United States District Court, E.D. Michigan, Southern Division.

AUTOMOTIVE TECHNOLOGIES INTERNATIONAL,

Plaintiff.

v.

BMW OF NORTH AMERICA, et al,

Defendants.

No. 01-CV-71700-DT

March 31, 2004.

Andrew Kochanowski, Sommers, Schwartz, Southfield, MI, for Plaintiff.

Binal Patel, Charles W. Shifley, Banner & Witcoff, Chicago, IL, James Sukkar, Harvey Kruse, Troy, MI, Andrew C. Sonu, Finnegan, Henderson, Reston, VA, John J. Feldhaus, Foley & Lardner, Washington, DC, John A. Vanophem, Jeffrey S. Kopp, Scott T. Seabolt, Foley & Lardner, Detroit, MI for Defendants.

ORDER CONSTRUING CLAIMS

ROBERT H. CLELAND, United States District Judge.

On September 10, 2003, and upon completion of discovery pertaining to patent construction, the court held a hearing regarding the proper construction for U.S. Patent Number 5,231,253 ("'253"), the disputed patent in the above-captioned matter. The '253 Patent contains forty-five claims and the parties submitted extensive briefing regarding the proper construction of most of them as well as a joint claim construction chart filed with the court on May 1, 2003. After hearing arguments during the September 10, 2003 hearing, the court ordered the parties to jointly identify which of the forty-five claims require construction by the court for this action. The parties filed their joint memorandum with the court on September 29, 2003. In light of the parties' efforts to narrow the claims at issue, the court will construe several of the disputed claims in the '253 Patent pursuant to Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed.Cir.1995) (en banc), *affd*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). The court will defer construction of the claims not addressed in this order and the parties may later request that the court construe such deferred claims if a party reasonably believes that a claim must be construed to support or defend its position regarding liability for infringement.

I. LEGAL STANDARDS

Under *Markman*, a court conducting a patent infringement analysis must undergo a two-step process. First, the court must determine the meaning and scope of the protected patents. This is known as the claim construction phase and is a question of law for the court. Markman, 52 F.3d at 976, 979. Once the court has interpreted the claims at issue, the second step requires comparing the properly construed claim and the

accused device to determine whether the accused device is infringing. Id. at 976. The infringement analysis generally is for the jury.

"The construction of claims is simply a way of elaborating the normally terse claim language in order to understand and explain, but not to change, the scope of the claims." Embrex, Inc., v. Serv. Eng'g Corp., 216 F.3d 1343, 1347 (Fed.Cir.2000) (internal quotations and citation omitted). In construing the claim, the court should keep in mind that "the language of the claim defines the scope of the protected invention." Bell Communications Research, Inc. v. Vitalink Communications, Corp., 55 F.3d 615, 619 (Fed.Cir.1995). For this reason, "resort must be had in the first instance to the words of the claim, words [which are ascribed] their ordinary meaning unless it appears the inventor used them otherwise." Id. at 620 (internal quotations omitted). Further, "it is equally 'fundamental that claims are to be construed in light of the specifications and both are to be read with a view to ascertaining the invention.' " *Id*. (quoting United States v. Adams, 383 U.S. 39, 49, 86 S.Ct. 708, 15 L.Ed.2d 572 (1966)).

In constructing a claim, the court begins with an analysis of the ordinary meaning of the disputed claim terms. The terms used in the claims bear a heavy presumption that they mean what they say, having the ordinary meaning that would be attributed to those words by persons having ordinary skill in the relevant art, *Texas Digital Sys.*, 308 F.3d at 1202. The court can then look to other intrinsic evidence, including, the specification, and the prosecution history if in evidence. Interactive Gift Express, Inc. v. Compuserve, Inc., 256 F.3d 1323, 1331 (Fed.Cir.2001).

After exhausting the available intrinsic evidence, the court may also consider extrinsic evidence "to aid [it] in coming to a correct conclusion as to the true meaning of the language employed in the patent." Markman, 52 F.3d at 980. Extrinsic evidence consists of all evidence external to the patent and prosecution history, including testimony of inventors or experts, dictionaries, and learned treatises. *Id.* However, extrinsic evidence cannot be used to contradict the established meaning of claim language. Gart v. Logitech, 254 F.3d 1334, 1340 (Fed.Cir.2001). In sum, "the ordinary and customary meaning of a claim term may be determined by reviewing a variety of sources." Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc., 334 F.3d 1294, 1298 (Fed.Cir.2003). These sources "include the claims themselves, dictionaries and treatises, and the written description, the drawings, and the prosecution history." *Id.* (citations omitted); *see also* Inverness Med. Switz. GmbH v. Warner Lambert Co., 309 F.3d 1373, 1378 (Fed.Cir.2002) (dictionaries are often helpful in ascertaining plain and ordinary meaning of claim language).

Although the parties' proposed claim constructions differ significantly, the parties do agree that several of the disputed claims in this case involve "means-plus-function" language permitted under 35 U.S.C. s. 112. It is well established that s. 112 permits inventors to use generic means of expression in claim limitations provided, however, they clearly identify and describe the corresponding structures to perform the stated function in the patent specification. Atmel v. Info. Storage Devices Inc., 198 F.3d 1374, 1381 (Fed.Cir.1999).

Paragraph six of s. 112 permits the use of the means-plus-function language and it 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.

35 U.S.C. s. 112 para. 6. The court interprets claims written in means-plus-function format to include only the structure set forth in the specification and its equivalents. Kahn v. General Motors Corp., 135 F.3d 1472, 1476 (Fed.Cir.1998).

In construing means-plus-function claim limitations, a court employs a two-step process. First, the court identifies the particular function claimed, often called the stated or claimed function. Second, it identifies the "corresponding structure, material, or acts described [by the claimant] in the specification." 35 U.S.C. s. 112; Harley Davidson, Inc. v. Budde, 250 F.3d 1369, 1376 (Fed.Cir.2001); Kudlacek v. DBC, Inc., 25 Fed. Appx. 837, 841, 2001 WL 1646654 (Fed.Cir.2001); Asyst Technologies, Inc. v. Empak, Inc., 268 F.3d 1364, 1369-70 (Fed.Cir.2001) (describing the two steps in construing a means-plus-function limitation). Unlike ordinary claims, a party choosing to write a claim in the means-plus-function format is limited to claiming the corresponding structure actually disclosed in the specification and its equivalents. Kahn, 135 F.3d at 1476.

Furthermore, a structure disclosed in the specification is only deemed to be "corresponding structure" if the specification clearly links or associates that structure to the function recited in the claim. B. Braun Med., Inc. v. Abbott Lab., 124 F.3d 1419, 1424 (Fed.Cir.1997). As a "quid pro quo" for the convenience of using s. 112 para. 6, the patentee accepts a duty to clearly link or associate corresponding structure to the stated function. Harley-Davidson, Inc., 250 F.3d at 1376. Whether or not the specification sets forth structure corresponding to the claimed function requires consideration of the specification from the viewpoint of one skilled in the art. *See, e.g., id.* (citing In re Ghiron, 58 C.C.P.A. 1207, 442 F.2d 985, 991 (USPQ 1971) and noting that functional-type block diagrams may be acceptable corresponding structure if they serve in conjunction with rest of the specification to enable a person skilled in the art to make a selection and practice the claimed invention).

II. CLAIM CONSTRUCTION

In light of discussion and analysis set forth below, the disputed portions of the relevant claims of U.S. Patent Number 5,231,253 are construed as follows:

Claim Number and Language	Court's Co	nstruction
Claim 1		
"A side impact crash sensor for a vehicle	This langus	age limits the device to one sensing side impact
having front and rear wheels, said sensor comprising:"	crashes and to a device that is used in a vehicle having front and rear wheels.	
Claim 1(b)		
said sensor comprising; "a mass within sai	d housing	This language means a mass that moves relative
movable relative to said housing in response to accelerations of said housing"		to a housing and in response to accelerations of the housing.
Claim 1(c)		
said sensor comprising: "means This	limitation is i	in the means-plus-function format as permitted by

responsive to the motion of said mass upon acceleration of said This limitation is in the means-plus-function format as permitted by 35 U.S.C. s. 112.

housing in excess of a predetermined threshold value, for initiating an occupant protection apparatus"

The function is initiating an occupant protection apparatus.

Corresponding structure includes mechanical switches with two contacts that engage in response to a force of sufficient magnitude and duration, and their equivalents. The specification identifies such mechanical switches in Figures 1 and 2 at column 6, lines 7-32; Figure 5 at column 8, lines 53-60; Figure 6 at column 8, lines 61-66; and Figures 8 and 9, lines 30-60.

Corresponding structure also includes an electronic switch or
assembly as described in Figure 11 at column 10, lines 3-14 of the
patent specification and its equivalents. The electronic switch or
assembly contains a sensing mass that moves relative to the housing
in response to the acceleration of the housing caused by a side
impact crash.

vehicle.

Claim 1(d):

... said sensor comprising: "means for mounting said housing onto at least one of a side door of the vehicle and a side of the vehicle between the centers of the front and rear wheels, in such a position and a direction as to sense an impact into the side of said vehicle"

The function is to mount the housing onto the

This limitation is in the means-plus-function format as permitted by 35 U.S.C. s. 112.

Corresponding structure for the mounting function includes a pair of flanges with openings to receive a fastener for mounting as shown in Figures 1, 2, 5, 6, 7, and 11.

"onto at least one of a side door of the vehicle and a side of the vehicle between the centers of the front and rear wheels" This language describes the means for mounting the housing. It requires that the housing be capable of being mounted onto at least one of the side doors and onto the side of the vehicle between the centers of the front and rear wheels.

"side of the vehicle"	"Side of the vehicle" means the side perimeter
	structure of the vehicle and not the top or bottom
	of a vehicle.

"The invention in accordance wi	th claim 1,	This language limits the device to a crash sensor installed
wherein said crash sensor is installed inside the		inside the skin of a vehicle and not on the exterior
skin of a vehicle."		surface of the vehicle.
Claim II		
"The invention in accordance with claim 1, wherein electronic meas are provided to sense the motion of said mass"	This limitation U.S.C. s. 112.	on is in the means-plus-function format as permitted by 35
	The stated fun	nction is to sense the motion of said mass.
	Corresponding described in co equivalents.	ng structure includes an electronic switch or assembly as column 10, lines 3-14 of the patent specification and its
	The electronic relative to the caused by a sid the specificatio	c switch or assembly contains a sensing mass that moves e housing in response to the acceleration of the housing side impact crash, as demonstrated by the examples listed in ion at column 10, lines 3-14.
Claim 15		
"The invention defined in claim further comprising a side impact safing sensor including:"	1, A side imp conjunction deploymen	pact safing sensor is an arming sensor that is used in on with a side impact crash sensor to reduce inadvertent nt of an occupant protection apparatus.
Claim 15(a)		
"a switch comprising a first cont second contact member"	act member and a	a a switch having two contacts
Claim 15(b)		
"means for mounting said switch on the side structure of a vehicle"	This claim limita 35 U.S.C. s. 112	tation is in the means-plus-function format as permitted by 2.
	The function is t	to mount said housing onto the side structure of a vehicle
	Corresponding s flanges with ope Figures 1, 2, 5, 6	structure for the mounting function includes a pair of being to receive a fastener for mounting as shown in 6, 7, and 11.
"side structure of a vehicle"	Side structure of	of a vehicle includes the side perimeter structure of a vehicle

Claim 15(c)

"means for forcing said first contact	The function is to force the first contact member to contact
member to contact said second contact	the second contact member.
member, and causing said switch to change	
its conductive state when said vehicle is	
impacted in a side crash"	
	Corresponding structure includes a mechanical device with a
	dome-shaped membrane that is used to force the first contact
	member to contact the second member, as described in Figure
	7 and column 9, lines 12-29 in the specification, and its
	equivalents.
Claim 15(d).	

Claim 15(a):

"means for mounting said sensor onto the side of a vehicle in a position to sense an impact into the side of said vehicle; said side impact crash sensor and said safing sensor being electrically connected together such that both sensors must sense an impact into the side of the vehicle to initiate the occupant protection apparatus.

This limitation is in the means-plusfunction format as permitted by 35 U.S.C. s. 112.

The stated function is mounting said sensor onto the side of a vehicle Corresponding structure for the mounting function includes a pair of flanges with openings to receive a fastener for mounting as shown in Figures 1, 2, 5, 6, 7, and 11.

"side of the vehicle"	"Side of the vehicle" means the side
	perimeter structure of a vehicle and
	not the top or bottom of a vehicle.

Claim 19

"The invention in accordance with claim 1, wherein said housing is installed in the side door structure of the vehicle."

Claim 20(c): "means for biasing said sensing mass within said housing toward a first position"

"Side door structure" includes the structure of a vehicle door itself as well as the surrounding vehicle door frame.

The stated function is to bias said sensing mass within said housing toward a first position.

Corresponding structure is found in the specification at Figure 5 at column 8, lines 56-57; Figure 6 at column 8, line 64; Figures 1 and 8 at column 6, lines 12-14, and at column 9, lines 40-43. The corresponding structure includes

perimeter structure of the vehicle and not

the top or bottom of a vehicle.

Claim 20(e)

"means for mounting said housing onto at least one of a side door of vehicle and a side of the vehicle between the centers of the front and rear wheels, in such a position and a direction as to sense an impact into the side of said vehicle; whereby said sensor responds to a designated velocity change function in a side impact crash."	This limitation is in the means-plus- function format as permitted by 35 U.S.C. s. 112.
•	The function is to mount said housing onto the vehicle.
"onto at least one of a side door of the vehicle and a side of the vehicle between the centers of the front and rear wheels"	Corresponding structure for the mounting function includes a pair of flanges with opening to receive a fastener for mounting as shown in Figures 1, 2, 5, 6, 7, and 11 and their equivalents. This language describes the means for mounting the housing. It requires that the housing be capable of being mounted onto at least one of the side doors and onto the side of the vehicle between the centers
"side of the vehicle"	"side of the vehicle" means the side

Claim 26

"The invention in accordance with claim 20, This limits the sensor in claim 20 to a crash sensor installed wherein said sensor is installed inside the skin of inside the skin of a vehicle and not on the exterior surface of the vehicle. a vehicle"

Claim 28

"The invention in accordance with claim 20, wherein said housing is installed in the side door structure of the vehicle"	"Side door structure of the vehicle" includes the structure of a vehicle door itself as well as the surrounding vehicle door frame.
Claim 30	The claim language at issue in claim 30 is the same language at issue in claim 1. (<i>see</i> 03/05/2003 Joint Claim Construction Chart.) Thus, the court adopts the same relevant construction from Claim 1.

Claim 38

wherein said crash sensor is installed inside the skin of the vehicle"	installed inside the skin of a vehicle and not on the exterior surface of the vehicle.
Claim 44	
"The invention in accordance with claim 30	"Side door structure of the vehicle" includes the
wherein said hosing is installed in the side door structure of the vehicle"	structure of a vehicle door itself as well as the surrounding vehicle door frame.

III. DISCUSSION SUPPORTING THE COURT'S CLAIM CONSTRUCTION

The '253 Patent contains forty-five claims, many of which are recited in the means-plus-function format. In an order dated September 13, 2002, and in an effort to narrow the disputed claims for construction, the court directed the parties to file "a joint memorandum with proposed constructions of the *claims at issue*." (Preliminary Sched. Or. at 2 (emphasis added).) The parties submitted their joint memorandum on May 1, 2002, but it offered little in the way of narrowing the construction required for the claims at issue. The court also ordered briefing by the parties in support of their proposed claim constructions and subsequently held a hearing on September 10, 2003, to afford the parties an additional opportunity to support their proposed claim constructions.

After conducting a hearing on September 10, 2000, the court issued another order dated September 17, 2003 directing the parties to attempt to narrow the claims for construction and to file a joint memorandum detailing their efforts. The parties filed their joint response on September 29, 2003. The parties do not agree on which claims require construction. Plaintiffs would have the court construe Claims 1 and 11. On the other hand, Defendants would have the court construe eleven different claims in the '253 Patent, including claims 1, 9, 15, 19, 20, 26, 28, 29, 30, 38, and 44. The court has construed claims 1 and 11 as well as the '253 claims as requested by Defendants with one exception. FN1 The following discussion supports the court's construction.

FN1. The court has reserved its claim construction regarding claim 29. Defendants requested that the court issue its construction of this independent claim, but the parties' briefs do not satisfactorily address the proper construction of this claim.

A. Claim 1

Claim 1 lies at the heart of the parties' dispute regarding the proper claim construction of the '253 Patent. Several of the '253 claims are dependent on Claim 1, and its construction will impact various other claims. Claim 1 provides:

A side impact crash sensor for a vehicle having front and rear wheels, said sensor comprising: (a) a housing; (b) a mass within said housing movable relative to said housing in response to accelerations of said housing; (c) means responsive to the motion of said mass upon acceleration of said housing in excess of a predetermined threshold value, for initiating an occupant protection apparatus; and (d) means for mounting said housing onto at least one of a side door of the vehicle and a side of the vehicle between the centers of the front and rear wheels, in such a position and a direction as to sense an impact into the side of said vehicle The parties dispute the construction of Claim 1 with regard to: (1) the meaning of "side impact crash sensor;" (2) the meaning of the language in element (c); and (3) the meaning of the language in element (d). The parties do not dispute the meaning of the language found in elements (a) and (b), and the court construes these elements to have their ordinary meaning attributable to a person having ordinary skill in the art.

1. "Side Impact Crash Sensor"

Defendants would have the court construe the words "side impact crash sensor" to mean "a crash sensor for use in detecting an impact to the side of a vehicle or an impact having a significant component of lateral force." (Defs.' *Markman* Br. at 13.) On the other hand, Plaintiff contends that the ordinary meaning of the language is self-evident and no construction is required. (*See* Joint Mem. at 1.) The court agrees that no construction of this phrase is required. The ordinary meaning of "side impact" already includes Defendants' proposed construction. Ordinarily understood, a side impact sensor senses not only the actual "striking" of the vehicle at one of its sides, but also the "[side] force or impetus transmitted by a collision." *See* Webster's New College Dictionary 353 (2d ed.1995). The court fails to see how the claim limitation language would be clarified by adopting Defendants' proposed construction. The ordinary meaning of "side impact sensor," as understood by a person having ordinary skill in the relevant art, includes a sensor capable of sensing both the actual striking of a vehicle at its side and the side force transmitted by the striking of the vehicle at a position other than its side.

2. Claim Language of Element (c)

The parties' joint claim construction reveals conflict between the proposed constructions of several terms in element (c) of Claim 1. The parties dispute the proper construction of the following language: (1) "means ... for initiating an occupant protection apparatus;" (2) "responsive to the motion of said mass;" and (3) "in excess of a predetermined threshold value."

a. "Means ... for Initiating an OPA"

All parties agree, and the court finds, that element (c) of Claim 1 is written in means-plus-function format. Use of the word "means" creates a presumption that the applicant is phrasing the claim limitation in meansplus-function format. York Prods., Inc. v. Cent. Tractor Farm & Family Ctr., 99 F.3d 1568, 1574 (Fed.Cir.1996) ("[T]he use of the word 'means' triggers a presumption that the inventor used this term advisedly to invoke the statutory mandates for means-plus-function clauses."). Accordingly, the court will first determine the stated function of the claim limitation found in element (c), and second, it will examine whether the specification sets forth clearly linked corresponding structure. Harley Davidson, 250 F.3d at 1376.

The parties agree that the function to be performed by the claim limitation is the initiation of an occupant protection apparatus ("OPA"). The parties' dispute does not center on the stated or claimed function, but rather on the corresponding structure. Plaintiff contends that the specification identifies the corresponding structure to include "a mechanical switch or an electronic switch or assembly, such as a sensing mass within a housing that includes an electronic sensor." (Joint Mem. at 1.) Defendants assert that the only clearly linked structure identified in the specification is a "bi-state switch that has a pair of metal contacts that close an electrical circuit when [they] engage each other." (Defs.' *Markman* Br. at 14.)

After reviewing the entire specification and the parties' proposed constructions, the court finds that the specification contains several corresponding structures clearly linked to the stated function of initiating the OPA, The '253 specification includes several descriptions of mechanical switches as preferred embodiments that would perform the stated function of initiating the OPA. Specifically, Figures 1 and 2, and the corresponding description in column 6 of the specification describe a type of mechanical switch that would initiate the OPA. The specification sets out corresponding structure by describing a mechanical device with two contacts that initiate the OPA when they make contact. ('253 Specification Figs. 1, 2 & column 6, lines 7-32.) The contacts described in the specification are to engage in response to a crash pulse or force of an appropriate magnitude and duration. (Id.) Likewise, the specification clearly includes other examples of mechanical switches that could be used as a means for initiating the OPA. (See '253 specification Fig. 5 & column 8, lines 53-60; Fig. 6 & column 8, lines 61-66; Figs. 8, 9 & column 9, lines 30-60.) In each description, a mechanical switch assembly carries out the function of initiating the OPA, The specification's descriptions of these mechanical switches identify two contacts that engage after a force of appropriate magnitude and duration is applied to the housing. Accordingly, the court finds that the corresponding structure for initiating an OPA includes the mechanical switch assemblies that contain two contacts that initiate the OPA when engaged.

Plaintiff also argues that corresponding structure for initiating the OPA includes "an electronic switch or assembly." (Joint Mem. at 1.) Plaintiff asserts that corresponding structure is identified for this electronic means in the specification. Plaintiff's position is strengthened in light of dependent Claim 11. Claim 11 states an "invention in accordance with claim 1 wherein electronic means are provided to sense the motion of said mass." ('253 Patent at column 11, lines 32-34.) Plaintiff directs the court's attention to Figure 11 and column 10, lines 3-14 of the specification as evidence of corresponding structure meeting the requirements of 35. U.S.C. s. 112 para. 6. (Pl.'s Reply at 5.) Defendants argue that Figure 11 and the specification text cited in column 11 provide no structure linked to the function of initiating an OPA. (Defs.' *Markman* Br. at 15-16.) Defendants argue that the electronic switch or assembly described is not corresponding structure and that it fails to meet the requirements of s. 112 para. 6 because it is not clearly linked to the stated function of initiating the OPA. Further, Defendants assert that the lack of corresponding structure concerning the alleged electronic means for initiating the OPA renders Claims 1 and 11 invalid.

Column 10 of the '253 specification provides, in relevant part, as follows:

"FIG. 11 is a conceptual view of an electronic sensor assembly 201 built according to the teachings of this invention. This sensor contains a sensing mass 202 which moves relative to the housing 203 which accompanies a side impact crash. The motion of the sensing mass 202 can be sensed by a variety of technologies using, for example, optics, resistance change, capacitance change or magnetic reluctance change. Output from the sensing circuitry can be further processed to achieve a variety of sensor response characteristics as desired by the sensor designer.

('253 Patent at column 10, lines 3-14.)

The issue for the court is whether Figure 11 and the text set forth above clearly link or associate the electronic sensing switch assembly to the means of initiating the OPA. *See* B. Braun Medical Inc., 124 F.3d at 1424, In other words, the court must determine if Plaintiff satisfied the quid pro quo of electing to use the means-plus-function format. The court finds that specification contains corresponding structure clearly linked to the means for initiating the OPA in the form of an electronic means for initiating an OPA.

In determining whether corresponding structure is clearly linked to the stated function, "[t]he specification must be read as a whole to determine the structure capable of performing the claimed function," Harley-Davidson, 250 F.3d at 1379. In doing so, the court considers any alternative structures identified and examines the claim language through the eyes of a person having ordinary skill in the art. Id. at 1379-80. The court will read the entire written description "if possible, in a manner that renders the patent internally consistent" through the "viewing glass" of one skilled in the art. *Id*.

Upon review of the entire specification and claim language, the court finds that the electronic switch assembly is clearly associated as corresponding structure. Consequently, the requirements of s. 112 para. 6 are met. Figure 11 and its textual description found in column 10, lines 3-14 of the '253 specification provide a potential alternative structure for initiating the OPA. The specification states that the "motion of the sensing mass 202 can be *sensed*, by a variety of technologies," and Figure 11 shows a potential electronic switch very similar to the preferred mechanical switches described elsewhere in the specification. ('253 Specification at column 10 (emphasis added).) A person having ordinary skill in the art would understand Figure 11 and the specification text as identifying an electronic means for initiating the OPA, This is especially true when reading the specification in connection with the entire patent. Claim 11 expressly contemplates the use of electronic means to initiate the OPA. The electronic switch assembly as described in the specification would, "according to the teachings of [the] invention," include a mass that moves relative to the housing in response to a side impact crash to initiate the OPA. ('253 Specification at column 10, lines 3-14.) The court finds that the patent specification contains corresponding structure to the means for initiating the OPA, including an electronic switch or assembly device similar to the mechanical switches described in the specification. The '253 specification contains mechanical and electronic corresponding structures that are clearly linked to the stated function as required by 35 U.S.C. s. 112 para. 6.

Defendants cite two Federal Circuit opinions, *B. Braun Medical Inc. v. Abbott Laboratories* and *Medtronic Inc. v. Advance Cardiovascular Systems, Inc.*, in support of their argument that Figure 11 and the text of column 10, lines 3-14 do not clearly link the structure to the stated function of initiating the OPA. The court's finding of corresponding structure, however, does not conflict with these cases.

In *B. Braun*, the court found no clear link between a valve seat and specified stated function because there was a complete absence of any indication that the valve seat corresponded to the function identified. B. Braun, 124 F.3d at 1425. There is no such complete absence in the '253 specification. Additionally, in *Medtronic*, the Federal Circuit held that the alleged corresponding structure was not clearly linked to the identified function, even though it was capable of performing the function, because the corresponding structure identified was clearly assigned an entirely different function in the specification. *Medtronic*, 248 F.3d at 1313. In this case, the only function assigned to the structure identified by Figure 11 and the specification's text describing an electronic switch assembly is the initiation of the OPA. Unlike the corresponding structure in *Medtronic*, the electronic switch assembly described in the '253 specification does not serve a different function. A coherent reading of the entire specification provides adequate notice that the specification is linking or associating the electronic sensor assembly with the initiation of the OPA and the cases cited by Defendants do not conflict with this finding.

It is important to note that the court's role at this stage of the case is limited to construing the claims of the '253 Patent. As such, the court holds only that the specification identifies and clearly links the corresponding structure to the claimed function of initiating the OPA. The court recognizes that challenges to the validity of a corresponding structure under 35 U.S.C. s. 112 para. 2 are closely related to a court's claim construction

analysis. *See* Atmel, 198 F.3d at 1379 (noting that a court's inquiry on the "closely related issue" of adequacy of structure disclosed in the specification uses a similar standard as used in claim construction analysis). However, claims of a patent are afforded a statutory presumption of validity and the evidentiary standard for pronouncing a claim invalid under s. 112 para. 2 requires clear and convincing evidence. Harley Davidson, 250 F.3d at 1381, Thus, validity issues are more appropriately decided after the initial claim construction stage. *See* Atmel 198 F.3d at 1376 (noting that district court decided validity issues under 35 U.S.C. s. 112 para. 2 after the *Markman* construction phase and during the liability phase of patent infringement case).

For the reasons articulated above, the court has construed the corresponding structures for initiating an OPA to include, as discussed above: (1) mechanical switches that contain two contacts that initiate the OPA when engaged; and (2) electronic switches or assemblies fitting the description found in Figure 11 and column 10, lines 3-14 of the specification.

b. "Responsive to the Motion of Said Mass" & "In Excess of a Predetermined Threshold Value"

As mentioned above, the parties also dispute the construction of two other phrases used in element (c) of Claim 1. First, Defendants argue that the phrase "responsive to the motion of said mass" is limited by the corresponding structure for initiating the OPA. Under Defendants' view, the only corresponding structure for initiating an OPA is a bi-state mechanical switch. As such, they assert that the phrase "responsive to the motion of said mass" means "that the means for initiating operates in direct response to the movement of the mass to the position required for initiation." (Joint Mem. at 1.) As discussed above, the court is not persuaded that the claim construction of the means for initiating in direct response to the movement of the mass" is not required. Using such language would contradict the ordinary meaning of the claimed language by limiting the means for initiation to only those means of initiation that respond "in direct response" to the movement of the mass. The court finds no reason for such a limitation on the language. The ordinary meaning of "responsive" is not equivalent to "in direct response."

Second, Defendants' proposed construction of the phrase "in excess of a predetermined threshold value" stems from its argument that Claim 1 is limited to bi-state electro-mechanical sensors only. (Defs.' Br. at 18.) Defendants' proposed construction would limit the phrase to mean "a predetermined amount of acceleration [that] is needed to overcome biasing force applied to the mass." (Joint Mem. at 1.) This narrow construction is not required. The ordinary meaning, as understood by a person having ordinary skill in the art, of the phrase "in excess of a predetermined threshold value" is not limited as Defendants suggest.

3. Claim 1, Element (d)

a. "Means for Mounting"

Element (d)'s claim limitation is also framed in means-plus-function format. Thus, the court must again identify the stated function and determine if corresponding structure is identified in the specification. The parties agree that the function to be achieved through this claim limitation is "mounting said housing onto at least one of a side door of the vehicle and a side of the vehicle between the centers of the front and rear wheels ." (Joint Claim Construction at 2.) Accordingly, the stated function is mounting the housing onto the vehicle.

Plaintiff asserts that corresponding structure for mounting the sensors is found in the mounting holes and

flanges pictured in Figures 1, 2, 5, 6, 7 and 11 of the patent specification. Plaintiff also relies on expert testimony stating that the figures show sensors with flanges and holes that would be interpreted by one having ordinary skill in the art to indicate various ways to mount the sensors described. According to Plaintiff's expert, the openings pictured in the figures could be used to mount them using bolts, rivets, screws, or other fasteners. (Dix Decl. at 8.) He asserts that a person having ordinary skill in the art would simply know the means of mounting by examining the figures. (*Id.*) Defendants, however, argue that the specification fails to clearly link corresponding structure for the stated mounting function rendering claim 1 invalid. Leaving invalidity arguments for later consideration, Defendants admit that the holes pictured in the Patent figures would be capable of being used to complete the mounting function. (Defs.' Br. at 19.) Furthermore, Defendants' expert acknowledges that some structure for mounting exists and falls short of concluding that a person having ordinary skill in the art would not understand how to mount the sensors after examining the specification. (*See* Bell Decl. at para. 24 ("Although I see some structure in some of the figures that could be used to help mount the housing, this is speculation since the specification does not identify the structure or its purpose.").)

Again, the issue for the court is whether the specification clearly links corresponding structure to the function of mounting the sensors. Reading the specification in its entirety, the court finds that the mounting structure is clearly linked with the stated function. Mounting of the sensors is required to practice the invention and the specification indicates the preferred locations for such mounting. ('253 Patent at Figure 4.) One having ordinary skill in the art would find the means for mounting the sensor self-evident after examining the figures and reading the specification in its entirety. Reading the specification in the manner Defendants suggest ignores the overall thrust of the specification.

Defendants cite *Medtronic Inc. v. Advanced Cardiovascular Systems* to support their position that the structure cannot be clearly linked just because it is capable of performing the stated function. (Defs.' *Markman* Br. at 19 (*citing* Medtronic, 248 F.3d 1303, 1311 (Fed.Cir.2001).) However, unlike *Medtronic*, this case does not involve an alleged corresponding structure that clearly performs *a different* function within the invention. Here, the only function to be performed by the pictured flanges and bolt holes is that associated with mounting the sensors in question. Accordingly, the court finds that corresponding structure exists for the mounting function.

b. "Onto at Least One of a Side Door of the Vehicle ..."

The parties also dispute the proper claim construction of the following language found in element (d) of Claim 1: "onto at least one of a side door of the vehicle and a side of the vehicle between the centers of the front and rear wheels." Defendants argue that "[i]n addition to reciting a 'means for mounting' this claim element also recites 'mounting said housing onto at least one of a side door of the vehicle and a side of the vehicle." (Defs.' 03/21/03 *Markman* Br. at 20.) The court disagrees with this characterization of language in element (d) inasmuch as Defendants argue that it requires actual mounting of a sensor onto at least one of the side doors of a vehicle.

The relevant claim language deals with the means for mounting the sensor described in Claim 1. Claim 1 of the '253 Patent describes a single sensor and contains four parts comprising that sensor. Element (d) of Claim 1 simply states the fourth component of the single sensor described in the Claim. It requires that the sensor's housing have a means for being mounted. The "onto at least one of a side door of the vehicle and a side of the vehicle" merely modifies the means for mounting the single housing described in Claim 1. Nothing in the claim language requires that multiple sensors be mounted in a vehicle, and element (d), the

fourth component of the claim, does not require the actual mounting of a sensor's housing in any certain location. The phrase "onto at least one of a side door of the vehicle and a side of the vehicle ..." is a dependent clause that modifies the means for mounting the single housing of the single sensor described in the claim.

The fourth component of the sensor in Claim 1 describing the means for mounting the housing is written in means-plus-function format. The stated function is to mount the sensor's housing. The corresponding structure includes a pair of flanges with openings to receive fasteners for mounting the single housing referred to in the claim language as found in Figures 1, 2, 5, 6, 7 and 11 and their equivalents. The ordinary meaning of this limitation describing the means for mounting does not require that the housing must actually be mounted in the two locations identified in the claim language.

The parties' arguments seem to lose sight of the fact that the clear import of the language found in element (d) of Claim 1 addresses only the fourth component comprising the sensor described in the claim. The language in dispute modifies the phrase "means for mounting" and does not require specific locations where the housing must, in fact, be mounted. The claim language at issue provides:

A side impact crash sensor for a vehicle having front and rear wheels, said sensor comprising; [and]

(a) a housing:

(d) means for mounting *said housing* onto at least one of a side door of the vehicle and a side of the vehicle between the centers of the front and rear wheels, in such a position and direction as to sense an impact into the side of said vehicle.

•••

('253 Patent Claim 1 (emphasis added).)

Plaintiff correctly notes that the claim language describes only one sensor and one housing. However, the court rejects Plaintiff's argument that the phrase "onto at least one of a side door and a side of the vehicle" unambiguously means "onto at least one of a side door *or* a side." The court is not convinced that somehow the word "and" used in this phrase means "or." In fact, contrary to Plaintiff's assertion, under basic grammar principles, the phrase is more properly understood to mean that the housing must be capable of being mounted on one of the side doors of the vehicle *and* one of the sides of the vehicle. The use of the conjunctive language suggests that the sensor not only *could* be mounted, but also *must* be capable of being mounted, at both locations. It does not, however, require the housing to be mounted at both locations at the same time.

In fact, the United States Court of Appeals for the Federal Circuit recently examined the proper construction of very similar language and ruled that when "the phrase '*at least one of*' precedes a series of categories [locations in this case] and the patentee used the term '*and*' to separate the categories," the plain and ordinary meaning supports a conjunctive interpretation. Superguide Corp. v. Directv Enterprises, Inc., 358 F.3d 870, 2004 WL 253013 (Fed.Cir. Feb.12, 2004) (page references not yet available) (emphasis in original).

In *Superguide*, the disputed claim language read as follows:

An online television program schedule system comprising:

first means for storing *at least one of a* desired program start time, a desired program end time, a desired program service, *and* a desired program type.

Id. (emphasis added). The district court's claim construction of the claim language in *Superguide* required that the program schedule system described in the claim include at least one of each of the categories listed. In other words, the system had to have a start time, an end time, a program service, and a program type. The Federal Circuit affirmed this conjunctive construction. Noting the absence of anything in the patent specification indicating that the patentee did not intend the plain and ordinary meaning of the language at issue, the Federal Circuit rejected the patentee's argument that "and" should be read as "or." *Id.* (citing *Texas Digital*, 308 F.3d at 1204).

The Federal Circuit cited a common treatise on grammar noting that it "teaches that 'an article of a preposition applying to all the members of the series must either be used only before the first term or else be repeated before each,' " *Id*. (citing William Strunk, Jr. & E.B. White, *The Elements of Style* 27 (4th Ed.2000)). Applying this rule of grammar, the Federal Circuit determined that "at least one of modified each item in the series. *Id*.

The disputed language in element (d) of Claim 1 in the '253 Patent is strikingly similar to the language construed in *Superguide*. However, there is one important distinction; the claim in *Superguide* described a system comprising several items while Claim 1 describes a single sensor. In light of *Superguide* and basic grammar rules, the court rejects Plaintiff's claim that "onto at least one of a side door of the vehicle." Plaintiff has failed to identify any part of the '253 specification that would rebut the presumption that the patentees intended the plain and ordinary meaning of the language employed. Notwithstanding Plaintiff's flawed grammatical argument, the proper construction of element (d) merely requires that the housing be capable of being mounted on one of the vehicle's doors and a side of the vehicle. This gives the phrase at issue its ordinary meaning in the context of its description of the means for mounting a single sensor.

Defendants' argument also misses the mark. Defendants argue that the claim language and the language found in column 4, lines 8-12 of the specification establish that at least one sensor described in Claim 1 must be mounted on a side door. The preferred embodiment states, "[a] crash sensor for sensing side impacts must be placed on the side door structure to be effective. This location is essential since it is sensing the velocity change of the portion of the vehicle which will eventually strike the occupant." ('253 Patent Col. 4, lines 8-12.) Defendants also cite evidence from the prosecution of the '253 Patent to support their position. In the October 9, 1991 amendment, the Patent applicants stated "it is the concept of placing an acceleration determining sensor in the vehicle door for which the applicants seek patent protection." (Defs.' *Markman* Br., Ex. 3 at 158.) In their October 9, 1991 amendment, the '253 Patent applicants went on to distinguish their use of acceleration sensors to sense side collisions from prior art. They specifically distinguished their application from "references, such as Norton" that use acceleration sensors "located within the forward position of the vehicle to sense frontal impacts." (Id. at 159.) Defendants assert that, to the extent that the claim language permits other locations for mounting, these locations refer to the possibility of mounting additional sensors once at least one sensor has been mounted on the door.

Because the claim language in element (d) of Claim 1 describes the means for mounting a single housing, the court does not agree with Defendants' claim construction. The language of element (d) includes a "senor comprising" a "housing" with a "means for mounting said housing onto at least one of a side door of the

vehicle and a side of the vehicle" ('253 Patent Claim 1.) The plain and ordinary meaning of this claim language requires that the sensor described have a housing and that the "said housing" have a *means* for being mounted onto a side door of the vehicle and the side of the vehicle. The conjunctive language merely describes the means for mounting a single sensor and requires that the housing of that single sensor be capable of being mounted in both locations described. It does not, however, require that the housing described actually be mounted on a door of a vehicle. The sensor described must comprise a housing with a means for mounting that *single* sensor "onto at least one of a side door of the vehicle and a side of the vehicle between the centers of the front and rear wheels, in such a position and a direction as to sense an impact into the side of said vehicle." ('253 Patent Claim 1.)

The ordinary meaning of this language cuts against Defendants' position that at least one sensor must be mounted in the vehicle door. Further, the specification text cited by Defendants states that the sensor must be placed on the "side door *structure*" and not just the side door, (See '253 Patent Col. 4, lines 8-12; Defs.' Claim Construction Br. at 20.) The specification also includes multiple preferred *places* for mounting the single sensor and housing claimed in the invention. (*See* Figure 4.) Figure 4 shows locations for mounting other than on the door itself.

Moreover, the evidence from the '253 Patent prosecution history does not clearly establish a disclaimer relating to where the mounting could take place. During patent prosecution, the applicants appear to have distinguished their invention from prior art that used an acceleration-type sensor in the frontal part of the vehicle only. (*See* October 9, 1991 Amendment at 8; Defs.' Br., Ex, 3 at 158-60.)

In fact, the prosecution history supports the court's claim construction because a May 1, 1992 amendment changed the claim language found in claim 1, element (d) to its current form. The prosecution history indicates that the patent applicants amended Claim 1 to permit mounting on either the door *or* the side of the vehicle. The 1992 amendment changed "means for mounting said sensor onto the side door of a vehicle" to "means for mounting said housing onto at least one of a side door of the vehicle and a side of the vehicle" (May 8, 1992 Amendment, Defs.' 03/21/03 *Markman* Br., Ex. 3 at 222.) In addition, the 1992 amendment's remarks described the impact of the change in language as follows: "the sensor is mounted on the motor vehicle in such a way as to sense *side impacts;* that is, it is mounted either on a side door of the vehicle or on a 'side of the vehicle between the centers of the front and rear wheels,' (or in both places)" FN2 (*Id.* at 228. (emphasis in original).)

FN2. Defendants argue that this May 1992 amendment constituted a broadening of the claim and introduced "new matter" rendering the claim invalid pursuant to 35 U.S.C. s.s. 112, 132. *See* Turbocare Div. of Demag Delaval Turbomachinery Corp. v. General Elec. Co., 264 F.3d 1111, 1118 (Fed.Cir.2001); ICN Photonics Ltd. v. Cynosure Inc., 2003 WL 21675334, (Fed.Cir. July 16, 2003). The parties have not fully briefed this issue and it is more appropriately addressed during the liability phase of this case. Therefore, the court will consider Defendants' invalidity argument if raised in a dispositive motion filed by Defendants after the liability phase of discovery is concluded.

Construing the claim language that addresses the means for mounting the single housing described to require more than one actual mounting would render the claim internally inconsistent. One sensor cannot be mounted in multiple locations. Upon close examination, when read in context of the claim language and other intrinsic evidence, the court finds the limitation in element (d) requires that the housing described be capable of being mounted onto a side door of the vehicle and the side of a vehicle, but that it does not

require that at least one sensor actually be mounted on the vehicle's door. This claim construction is proper because it gives the language at issue its plain and ordinary meaning. *See* Superguide, 358 F.3d 870, 2004 WL 253013 (citing *Texas Digital Sys., Inc.,* 308 F.3d at 1202.) Construing the claim language in element (d) as requiring that the single housing be capable of being mounted on both a side door and on a side of the vehicle accounts for both the clear claim language referring to a single sensor and a single housing without ignoring the clear conjunctive meaning of the language describing where that single housing must be capable of being mounted. Nothing in the claim language requires that at least one sensor actually be mounted on one of the side doors of a vehicle.

c. "Side of the Vehicle"

Plaintiff asserts that the court does not need to construe the phrase "side of the vehicle" as used in element (d) of claim 1. Plaintiff contends that the phrase's ordinary meaning is a location "defined by the centerline of the vehicle and the centers of the front and rear wheels." (Joint Mem. at 2.) Defendants encourage the court to adopt a construction that would define the language as meaning "the side perimeter structure of the vehicle and not the side half of the vehicle." (*Id.*) Because the housing described in Claim 1 may, in fact, be mounted onto a side door or a side of the vehicle, the court turns to the construction of the language "side of the vehicle."

Plaintiff asserts that one having ordinary skill in the art would understand that the specification allows for the housing to be mounted *anywhere* in the vehicle between the center of the front and rear wheel lateral axis. In fact, Plaintiff suggests and provides examples in its brief showing how the housing for the sensor could be mounted in the center of the vehicle between the front and rear wheels, provided the sensor can still sense the impact at the side of the car. (Pl.'s *Markman* Br. at 15-17.)

This construction stretches the ordinary meaning of the phrase. If the housing could be mounted on the roof, bottom, or center of the vehicle, then it is not mounted on the *side* of the vehicle. If "side of the vehicle" were interpreted as Plaintiff suggests, then the word "side" would be superfluous. Plaintiff's construction would be correct if it had simply stated "a position between the centers of the front and rear wheels." The phrase "side of vehicle" modifies the position between the centers of the front and rear wheels. Plaintiff's construction would have the court read "side" out of the claim limitation. The court declines to do so.

The claim language specifically identifies the side door and *side of the vehicle* as the places for the mounting of the housing. The preferred locations identified in Figure 4 also demonstrate preferred locations for the mounting on the side of the vehicle. Figure 4 shows a side view of a vehicle with the preferred placement of sensors on the side of the vehicle and not on the bottom or roof. Likewise, the specification's preferred embodiment states that the sensor "must be placed on the side door structure to be effective," and lacks any indication that the sensors would be mounted in the locations suggested in Plaintiff's brief. Thus, the court will not construe "side of the vehicle" to include one entire half of the vehicle. "Side of the vehicle" means the side perimeter structure of the vehicle and not the top or bottom of a vehicle.

B. Claim 11

Claim 11 is dependent on Claim 1 and is also written in means-plus-function format. The inventors specifically claim "[t]he invention in accordance with Claim 1 wherein electronic means are provided to sense the motion of said mass." ('253 Patent Claim 11.) The parties agree that the stated function of this claim language is to "sense the motion of the mass." (Joint Mem. at 4.) As discussed above, Plaintiff asserts that clearly linked corresponding structure can be found in column 10, lines 3-14 of the specification and

Figure 11. Defendants assert that the specification discloses no structure and the claim is therefore invalid. For the reasons already set forth above, the court finds that corresponding structure exists and that the specification, when read in its entirety, clearly links the structure to the stated function of sensing the motion of the mass. Electronic means will include those electronic structures consistent with those means disclosed in the specification that would have been known by a person having ordinary skill in the art at the time of filing of the patent application.

Again, the court declines the invitation to decide the validity issues raised by Defendants' proposed construction. Disclosure of structure corresponding to a means-plus-function limitation is limited to the specification; however, "[such corresponding structure] may be implicit in the written description *if it would have been clear to those skilled in the art* what structure must perform the function recited." Atmel, 198 F.3d at 1380 (quoting PTO proposed Supplemental Examiner Guidelines that incorporate the Federal Circuit's approach for determining whether adequate structure has been disclosed) (emphasis added), A failure to adequately describe the necessary structure, material, or acts in the written description would fail to comply with 35 U.S.C. s. 112 para. 2, raising a validity issue, not a claim construction issue.

C. Claim 15

The parties' proposed claim constructions differ with regard to elements (a), (b), (c), and (d) of Claim 15. Claim 15 is a dependent claim and is written in means-plus-function language. It provides as follows:

[t]he invention defined in claim 1, further comprising a side impact safing sensor including: (a) a switch comprising a first contact member and a second contact member; (b) means for mounting said switch on the side structure of a vehicle; (c) means for forcing said first contact member to contact said second contact member, and causing said switch to change its conductive state when said vehicle is impacted in a side crash; and means for mounting said sensor onto the side of a vehicle in a position to sense an impact into the side of said vehicle

('253 Patent Claim 15.)

The court finds that element (a) requires no claim construction as its ordinary meaning to one skilled in the art is apparent. It also declines to consider, for the reasons stated above, Defendants' argument that the means for mounting claim limitations found in elements (b) and (d) are invalid. The court discussed these issues in the course of its analysis regarding Claim 1 *supra*.

The parties dispute the stated function and the corresponding structure associated with the claim limitation in element (c). Defendants construe the function to include forcing the first contact member to contact the second contact member "to cause the switch to change its conductive state." (Joint Mem. at 6.) The court, however, finds that the claim language provides the stated function and that function need not include the extra language proposed by Defendants. Thus, the function for the claim limitation is forcing the first contact member to contact the second contact member.

The parties also dispute the scope of the corresponding structure found in the specification. Defendants assert that the corresponding structure is limited to "a deformable dome-shaped membrane that is used both to force the first contact member to contact the second contact member and to thereby change the conductive state of the switch from off to on." (Defs.' *Markman* Br. at 32-33.) Plaintiff asserts a broader corresponding structure. Because this claim limitation is phrased in means-plus-function language, the court

finds that the Plaintiff is limited to the corresponding structure set forth in the specification which includes the preferred embodiment and its equivalents as described in Figure 7 and in column 9, lines 12-29 of the specification.

D. Claim 19

Claim 19 is dependent on claim one and provides "[t]he invention in accordance with Claim 1, wherein said housing is installed in the side door structure of the vehicle." Plaintiff contends that the ordinary meaning of "side door structure" requires no construction by the court. On the other hand, Defendants would have the court construe the phrase as meaning only the structure of the side door and "not the structures surrounding the door." Defendants' construction is based on its proposed claim construction of Claim 1 that the sensor must be mounted on the side door, For the reasons already discussed, the court does not agree and finds no reason to limit the construction of the claim 19 language to include Defendants' proposed interpretation. "Side door structure" includes the structure of a vehicle door itself as well as the surrounding vehicle door frame.

E. Claim 20

The Defendants' brief indicates that Plaintiff's proposed construction of element (c) of this claim would include corresponding structure in the form of "applying an electronic charge to an electronic circuit to create bias." (Joint Mem. at 8.) However, the court notes that the parties' joint memorandum and proposed claim constructions states Plaintiffs proposed construction as "various structures that perform a biasing function as shown in Figs. 1, 5, 6, and 9 including ... a discrete spring or a contact configured as a spring." Thus, the parties' proposed constructions are not in complete conflict.

Element (c) is framed in means-plus-function format and the parties agree that the stated function of this claim limitation is to bias the sensing mass within the housing toward a first position. The court finds that corresponding structure exists in the '253 Patent specification that is clearly linked to the stated function. The court finds this corresponding structure in the figures and textual descriptions supplied in the specification. (Figure 5 & col. 8, lines 56-57; Figure 6 & col. 8, line 64; Figures 1, 8 & Col. 6, lines 12-14, col, 9, lines 40-43.) Mr. David Breed's deposition testimony acknowledges that the only biasing structure disclosed in the figures includes a spring or contact acting as a spring. (Breed Tr. at 79, lines 3-9, Ex. 6.) Thus, the court finds that the corresponding structure includes the structures disclosed using a spring or its equivalent as a means for biasing.

IV. CONCLUSION

For the reasons stated above, IT IS ORDERED that the claims of the '253 Patent are construed as set forth in this order.

E.D.Mich.,2004. Automotive Technologies Intern. v. BMW of North America

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