

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

METHODE ELECTRONICS, INC.,
Plaintiff/Counter-Defendant,

Case No. 09-cv-13078

v.

Paul D. Borman
United States District Judge

DPH-DAS LLC, f/k/a DELPHI
AUTOMOTIVE SYSTEMS LLC,

Defendant/Counter-Plaintiff,

MARIAN, INC.,

Defendant

DELPHI TECHNOLOGIES, INC.,

Counter-Plaintiff.

DELPHI AUTOMOTIVE SYSTEMS LLC,
Plaintiff,

Case No. 09-cv-14303

v.

METHODE ELECTRONICS, INC.,
Defendant.

OPINION AND ORDER ACCEPTING, ADOPTING, AND MODIFYING IN PART
SPECIAL MASTER JAY G. TAYLOR'S SEPTEMBER 12, 2011 REPORT AND
RECOMMENDATION ON CLAIM CONSTRUCTION (DKT. NO. 119), AS
SUPPLEMENTED BY HIS JANUARY 13, 2012
RESPONSE TO THE PARTIES' OBJECTIONS (DKT. NO. 159)¹

¹ Unless otherwise noted, Docket Number References are to entries in Case No. 09-cv-13078 (E.D. Mich. 2009).

I. BACKGROUND

A. The Patent

The patent in this case is U.S. Patent No. 5,975,568 (the “568 patent” or the “Patent”). It relates to a weight-sensing pad for controlling the deployment of automobile airbags. (Dkt. No. 72, Delphi’s Opening Claim Construction Br. 1; Ex. 2.) The invention was developed to address the safety risks airbags present to small adults and children sitting in the front passenger seat. (Dkt. No. 73, Methode’s Opening Claim Construction Br. 1.) The weight-sensing pad is part of a Passive Occupant Detection System (PODS) that uses a weight-sensing bladder. (*Id.*) The PODS enables the selective deployment of the passenger airbags, depending on the passenger’s weight which is measured by the pressure the occupant applies to the weight-sensing bladder located within the seat. (*Id.*)

The bladder is filled with a fluid and is broken into several hexagonal cells that the fluid can pass between. (*Id.*) The bladder is connected to a pressure tube which in turn is connected to a pressure activated electronic transducer. (Methode’s Opening Br. Ex. A - the Patent, Abstract.) The transducer controls whether the passenger airbags will deploy in the event of a crash. If the passenger puts sufficient pressure on the seat so that the volume of the bladder is reduced to a point where the volumetric pressure within the bladder reaches a predetermined point (that correlates to the pressure produced when the passenger weighs 100 pounds or more) then the transducer sends an arming signal to the airbag control module to deploy in the event of a crash. If the passenger weighs less than 100 pounds or there is no passenger riding in the front seat, then the transducer will not signal the airbag controller to deploy.

B. The Dispute Between the Parties

In the late 1990s, Delphi approached Methode's predecessor American Components, Inc. ("ACI") about developing the weight-sensing bladder. (Methode's Opening Br. 1.) Methode claims that Delphi's original designs used square cells and were unable to accurately differentiate between child and adult passengers. (*Id.* at 1-2.) Methode alleges that Dr. Frank Speckhart and Scott Baker developed the hexagon-shaped cell design while working for ACI. (*Id.* at 2.) ACI and Delphi then entered into a long-term supply contract through which ACI agreed to manufacture the PODS. Methode later acquired certain assets of ACI, including the Patent and the Delphi contract. (*Id.*) For almost a decade, Methode supplied Delphi with the PODS weight-sensing bladders. In 2008, the most recent contract expired and Methode was forced to raise the cost of manufacturing the bladders due to economic conditions. (*Id.*) As a result, Delphi, with Marian's assistance, began manufacturing, using, and selling its own version of a weight sensing pad. (*Id.*) Methode has accused Delphi of infringing Claims 1-6, 6-12, 14-16, 19, and 20 of the Patent. (Methode's Opening Br. 7.)

C. Claim Construction Proceedings

Five disputed claim terms have been presented to the Court for claim construction.² On April 20, 2011, the parties stipulated to the appointment of Jay G. Taylor as a Special Master to report and recommend to the Court on the disposition of the issues of patent claim construction pending before the Court. (Dkt. No. 108, Order of Appointment and Reference of Jay Taylor as Special Master Pursuant to Fed. R. Civ. P. 53.) The parties' positions on claim construction, including the parties'

² A complete listing of the asserted claims with the disputed terms the Court has been asked to construe appear as Exhibit D to Methode's Opening Claim Construction Brief. (Dkt. No 73, Ex. D.)

Opening and Opposing Claim Construction briefs, were referred to the Special Master and a *Markman*³ hearing was held before the Special Master on August 10, 2011.

On September 12, 2011, Special Master Taylor issued his Report and Recommendation on Claim Construction (“the Special Master’s Report” or “the Report”). (Dkt. No. 119.) On October 3, 2011, the parties filed Objections to the Special Master’s Report. (Dkt. Nos. 121, 122.)⁴ On October 20, 2011, both parties filed responses to the other side’s objections. (Dkt. Nos. 125, 126.) On December 16, 2011, the Court requested Special Master Taylor to respond to the parties’ objections (Dkt. No. 137). On January 13, 2012, the Special Master filed his Response to the Objections of the Parties (Dkt. No. 159, “the Special Master’s Response” or “the Response”). On January 27, 2012, both parties filed Statements of Continued Objection to the Special Master’s Report and Response (Dkt. Nos. 165, 166), as permitted by the Court’s December 16, 2011 Order requesting the Special Master to respond to the parties’ objections (Dkt. No. 137).⁵

³ *Markman v. West View Instruments, Inc.*, 517 U.S. 370 (1996) (establishing that construction of a patent, including terms of art within the claims, was exclusively within the province of the court).

⁴ In connection with its statement of objections to the Special Master’s Report, Methode filed the Declaration of Charles A. Garris, Jr., an expert retained by Methode specifically to respond to the Special Master’s Report and to opine further on how a person of ordinary skill in the art would understand some of the disputed claims of the patent in suit. (Dkt. No. 121, Ex. 3, Declaration of Charles A. Garris, Jr., Oct. 2, 2011 ¶ 2.) On October 13, 2011, Delphi filed a motion to strike the Garris Declaration. (Dkt. No. 124.) The Court agrees with Delphi that because “Methode did not previously disclose Garris as a testifying expert witness on claim construction, or proffer a Garris Declaration or Garris testimony, at any time in the eighteen months of claim construction proceedings, despite Court Order to do so,” and because the Special Master, who also recommends that the Court not consider the Garris Declaration, was not presented with Garris’s opinion in advance of the claim construction hearing, the Garris Declaration should be stricken. Accordingly, the Court GRANTS Delphi’s motion to strike the Garris Declaration. (Dkt. No. 124.)

⁵ On February 13, 2012, Delphi filed a further brief in opposition to Methode’s objections to the Special Master’s Report. On February 16, 2012, Methode filed a motion to strike Delphi’s February 13, 2012 opposition brief, arguing that further briefing beyond initial responses to the Special

The Court now reviews the Special Master's Report and Response, along with the parties' objections to both. Having conducted, pursuant to Fed. R. Civ. P. 53(f)(2), *de novo* review of the parties' objections to the Special Master's Report and Response, the Court DENIES the parties' objections and ADOPTS and MODIFIES IN PART the claim construction recommended by the Special Master in his Report, as supplemented by his Response.

II. STANDARD OF REVIEW

The Court is required, under Fed. R. Civ. P. 53(f)(2), to conduct a *de novo* review of those portions of the Special Master's Report to which objections have been filed, unless the parties have agreed that the Special Master's findings shall be final or that review shall be for clear error. Fed. R. Civ. P. 53(f)(3). *See also Hochstein v. Microsoft Corp.*, 730 F. Supp. 2d 714, 717 (E.D. Mich. 2010), *aff'd* 430 F. App'x 898 (Fed. Cir. 2011) ("The Court reviews *de novo* factual findings and legal conclusions of the Special Master to which a specific objection has been made. *See* Fed. R. Civ. P. 53(f).") The parties have not stipulated to the finality of the Special Master's Report and have not agreed to clear error review; indeed the Court's Order of Reference expressly provides for *de novo* review of objections to the Report. (Dkt. No. 108 ¶ 6.) The Court may "'accept, reject, or modify, in whole or in part the finding or recommendations'" of the Special Master. *Chrimar Systems, Inc. v. Foundry Networks, LLC*, No. 06-13936, 2010 WL 3431569, at * 2 (E.D. Mich. Aug. 30, 2010) (quoting 28 U.S.C. § 636(b)(1)).

Master's Response were not contemplated by the Court's December 16, 2011 Order, which provided that: "Upon the filing of the Special Master's Response, the parties will have 14 days to respond to his response to their objections." The Court agrees with Methode that further briefing, beyond a response filed within 14 days, was not anticipated by the Court's December 16, 2011 Order. Accordingly, the Court GRANTS Methode's Motion to Strike Delphi's Statement of Opposition to the Response of Methode to the Special Master's Response to the Parties' Objections. (Dkt. No. 176.)

III. ANALYSIS

A. General Principles of Claim Construction

The purpose of claim construction is to “determin[e] the meaning and scope of the patent claims asserted to be infringed.” *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976-78 (Fed. Cir. 1995), *aff’d*, 517 U.S. 370 (1996). It is well-established that claim construction is conducted by courts in accordance with certain canons of construction. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-24 (Fed. Cir. 2005) (en banc). Claim construction analysis begins with the language in the claims themselves, which are generally given their ordinary and customary meaning to a person of ordinary skill in the art in question at the time the invention was patented. *Id.* at 1312-13. This “person of ordinary skill in the art” is also deemed to have read the claim “in the context of the entire patent, including the specification.” *Id.*

If the plain meaning of the claims is not entirely clear, courts next refer to the patent’s intrinsic evidence. For example, “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.” *Id.* at 1315 (quoting *Vitronics Corp. v. Conceptor, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)) (quotation marks omitted). The construction which is most faithful to the claim’s language and most aligns with the invention’s description will ultimately be the correct construction. *Id.* at 1316. The prosecution history is also considered intrinsic evidence and is an important source for understanding the true meaning of terms. This is because like the specification, the prosecution history demonstrates how the PTO and the inventor understood the patent’s claims. *Id.* at 1317.

Extrinsic evidence, such as dictionaries or technical treaties, are also often useful to assist courts’ understanding of how complex or technical terms of art are commonly understood by experts

in the field. Such extrinsic evidence may be relied on so long as it does not contradict clear language from the claims, specification, or other intrinsic evidence. *Id.* at 1322-23.

B. The Parties' Objections to the Special Master's Report

Of the five claims that the Special Master was asked to construe, the parties have filed objections only to two of the Special Master's recommended claim constructions. The two terms that remain in dispute, and the Special Master's recommended constructions, are as follows:

(1) "Transducer is activated by a selected volumetric displacement of said fluid that provides a pressure change in said bladder member." (Claims 5 and 8)

Special Master's Construction (Original Report): "The transducer generates and sends a signal upon detection of bladder pressure caused by the displacement [of] a selected volume of fluid indicative of a preselected amount of weight." (Dkt. No. 119, 9/12/11 Report, 21.)

Special Master's Construction (Response to Objections): "The transducer generates and sends a signal *only* upon detection of bladder pressure caused by the displacement [of] a selected volume of fluid indicative of a preselected *or greater* amount of weight." (Dkt. No. 159, 1/13/12 Response, 11) (changes highlighted).

(2) "Silicon" (Claims 4 and 10)

Special Master's Construction (Original Report): "The Special Master concludes that the proper construction of the term "silicon" in claims 4 and 10 is that a typographical error was made in drafting the claims and it should be corrected and construed as "silicone." (Dkt. No. 119, 9/12/11 Report, 9.)

Special Master's Construction (Response to Objections): "[T]he Special Master remains of the firm conclusion that the ter[m] "silicon" in claims 4 and 10 should be construed as a

typographical error that should be corrected to be “silicone.” (Dkt. No. 159, 1/13/12 Report, 13.)

C. The Special Master Correctly Construed the Claim Term “Transducer is Activated . . .” to Exclude the Alternate Embodiment of a Transducer That Generates and Sends a Constant Signal to the Air Bag Control Module Indicative of *Any*, as Opposed to a Preselected, Pressure Change Caused by *Any*, as Opposed to a Preselected, Volumetric Displacement of Fluid

Methode states in its Objections: “The [Special Master’s] Report construed each of the five disputed claim terms, and Methode has no objection to any of the constructions.” (Dkt. No. 121, 1.) Methode then goes on to spend nine pages pseudo-objecting to a perceived “ambiguity” in the Special Master’s “discussion” of “extrinsic evidence” that “could be read to exclude an analog transducer from the pressure activated electronic transducer recited, for example, in Claim 5.” *Id.* at 3. Methode asks that certain portions (in fact several pages) of the Special Master’s Report, which Methode has indicated in a redline version of the Report, not be adopted by the Court. Thus, although Methode claims that it has no objection, in fact Methode has objected to the Special Master’s construction of the term: “Transducer is activated by a selected volumetric displacement of said fluid that provides a pressure change in said bladder member.” Specifically, Methode objects to the Special Master’s suggestion in his Report and Response that the alternate analog transducer embodiment disclosed in the ‘568 Patent is not claimed in Claims 5 and 8.

Like Methode, Delphi objects to the Special Master’s construction of the claim term: “Transducer is activated by a selected volumetric displacement of said fluid that provides a pressure change in said bladder member.” Delphi argues that the Special Master’s construction is ambiguous and should be modified, by the addition of the word “only” after the word “signal,” to clarify that a transducer “that generates and sends a signal upon detection of *any* bladder pressure caused by the displacement of fluid [such as described in the alternate embodiment], is not covered by the claims.”

(Dkt. No. 122, Delphi Objs. 6) (emphasis in original).

In his Response to the parties' Objections, the Special Master rejected Methode's objections to his construction of this claim term and agreed with Delphi, adopting Delphi's suggestion and adding the word "only" to further clarify his original findings and recommended construction. Additionally, the Special Master clarified in his Response that the preselected weight of 100 pounds suggested as typical in the preferred embodiment is a minimum and that pressure indicative of the preselected weight "or greater" would result in the defined activation.

The Court agrees with the Special Master and Delphi that the preferred embodiment discloses a transducer that sends an arming signal to the airbag control module only upon detection of a preselected, as opposed to any, volumetric displacement of fluid in the bladder, indicative of a preselected, as opposed to any, amount of weight. The specifications of the '568 patent provide:

When a person sits upon a seat 54 in which a weight sensing pad 10 is mounted, there is a volumetric displacement of fluid 18 inside the bladder 15 causing the bladder 15 to change shape and consequently causes the pressure to increase which is measured by transducer 26. If there is a sufficient volumetric displacement of fluid to cause sufficient pressure change to activate transducer 26, transducer 26 sends a signal to air bag controller 30. In other words, if a passenger that weighs in excess of a preselected weight is seated on a seat 54 in which a weight sensing pad 10 is mounted, a sufficient volumetric displacement will occur to activate transducer 26.

* * *

In use, electronic transducer 26 is selected to generate a signal upon detection of pressure resultant from the volumetric displacement of fluid from bladder 15 expected from the average size adult of approximately one hundred pounds or heavier.

'568 Patent, col. 4, ln. 2-13; col. 5, ln. 11-15.

The specification for the preferred embodiment is clear: "If there is a *sufficient* volumetric displacement of fluid to cause *sufficient* pressure change to activate [the] transducer, [then the]

transducer sends a signal to air bag controller.” (Emphasis added). The meaning is clear: Only if a person who weighs in excess of a preselected weight (100 pounds or heavier) sits on the weight sensing pad will sufficient volumetric displacement of fluid result in a sufficient pressure change to activate the transducer to send an arming signal to the air bag control module. Conversely, if someone weighing less than 100 pounds sits on the weight sensing pad, the transducer is not “activated” to send an arming signal.

The system disclosed in the alternate embodiment is much different:

In an alternate embodiment, an analog transducer could be utilized to generate a signal proportional to the passenger’s weight. With this information the control module would fire the airbag in accordance with a preselected set of conditions. Further information regarding passenger weight could be used to determine the force at which a variable force airbag would deploy as airbag technology advances.

col. 5, ln. 20-27.

There is no question that in the preferred embodiment, the airbag control module is not receiving information from the transducer about a passenger’s weight until that weight reaches a preselected amount (approximately 100 pounds) or greater. While Methode claims that there is constant communication from the transducer to the airbag control module, in the sense that the transducer is sending a “zero” signal at all times saying “I’m on” or “I’m working,” it is beyond dispute that the transducer in the preferred embodiment is not sending any signal indicative of passenger weight unless and until that weight reaches a preselected amount (or greater). In the alternate embodiment, the airbag control module is constantly receiving information from the transducer regarding a passenger’s weight. In the alternate embodiment, with this constantly transmitted information from the analog transducer, “the control module would fire the airbag in accordance with a preselected set of conditions.” (col. 3, ln. 17-19.)

Methode appears to recognize this, analogizing the functionality of the transducer to a telephone, stating: “The same is true for the transducer – it is ready and waiting to detect a change in pressure and it emits an electrical signal *once the requisite pressure change is detected.*” (Dkt. No. 73, Methode’s Opening Claim Construction Brief, 15 n.9) (emphasis added). Thus, by Methode’s own analogy, the relevant arming signal is emitted once (when and only when) the preselected pressure change is detected. The alternate embodiment is distinctly different in that the transducer described there is constantly sending a signal regarding pressure change corresponding to the volumetric displacement of fluid caused by any amount weight placed on the passenger seat. The transducer in the alternate embodiment is not in “waiting mode” and only sending an arming signal upon detection of a certain pre-defined pressure change – it is constantly transmitting information regarding any amount of passenger weight to the airbag control module, which then decides whether or not to deploy the air bag based upon the information that it is receiving.

As the Special Master suggests in his Report, not only is the triggering volumetric displacement preselected in the preferred embodiment, but the transducer sends the signal instructing the air bag control module, which passively receives the command, to execute the arming function. In the alternate embodiment, the air bag control module receives constant signal from the transducer regarding pressure/weight and with this information, the air bag control module, not the transducer, makes the decision regarding deployment of the air bag:

Thus, in this alternative embodiment, the air bag control module is the decision making device programmed to decide when the constantly transmitted variable signal from the transducer is sufficient to cause the air bag to deploy and at what force, whereas, in the previously described embodiment, the transducer is the decision making device that is “activated” to generate and send an arming signal only upon its detection of the preselected pressure.

Report, 19-20.

Methode's attempt to cabin the debate to digital versus analog ignores these broader and important functional distinctions between the two embodiments. Even assuming, as Methode argues, that the preferred embodiment includes both a digital and an analog transducer, the proper focus is not on whether the transducer is digital or analog, but on whether the transducer claimed in the patent sends an arming signal indicative of a passenger's weight to the air bag control module only when it detects pressure exerted by a preselected volumetric displacement caused by a weight of 100 pounds or more or whether the transducer is constantly sending a signal indicating *any* amount of passenger weight to the air bag control module, which in turn is programmed to deploy the airbag based on a predetermined set of conditions. Even assuming that Claim 5 also claims an analog transducer, it simply does not claim one that functions as suggested in the alternate embodiment.

In its single-minded effort to focus the Court on the analog/digital controversy which it has manufactured, Methode complains that the Special Master, in reaching his conclusion that the scope of the claims should be limited to the preferred embodiment, relied on "new" extrinsic evidence about "a non-analog, non-digital, hybrid transducer" that Methode claims does not exist. In an attempt to correct this perceived "error," Methode offered the stricken Garris Declaration. But in fact, the Special Master, in reaching his conclusion that the '568 Patent does not claim the alternate embodiment, does not rely on any such alleged extrinsic evidence. His conclusion relies solely on the intrinsic evidence, the specifications and the claim language, which the Court agrees overwhelmingly support his limitation of the claims to the preferred embodiment.

The intrinsic evidence demonstrates clearly that only upon detection of a selected volumetric

displacement equal to the pressure produced by a preselected weight approximating 100 pounds (or greater) is the transducer of the preferred embodiment activated to generate and send an arming signal to the airbag controller:

- Abstract: “If there is a sufficient pressure change due to the volumetric displacement of fluid to activate transducer 26, transducer 26 sends a signal to air bag controller 30.”
- Abstract: “Electronic transducer 26 is selected to generate a signal upon detection of pressure resultant from the volumetric displacement of fluid from bladder 15 expected from the average size adult of approximately one hundred pounds or heavier.”
- col. 2, ln. 62-65: “The preferred transducer is digital and sends an arming signal to the airbag control module upon detection of a preselected pressure . . .”
- col. 3, ln. 11-15: “In use, the electronic transducer is selected to generate a signal upon detection of pressure resultant from the volumetric displacement of fluid inside the bladder expected from the average size adult of approximately 100 pounds or heavier.”
- col. 4, ln. 6-9: “If there is sufficient volumetric displacement of fluid to cause sufficient pressure change to activate transducer 26, transducer 26 sends a signal to the air bag controller 30 . . .”
- col. 5, ln. 11-15: “In use, electronic transducer 26 is selected to generate a signal upon detection of pressure resultant from the volumetric displacement of fluid 18 from bladder 15 expected from the average size adult of approximately one hundred pounds or heavier.”

The specification and claim language is clear: only if a person of a preselected weight (100 pounds) or greater sits on the weight sensing pad will sufficient volumetric displacement occur to cause the transducer to send an arming signal to the air bag module to arm for deployment. Conversely, if someone weighing less than 100 pounds sits on the weight sensing pad, the transducer

will not perform this function.

The Court is sensitive to the fact that Delphi's original proposal to construe "activated" to mean "turned on," ignores the intuitive understanding that the transducer must be "on" in some sense in order to "detect" the relevant pressure. At the *Markman* hearing Mr. Wolfe, counsel for Methode, suggested to the Special Master that the transducer of Claims 5 and 8 in fact is in "constant communication" with the air bag control module, sending out a "zero" signal indicating "I'm alive, I'm here, I'm operating." (Dkt. No. 118, Tr. 8/10/11 *Markman* Hearing, 28.) Mr. Wolfe goes on to explain that when the pressure gets to a "threshold level," i.e. that caused by the preselected passenger weight, the signal "jumps up to the one state" and sends a different signal to the airbag control module directing it to arm for deployment. *Id.*

The Special Master appears not to have fully adopted this particular interpretation of the specification, as he states in his Response:

Further, because the specification equates activation and the generation and sending of the arming signal to "detection of pressure resultant from the volumetric displacement of fluid 10 from bladder 15 expected from the average size adult of approximately one hundred pounds or heavier" (Col. 5, Ln. 11-15 and Col. 4, Ln. 6-13) there is no signal generated or sent to the control module until the transducer is activated, i.e., until someone weighing more than the preselected weight sits on the bladder.

Dkt. No. 159, Response, 8 (emphasis in original). While Methode appears to disagree with the notion that there is "no signal" sent to the control module until the preselected pressure is reached, it cannot take issue with the fact that there is "no arming signal" sent to the air bag controller until that preselected pressure is reached. It is clear to the Court that whatever information the transducer may or may not be sending to the airbag control module, or elsewhere, about its "existence" when it is not sensing the preselected pressure, the transducer is not sending any arming signal to the

airbag control module indicative of passenger weight and resultant bladder pressure unless and until a person of a certain weight, sufficient to cause a preselected volumetric displacement of fluid, sits on the weight sensing pad. To address this possible ambiguity, as discussed below, the Court will modify the construction of this claim term to clarify that the transducer in the preferred embodiment sends “an arming” signal “to the air bag controller” only upon detection of bladder pressure caused by the displacement [of] a selected volume of fluid indicative of a preselected or greater amount of weight.

The Court agrees with the Special Master that the intrinsic evidence is clear that the language of Claims 5 and 8, which describe the activation of a transducer to send an arming signal to the air bag control module only upon detection of a preselected pressure corresponding to the volumetric displacement caused by a weight of 100 pounds or greater, does not claim the alternate embodiment. Only a selected volumetric change, not any change, will serve to activate the transducer in the preferred embodiment. Again, quoting from the specifications:

Thus, for a small adult or child less than one hundred pounds, or if a child seat is positioned on the seat, there will be insufficient volumetric displacement to cause a pressure change to activate the transducer and the airbag controller will not arm the airbag to deploy in the event of a collision.

col. 5, ln. 15-20. The transducer of the preferred embodiment is activated to generate an arming signal to the air bag control module only upon detection of a preselected pressure. In the absence of detection of that preselected pressure, there is no activation and no arming signal generated. The specification goes on to explain that in an alternate embodiment, an analog transducer could be utilized to generate a constant signal, proportional to any amount of passenger weight, which the airbag control module would receive and use to make a decision regarding air bag deployment. This

is the only instance in which the patent language suggests a transducer constantly signaling to the air bag control module information about passenger weight so that the air bag control module can determine whether or not to deploy in the event of a collision.

Claims 5 and 8 exclude such an embodiment as they both specify a transducer activated by a preselected volumetric displacement. The alternative embodiment does not involve activation by a preselected volumetric displacement and therefore this limitation in the Claims would have to be removed in order to conclude that the alternate embodiment reads on Claim 5. Methode asks the Court to read the preselected volumetric displacement limitation out of the Claim. This the Court cannot do. *See Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp.*, 93 F.3d 1572, 1582-83 (Fed. Cir. 1996) (“Ethicon ... invites us to read its ‘during staple firing’ limitation out of the claim. This we cannot do. ... Ethicon need not have included this limitation in its claim. Having done so, it must live with the language it chose.”). As the Special Master aptly noted in his Response: “The patentee can elect to claim the invention anyway the patentee wants to. Here, as discussed above, the patentee chose, by the language selected, to claim the first embodiment in claims 5 and 8 and not the alternative embodiment.” (Dkt. No. 159, 10.)

As the Special Master noted in his Response, “the scope of the claims should not be unduly limited to the preferred embodiment, [but] the words of the claim control the scope of the claim. If the words of the claims limit the claim to one embodiment to the exclusion of another embodiment, such is how the claims must be construed.” (Dkt. No. 159, 20.) The Federal Circuit has recognized and applied this principle time and again:

TIP, of course, is correct that the specification of the '828 patent discloses an alternative embodiment, wherein the earpiece and mouthpiece do not extend through the housing front wall. However, to construe the claim term to encompass the

alternative embodiment in this case would contradict the language of the claims. Indeed, read in the context of the specification, the claims of the patent need not encompass all disclosed embodiments. *PSN Ill., LLC v. Ivoclar Vivadent, Inc.*, 525 F.3d 1159, 1167 (Fed. Cir. 2008). Our precedent is replete with examples of subject matter that is included in the specification, but is not claimed. *Schoenhaus v. Genesco, Inc.*, 440 F.3d 1354, 1359 (Fed. Cir. 2006); *Maxwell v. J. Baker, Inc.*, 86 F.3d 1098, 1108 (Fed. Cir.1996); *Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1562-63 (Fed. Cir.1991). Therefore, the mere fact that there is an alternative embodiment disclosed in the '828 patent that is not encompassed by district court's claim construction does not outweigh the language of the claim, especially when the court's construction is supported by the intrinsic evidence.

TIP Sys. LLC v. Phillips & Brooks/Gladwin, Inc., 529 F.3d 1364, 1373 (Fed. Cir. 2008).

Where the alternative embodiment is not distinctly claimed, the patent office is deprived of the opportunity to consider the patentability of such alternatives and such alternatives, although disclosed, are yet deemed “dedicated to the public:”

Here, Maxwell limited her claims to fastening tabs attached between the inner and outer soles. She disclosed in the specification, without claiming them, alternatives in which the fastening tabs could be “stitched into the lining seam of the shoes.” Col. 2, l. 42. By failing to claim these alternatives, the Patent and Trademark Office was deprived of the opportunity to consider whether these alternatives were patentable.FN3 A person of ordinary skill in the shoe industry, reading the specification and prosecution history, and interpreting the claims, would conclude that Maxwell, by failing to claim the alternate shoe attachment systems in which the tabs were attached to the inside shoe lining, dedicated the use of such systems to the public. As a matter of law, J. Baker could not infringe by using an alternate shoe attachment system that Maxwell dedicated to the public.

Maxwell v. J. Baker, 86 F.3d 1098, 1109 (Fed. Cir. 1996).

The advantage to the patentee of claiming an embodiment that is disclosed but not “distinctly” claimed is clear:

The statute requires that an inventor particularly point out and distinctly claim the subject matter of his invention. 35 U.S.C. § 112 (1988). It would run counter to this statutory provision for an applicant for patent to expressly state throughout his specification and in his claims that his invention includes right angle corner border pieces and then be allowed to avoid that claim limitation in a later infringement suit

by pointing to one paragraph in his specification stating an alternative that lacks that limitation, and thus interpret the claim contrary to its plain meaning. Such a result would encourage an applicant to escape examination of a more broadly-claimed invention by filing narrow claims and then, after grant, asserting a broader scope of the claims based on a statement in the specification of an alternative never presented in the claims for examination.

Unique Concepts, Inc. v. Brown, 939 F.2d 1558, 1562 (Fed. Cir. 1991).

So too here, the Court concludes, it would be contrary to the patent application process to permit the patentee “to expressly state throughout [the] specification and in [the] claims that [the] invention includes [activation of the transducer upon detection of a preselected volumetric displacement equal to the pressure produced by a preselected weight] and then be allowed to avoid that claim limitation in a later infringement suit by pointing to one paragraph in [the] specification stating an alternative that lacks that limitation, and thus interpret the claim contrary to its plain meaning.” In the alternate embodiment, the transducer is not in any way activated by, and does not function in response to, a preselected volumetric displacement that corresponds to a person of a weight of 100 pounds or greater. In the alternate embodiment, the transducer is in constant communication with the air bag control module, signaling information regarding *any* amount of weight placed on the passenger seat, dedicating to the air bag control module the function of deciding whether or not to deploy the air bag in the event of a collision.

Accordingly, the Court ADOPTS the Special Master’s construction of this claim term, as described in his Report and supplemented by his Response, and MODIFIES that construction in part, taking language directly from the specification disclosing the invention, col. 2, ln. 62-63, to further clarify that the language of Claim 5 precludes its reading on the described alternate embodiment. The term in Claims 5 and 8 - “Transducer is activated by a selected volumetric displacement of said

fluid that provides a pressure change in said bladder member” - is construed as follows:

THE TRANSDUCER GENERATES AND SENDS *AN ARMING SIGNAL TO THE AIR BAG CONTROL MODULE* ONLY UPON DETECTION OF BLADDER PRESSURE CAUSED BY THE DISPLACEMENT OF A SELECTED VOLUME OF FLUID INDICATIVE OF A PRESELECTED OR GREATER AMOUNT OF WEIGHT. (Modification emphasized).

D. The Special Master Correctly Concluded That the Term “Silicon” Should be Construed to Mean “Silicone”

Delphi objects to the Special Master’s conclusion that the use of “silicon” was a typographical error. Delphi points out that the term appears in two separate Claims of the patent, Claims 4 and 10, and in the specifications and the Abstract, and argues that such repeated use cannot be excused as a minor typographical error. (Dkt. No. 122, Delphi’s Objs. 9.) Delphi does not dispute the Special Master’s finding that “silicon” cannot be a fluid. The Court agrees with the Special Master that the desired filler for the bladder in the ‘568 patent is clearly defined to be a “non-compressible fluid having a very low freezing point.” (Dkt. No. 159, 12.) The Court agrees with the Special Master that of the terms mentioned as bladder fillers, “[o]nly silicone fulfils those properties set forth for the desired fluid in the specification.” (*Id.* at 13.) Simply adding an “e” to the term “silicon” where used in the patent corrects the typographical error and effectuates the clear intent expressed in Claims 4 and 10 to claim a non-compressible fluid having a very low freezing point. The Court concludes that this correction is not subject to reasonable debate based on the claim language and the specification and further finds that the prosecution history does not suggest a different interpretation.

Accordingly, the Court ADOPTS the Special Master’s Report, as supplemented by his Response, and concludes that, as used in Claims 4 and 10:

THE TERM "SILICON" SHALL BE CONSTRUED AS "SILICONE"

IV. CONCLUSION

For the foregoing reasons, the Court DENIES the parties' objections to the Special Master's Report, as supplemented by his Response, and ADOPTS the Special Master's Report, as supplemented by his Response (Dkt. Nos. 119, 159), as MODIFIED IN PART in this Opinion and Order. The Court further GRANTS Delphi's Motion to Strike the Garris Declaration (Dkt. No. 124) and GRANTS Methode's Motion to Strike Delphi's Statement of Opposition to Methode's Response to the Special Master's Response (Dkt. No. 176).

IT IS SO ORDERED.



PAUL D. BORMAN
UNITED STATES DISTRICT JUDGE

Dated: 4-30-12