhile, seeks to preclude the possibility of immediate communication, stressing that in the prosecution history—when AMS argued to the PTO that, unlike prior art, the ‘149 patent’s data is stored and automatically transferred according to a predetermined schedule—AMS distinguished prior art in which “readings . . . are not stored for later transfer, but instead, . . . are immediately transferred after being taken.” (Joint Exh. 2, Doc. 63-7, at 655).

The Court concludes that neither party’s argument warrants changing the current claim language, which best captures the true meaning of the claim. AMS’s suggestion, to alter “are” to “may be” is deficient for substantially the same reasons discussed above under the previous disputed term; but also, here, because the fact that readings are immediately communicated from the modem when an alert condition is detected does not mean that it is not also the case that readings are (not “may be”) communicated at the predetermined time intervals of the second schedule. That is, even if a reading is communicated to the monitor network at a non-predetermined time due to the detection

---

<sup>11</sup> See Doc. 63-5, Col. 11, ll 1-5: “If there is data that needs to be transmitted to Monitor Network immediately, or if it is a scheduled time to call Monitor Network, then Modem will go through the connection process and connect to Monitor Network.”

of an alert condition, the claim language and specification make clear that readings are still communicated at the next predetermined interval.

Next, BI's proposed construction is not compelled by the prosecution history. AMS was distinguishing prior art that, apparently, did not store data but rather exclusively passed data through immediately. AMS's representation that the '149 patent is different from prior art that only had immediate, or continuous, pass-through of data is consistent with a construction that allows for pass-through in some cases but also for regular communication of stored data according to the second schedule, as expressed by the current claim language. At the least, AMS's statement did not constitute an unequivocal disavowal of the ordinary meaning of the claim. See Chimie, 402 F.3d at 1384. Accordingly, the Court determines that no construction is necessary.

(4) "*a secure internet connection*" (claim 4, row 10)

At the Markman hearing, the parties agreed that **no construction** is required for this term.

#### Summary of claim construction of the '149 patent

The Court concludes that no claim construction is warranted for the '149 patent.

#### **b. Patent '611**

(1) "*raw data*" (claim 1, row 17)<sup>12</sup>

- AMS's proposed construction: "[transdermal alcohol content] readings, tamper indicators and/or error indicators recorded by the monitor device that undergo no further processing at either the monitor device or modem level"

---

<sup>12</sup> The latest proposed constructions for this term were submitted by the parties in their post-hearing briefs. (Doc. 115 at 2 (AMS); Doc. 116 at 2 (BI).)

- BI's proposed construction: "TAC readings recorded by the Monitoring Device, which undergoes no further processing by the Monitoring Device nor the Modem"
- The Court's construction: "**data, recorded by the monitoring device, which undergo no further processing by either the monitoring device or the modem, but which are subsequently parsed by the monitor network,**"

The parties essentially agree on the construction of this term except on whether the construction should include "tamper indicators and/or error indicators recorded by the monitor device." AMS argues that this inclusion is justified in light of the specification, which indicates, among other things, that the "Monitor Device will transfer is [sic] to Modem . . . all the TAC readings, tamper indicators, error indicators, diagnostic data, and any other data stored in Monitor Device regarding Subject." (Doc. 63-9, Col. 4, ll 24-29.)<sup>13</sup> BI argues, however, that AMS disclaimed the possibility of tamper and error indicators qualifying as raw data, citing prosecution history in which AMS, in distinguishing prior art, asserted that raw data must be "subject to [subsequent] parsing," as opposed to unparsed, "finished or complete data not subject to interpretation," i.e., data whose "meaning is already clear." (Joint Exh. 4, Doc. 105-2, at 589.)<sup>14</sup>

The Court determines its construction satisfies each party's argument and best captures the proper meaning of the claim term. AMS's proposed addition is warranted

---

<sup>13</sup> See also Doc. 63-9, Col. 4, ll 45-50 ("Modem will transfer all of the TAC readings, tampers, errors, diagnostic data, and any other data stored to a web-hosted database server at Monitor Network where all data is stored. Monitor Network then analyzes the data received and separates and groups the data . . .").

<sup>14</sup> To illustrate, AMS distinguished a Battery Status Register and a Tamper Status Register (prior art) whose respective "finite states"—"low; normal; and not sure," for the former, and "active; reset; and not sure," for the latter—"represent finished or complete data not subject to parsing . . . and thus cannot properly be construed as 'raw data.'" (Joint Exh. 4, Doc. 105-2, at 589.)

but is too limited in light of the specification: the inclusion of “tamper indicators and/or error indicators,” to the exclusion of the “diagnostic data, and any other data” identified immediately thereafter, is arbitrary and unjustified. Meanwhile, the Court agrees with BI that, in light of the prosecution history, AMS may not argue that raw data includes any data that is not subject to subsequent parsing. The Court’s construction allows for the inclusion of data regarding tamper and error indicators, as AMS desires, so long as that data is not finished data that undergo no further analysis, as BI maintains it cannot be. As such, neither party’s position is offended by the Court’s construction; and in any event, the Court determines that its construction best reflects the meaning of the term.

(2) “*connectable to*” (claim 1, rows 19, 21, 23, 25; claim 2, row 29)

The parties’ dispute regarding each of the terms of the above-identified row numbers focuses on the phrase “connectable to,” which is common to each term. Separate evaluations for the respective row numbers is not necessary, since the parties’ arguments regarding “connectable to” were uniform and independent of the broader claim term in which the phrase appears. As such, the following analysis of “connectable to” shall pertain to each of the disputed terms to be construed here.<sup>15</sup>

- AMS’s proposed construction: (no construction required)
- BI’s proposed construction: “separate from, and having the ability to be connected to”

---

<sup>15</sup> The Court interprets the parties’ joint affirmation at the Markman hearing that “connectable to” is the sole disputed term among these several rows to constitute an abandonment of minor wording disputes identified in briefs in regards to other aspects of certain terms. In any event, even if the parties did still dispute other phraseology (aside from “connectable to”) in any of the terms of rows 19, 21, 23, 25 and 29, the Court determines that no further construction is warranted.

- The Court’s construction: **“that works together with, but is not the same as,”**

The crux of the parties’ dispute, here, is whether Claims 1 and 2 should be construed so that the items listed as “connectable to” each other within the monitor network<sup>16</sup> must necessarily be separate processors (i.e., discrete physical devices); or whether they should be construed so as to allow for the items to be processes (i.e., programs) that may run on a single physical processor, yet operate in connection with each other. BI argues for the former, relying chiefly on an alleged disclaimer in the prosecution history, but also pointing to a graphical depiction in the patent of the monitor network as well as to extrinsic evidence about network-related verbiage. Meanwhile, AMS argues for the latter, citing the lack of a separate-processors limitation in the patent language and denying the alleged disclaimer.

First, with respect to the prosecution history, BI makes a legitimate point, though it overstates the scope of AMS’s disclaimer. The context of AMS’s statement was its argument that a single computer in prior art should not be equated with both the communication server and situation analyzer of the ‘611 patent. AMS asserted that, “[a]s Claim 1 requires the communication server and the situation analyzer to be ‘connectable’ (i.e., to work together), a single device is not ‘connectable’ to itself and [therefore] does not meet the claim limitations.” (Joint Exh. 4, Doc. 63-10, at 122.) Strictly speaking, then, AMS merely disclaimed that “connectable” items, including the communication

---

<sup>16</sup> These items being a situation analyzer, a communication server, a workflow instructions, a supervising agency / subject database, a notification server, and an alert manager. See Doc. 63-9, Col. 16, l 59 - Col. 17, l 22; see also id. at 24 (Fig. 14, depicting the monitor network).

server and situation analyzer, may be the same “single device.” However, that concession does not logically require that the communication server and situation analyzer, or any other two particular “connectable” items, be two (separate) devices. Rather, it could be that the two items are processes that run on some third physical device, or that one is a device and the other is a process that runs on it. Either of those possibilities would be consistent with AMS’s argument, as well as with AMS’s later statement to the PTO that while “[a computer] is not connectable to itself, pieces of software code inside the computer . . . may nevertheless be connected together in much the same way as the computer . . . is connected to other portions of the central host unit.” (Joint Exh. 4, Doc. 105-2, at 584.) The Court need not rely on that later statement, however, because AMS’s earlier statement did not “unequivocally disavow,” Chimie, 402 F.3d at 1384, the possibility that the “connectable” items are processes that run on devices. The only thing AMS disavowed was the possibility that “connectable” items may be one single device. Therefore, BI’s proposed construction, with “separate from,” is too limiting, since a process could be thought of as “separate from” another process or from a device on which it runs. The Court’s construction reflects the proper extent to which the prosecution history should narrow the meaning of “connectable to.”

Meanwhile, the Court determines that the “works together with” portion of its construction reflects what one skilled in the art would understand “connectable to” to mean in this context, particularly given that AMS used that choice of words in the prosecution history. See Phillips, 415 F.3d at 1317. BI cites general definitions from



technical dictionaries and treatises for the purpose of showing that software or processes are not usually said to be “connected” to the hardware on which they run, and that a network is generically thought of as an interconnected system of devices. (Doc. 116 at 3-4.) However, general extrinsic definitions do not override the intrinsic record in the task of claim construction. See id. at 1317-19. In this case, the Court determines that, in the context of this patent, one skilled in the art would not understand “connectable to” to mean necessarily “separate from,” as BI proposes. BI would be hard-pressed, for instance, to argue that the “workflow instructions”—one of the “connectable” items of the monitor network— is necessarily a physically discrete device or processor.<sup>17</sup>

(3) “*historical data*” (claim 1, row 22)

The parties conferred after the Markman hearing and stipulated to construction of this term as “**data relating to prior messages, as opposed to data relating to the message just received by the situation analyzer,**”<sup>18</sup>

(4) “*an immediate notification*” (claim 1, row 27)

---

<sup>17</sup> The graphical representation of the monitor network in Figure 14 of the ‘611 patent sheds little light on whether any of the “connectable” items that comprise the monitor are discrete physical devices: although the items are depicted as separate boxes, they are also all depicted as being contained within a larger box. (See Doc. 63-9 at 24.)

<sup>18</sup> The Court accepts that quoted language, from BI’s post-hearing brief (Doc. 116 at 8), as the embodiment of the parties’ stipulation. AMS, in its post-hearing brief, did not offer quoted language but rather simply acknowledged, more generally: “The parties agreed during the Markman hearing that the term historical data would not include data related to the current usage being analyzed by the situation analyzer.” (Doc. 115 at 8.) The Court takes BI’s language as the precise language to which the parties stipulated, since AMS’s more casual acknowledgement of the stipulation is consistent with BI’s quote. In any event, the Court would construe the term as quoted.

The parties conferred after the Markman hearing and agreed that this term requires **no construction.**<sup>19</sup>

Summary of claim construction of the ‘611 patent

The Court construes claims 1 and 2, in relevant part, as follows (adding emphasis to show the Court’s constructions):

1. A monitor network . . . comprising:
  - a communication server, wherein said communication server receives data, recorded by the monitoring device, which undergo no further processing by either the monitoring device or the modem, but which are subsequently parsed by the monitor network, over a communication link from the modem, wherein said data, recorded by the monitoring device, which undergo no further processing by either the monitoring device or the modem, and which are subsequently parsed by the monitor network, is gathered . . . ;
  - a situation analyzer that works together with, but is not the same as, said communication server, wherein said situation analyzer parses said data, recorded by the monitoring device, which undergo no further processing by either the monitoring device or the modem, but which are subsequently parsed by the monitor network, through a predetermined set of rules . . . ;
  - a workflow instructions that works together with, but is not the same as, said situation analyzer, wherein said situation analyzer queries said workflow instructions and []<sup>20</sup> data relating to prior messages, as opposed to data relating to the message just received by the situation analyzer, for an action to be applied . . . ;
  - a supervising agency / subject database that works together with, but is not the same as, said situation analyzer for storing said data, recorded by the monitoring device, which undergo no further processing by either the monitoring device or the modem, but which are subsequently parsed by the monitor network, for storing information . . . ; and

---

<sup>19</sup> AMS did not acknowledge this stipulation in its post-hearing brief (Doc. 115) as BI did (Doc. 116 at 8). However, in light of both BI’s affirmative representation of the stipulation and the parties’ apparent agreement at the Markman hearing, the Court takes AMS’s omission simply as an oversight. In any event, the Court would rule that no construction is necessary.

<sup>20</sup> The Court removes the “a” that appears here in the claim language, preceding “historical data.” The inclusion of that article appears to have been a typographical error.

- a notification server that works together with, but is not the same as, said situation analyzer . . . .
2. The monitor network according to claim 1 further comprising:
- An alert manager that works together with, but is not the same as, said situation analyzer and said workflow instructions . . . .

## CONCLUSION

For the foregoing reasons, the Court GRANTS AMS's Summary Judgment Motion, and CONSTRUES the disputed claims of the '149 and '611 patents as identified above. The parties are ORDERED promptly to confer about next steps in this case, and to submit a joint status report or separate status reports (not to exceed ten pages) to this Court and to the magistrate judge no later than July 19, 2012.

DATED this 20th day of June, 2012.

BY THE COURT:

*s/ David M. Ebel*

---

U.S. CIRCUIT JUDGE