

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF MICHIGAN
SOUTHERN DIVISION

MAGNA ELECTRONICS, INC.,

Plaintiff,

-vs-

Case No. 13-11376
HON. AVERN COHN

VALEO, INC.; VALEO S.A.; VALEO
GMBH; CONNAUGHT ELECTRONICS,
LTD.; VALEO SCHALTER UND
SENSOREN GMBH; VALEO NORTH
AMERICA, INC.,

Defendants.

DECISION ON CLAIM CONSTRUCTION

TABLE OF CONTENTS

I.	Introduction	1
II.	Background	1
	A. General	1
	B. The <u>Markman</u> Papers	2
III.	The Law	3
IV.	Discussion	6
	A. The '565 Patent/Claim 45 and Claim 46	6
	1. General	6
	2. The Words and Phrases at Issue in the '565 Patent	6
	a. Terms Chart	6
	b. Term 2b and Term 3b	7
	c. Term 9 and Term 10a	7
	d. Term 12b	7
	B. The '175 Patent/Claim 1 and Claim 16	8
	1. General	8
	2. The Words and Phrases at Issue in the '175 Patent	9
	a. Terms Chart	9
	b. Term 5a	10
	c. Term 5a (subpart)	10
	d. Term 6 and Term 7	11
	e. Term 7b and Term 8b	11
V.	Conclusion	11

INDEX OF EXHIBITS

- Exhibit A Paradigm Claim 45 of the '565 Patent
- Exhibit B Paradigm Claim 46 of the '565 Patent
- Exhibit C Paradigm Claim 1 of the '175 Patent
- Exhibit D Paradigm Claim 16 of the '175 Patent
- Exhibit E Claim Construction Chart for Claim 45 of the '565 Patent
- Exhibit F Claim Construction Chart for Claim 46 of the '565 Patent
- Exhibit G Claim Construction Chart for Claim 1 of the '175 Patent
- Exhibit H Claim Construction Chart for Claim 16 of the '175 Patent
- Exhibit I File History Excerpt

I. Introduction

This is a patent case. The patents-in-suit, U.S. Patent No. 7,859,565 B2, Vision System For A Vehicle Including Image Processor, issued December 28, 2010 (the '565 Patent) and U.S. Patent No. 7,877,175 B2, Object Detection System For Vehicle,¹ issued January 25, 2011 (the '175 Patent), are owned by plaintiff, Magna Electronics, Inc. (Magna). Magna charges defendants, Valeo, Inc., et al., with infringement of the '565 and '175 Patents. The paradigm claims which contain ambiguous words and phrases which require construction are Claim 45 and Claim 46 of the '565 Patent, and Claim 1 and Claim 16 of the '175 Patent.

This decision explains the reasons for the constructions adopted by the Court. See Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), aff'd, 517 U.S. 370 (1996). As noted below, the Court adopts the constructions proposed by Magna because they offer the best explanation as to the ordinary meaning of the identified words and phrases as understood by a person skilled in the art and consistent with the patents.

II. Background

A. General

The patents-in-suit are described by Magna as follows:

The '565 Patent is directed to vision systems for vehicles with multiple cameras to 'provide the vehicle operator with scenic information' from exterior of the vehicle. * * *
Cameras are configured to be mounted at opposing sides of the equipped vehicle and at a center rear portion of the vehicle, with the cameras having overlapping fields of view. The systems address the potential duplication of images that would result from this overlap, and a display screen displays

¹Changed from Imaging System for Vehicle by amendment.

a synthesized composite image from the cameras to a driver operating the vehicle. The '565 Patent claims are thus embodied in systems that include multiple cameras.

The '175 Patent is directed to vision systems for vehicles that compensate for camera misalignment. Such systems monitor the surroundings adjacent to, forward of and/or rearward of the vehicle, such as to assist the driver in changing lanes or parking the vehicle. * * * The '175 invention may be applied to single-camera or multi-camera vehicle vision systems. A camera captures an image exterior of the vehicle, with a control processing an image data set to a reduced image data set to extract information from the reduced data set. The control is operated to determine if the camera is misaligned, and adjusts to at least partially compensate for misalignment.

The technology reflected in the dispute was early described in an article in *The Wall Street Journal* in 1998 headlined "A New Microchip Ushers In Cheaper Cameras" (August 21, 1998, p. B1).

Magna supplies multi-camera Surround Vision™ systems embodying the paradigm claims for use on vehicles including Ford F-150 trucks and Chrysler Pacifica minivans. Valeo is accused of supplying its Valeo 360Vue® system embodying the technology reflected in the paradigm claims for use on vehicles including Mercedes C-Class sedans and BMW X5 SUVs. Through 2016, millions of such systems have been supplied to automobile manufactures by Magna and Valeo.

B. The Markman Papers

Claim 45 and Claim 46 of the '565 Patent and of Claim 1 and Claim 16 of the '175 Patent, displayed in alphanumeric form with the ambiguous words and phrases underlined and in bold, are attached as Exhibits A, B, C and D.

The Claim Construction Charts which identify the ambiguous words and phrases of Claim 45 and Claim 46 of the '565 Patent and Claim 1 and Claim 16 of the '175

Patent, together with the parties' proffered construction, are attached as Exhibits E, F, G and H.

The Markman filings by the parties are extensive and voluminous. They consist of the following:

Doc. 64 - Valeo's Identification of Ambiguous Words and Phrases

Doc. 69 - Magna's Markman Brief

Doc. 70 - Magna's Statement of Paradigm Claims

Doc. 73 - Valeo's Response to Markman Brief

Doc. 76 - Magna's Reply Brief

Doc. 78 - Notice re Joint Submission of File History Appendices (excerpts from file history)

Doc. 86 - Transcript of Markman Hearing

Doc. 87 - Joint Stipulation Regarding Supplemental Claim Construction Briefing Schedule

Doc. 88 - Magna's Supplemental Markman Brief

Doc. 89 - Joint Submission of Claims Construction Chart

Doc. 90 - Valeo's Response to Supplemental Markman Brief

Doc. 91 - Magna's Supplemental Reply Brief

Doc. 92 - Valeo's Submission of Annotated Copies of Paradigm Claims

Doc. 93 - Magna's Statement of Presentation of Paradigm Claims

III. The Law

The parties agree on the rules governing claim construction. Claim construction is a matter of law for the Court. Markman, supra at 979 (Fed. Cir. 1995). The focus is on "what one of ordinary skill in the art at the time of the invention would have understood the term to mean." Id. at 986. The Court of Appeals for the Federal Circuit

has stated: "Claim terms generally are construed in accordance with the ordinary and customary meaning they would have to one of ordinary skill in the art in light of the specification and the prosecution history." Aventis Pharma S.A. v. Hospira, Inc., 675 F.3d 1324, 1329 (Fed. Cir. Apr. 9, 2012) (citing Phillips v. AWH Corp., 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc)).

The sequence of construing a patent claim is as follows:

First, we look to the words of the claims themselves, both asserted and nonasserted, to define the scope of the patented invention. Although words in a claim are generally given their ordinary and customary meaning, a patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the special definition of the term is clearly stated in the patent specification or file history.

Thus, second, it is always necessary to review the specification to determine whether the inventor has used any terms in a manner inconsistent with their ordinary meaning. The specification acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication. . . . The specification contains a written description of the invention which must be clear and complete enough to enable those of ordinary skill in the art to make and use it. Thus, 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.

Third, the court may also consider the prosecution history of the patent, if in evidence. This history contains the complete record of all the proceedings before the Patent and Trademark Office, including any express representations made by the applicant regarding the scope of the claims. As such, the record before the Patent and Trademark Office is often of critical significance in determining the meaning of the claims. Included within an analysis of the file history may be an examination of the prior art cited therein.

Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996) (citations omitted).

These sources are analyzed in a hierarchical fashion, beginning with the " 'heavy presumption' " that claim terms mean what they say and carry their ordinary meaning as

viewed by one of ordinary skill in the art. W.E. Hall Co. v. Atlanta Corrugating, LLC, 370 F.3d 1343, 1350 (Fed. Cir. 2004) (citing Johnson Worldwide Assocs., v. Zebco Corp., 175 F.3d 985, 989 (Fed. Cir. 1999)); Intellectual Property Dev., Inc. v. UA-Columbia Cablevision of Westchester, Inc., 336 F.3d 1308, 1315 (Fed. Cir. 2003). Dictionaries, encyclopedias, and treatises may be used to discover a term's ordinary meaning. Altiris, Inc. v. Symantec Corp., 318 F.3d 1363, 1369 (Fed. Cir. 2003); Texas Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193, 1202-03 (Fed. Cir. 2002).

A patent claim is to be "given [its] ordinary and customary meaning," which is "the meaning that [a] term would have to a person of ordinary skill in the art in question." In construing a patent claim consideration is to be given to the intrinsic evidence of the patent at issue, which includes the claims, specifications and prosecution history. Phillips v. AWH Corp., 415 F.3d 1303, 1312-13 (Fed. Cir. 2005).

Here importantly, the specifications and the claim language are the most important factors in the resolution of differences in the meaning and scope of claim language. Undoubtedly, because of the time the parties have devoted to their differences, as well as their commercial competitiveness, they are fully familiar with the differences in each other's competing products. While Wilson Sporting Goods Co. v. Hillebrand, 442 F.3d 1322 (Fed. Cir. 2006), allows for consideration of the accused product in a Markman proceeding, it notes the "construction of the claim is independent of the device charged with infringement." Id., 1327.

Lastly, attention should be paid to Hill-Rom Services, Inc. v. Stryker Corp., 755 F.3d 1367, 1372-73 (Fed. Cir. 2014), for the admonishment not to read into terms, "words of manifest exclusion," where such is not called for.

IV. Discussion

A. The '565 Patent/Claim 45 and Claim 46

1. General

The Abstract of the '565 Patent reads:

A vision system for a vehicle is provided that includes a vehicle equipped with at least two image capture devices. The image capture devices capture an image external of the vehicle and have overlapping fields of view. Outputs of the at least two image capture devices are fed to an image processor. The image processor produces a synthesized image from the outputs of the at least two image capture devices. The vision system may be a night-vision system.

and col. 1, ll. 18-20 reads:

The invention relates generally to vision systems for vehicles, and more particularly, to rearview vision systems which provide the vehicle operators with scenic information in the direction rearward of the vehicle. More particularly, the invention relates to a rearview vision system utilizing image capture devices such as CM05 image arrays and the like.

2. The Words and Phrases at Issue in the '565 Patent

a. Terms Chart

Terms 2b and 3b (Claim 45 and Claim 46)	Magna Construction	Valeo Construction
"directed generally rearwardly and sidewardly"	[<i>the image capture device</i>] "sees sideways and to the back of the vehicle"	[<i>the image capture device is</i>] "aimed generally toward the back of the vehicle and sideways"

Terms 9 and 10a (Claim 45 and Claim 46)	Magna Construction	Valeo Construction
"composite image"	"A single, combined image"	"a single, combined image"

Term 12b (Claim 45 and Claim 46)	Magna Construction	Valeo Construction
"Viewable by a driver of said vehicle when the driver is normally operating said vehicle"	"The display screen may be seen by a driver sitting in the driver's seat who is facing to the front when he/she looks at the screen"	[<i>the display screen is</i>] "viewable by a driver who is sitting in the driver seat and facing forward"

b. Term 2b and Term 3b

The differences between the parties on the construction of the phrase "directed generally rearwardly and sidewardly" centers on what is the driver's field of vision. These words implicate and call into question the scope of what the driver sees. Magna's proposed construction apparently would call for infringement, while Valeo's construction would defeat infringement. A Markman proceeding is not the stage of a case where the Court should be deciding infringement. The Court is satisfied that Magna has the better position. Decision on the displayed image is best left for the trial. As Magna states in its Reply (Doc. 91, p. 4):

. . .there are no "clear limiting descriptions of the invention" that would limit the physical orientation of the cameras to being "aimed" as Valeo seeks to require.

c. Term 9 and Term 10a

The parties agree on the construction of the phrase "composite image." No further discussion is required.

d. Term 12b

The differences between the parties on the construction of the phrase "viewable by [the] driver. . .when. . .normally operating" [the vehicle] are difficult to ascertain.

Clearly the claim calls for

- the driver facing forward while operating the vehicle

- a display screen
- the driver looking at the screen

Again the parties appear to be arguing their disagreement on claim construction in anticipation of arguing for and against infringement. Absent any real differences in the proposed constructions, Magna's construction is preferred.

B. The '175 Patent/Claim 1 and Claim 16

1. General

The Abstract of the '175 Patent reads:

An imaging system for a vehicle includes an imaging array sensor and a control. The image array sensor comprises a plurality of photo-sensing pixels and is positioned at the vehicle with a field of view exterior of the vehicle. The imaging array sensor is operable to capture an image exterior of the vehicle. The control may process the captured images and may determine that the imaging array sensor is not aligned within a desired tolerance when the imaging array sensor is positioned at the vehicle. The control, responsive to a determination of a misalignment of the imaging array sensor at the vehicle, may adjust at least one of the captured images or an image data set and the image processing to at least partially compensate for the determined misalignment of the imaging array sensor.

and col. 2, ll. 32-42 reads:

The present invention is intended to provide an object detection system, such as a blind spot detection system, a lane change assist or aid system or device, a lane departure warning system, a side object detection system, a reverse park aid system, a forward park aid system, a forward, sideward or rearward collision avoidance system, an adaptive cruise control system, a passive steering system or the like, which is operable to detect and/or identify a vehicle or other object of interest at the side, front or rear of the vehicle equipped with the object detection system. * * *

2. The Words and Phrases at Issue in the '175 Patent

a. Terms Chart

Term 5a (Claim 1 and Claim 16)	Magna Construction	Valeo Construction
"Algorithmically processing said image data set to a reduced image data set"	"Using software, reducing the image data set of the captured image to a smaller data set corresponding to an area of interest in the captured image"	"using software to select a reduced image data set corresponding to an area of interest in the captured image"
Term 5a (Subpart) (Claim 1 and Claim 16)	Magna Construction	Valeo Construction
"said image data set"	The image data set (<i>italicized</i>) of the following claim element: "wherein said imaging array sensor is operable to capture an image of a scene exterior of the vehicle, said captured image comprising <i>an image data set</i> representative of the exterior scene"	"the data set for the entire captured image"

Term 6 (Claim 1 and Claim 16)	Magna Construction	Valeo Construction
"wherein said control is operable to determine that said imaging array sensor is not aligned within a desired tolerance when said imaging array sensor is positioned at the vehicle"	The control can determine whether a disparity needing correction exists between where the camera actually aligns compared to where the camera should be aligned.	Valeo does not propose this term but reserves the right to argue indefiniteness at a later date in accordance with the Court's instructions during the December 6, 2016 Hearing.

Term 7 (Claim 16)	Magna Construction	Valeo Construction

<p>“wherein said control, responsive to processing of said image data set, is operable to verify that said imaging array sensor is mounted at the vehicle within said desired tolerance”</p>	<p>Based on processing of said image data set captured by the camera, the control can establish that where the camera aligns compared to where the camera should be aligned is proper.</p>	<p>Valeo does not oppose this term but reserves the right to argue indefiniteness at a later date in accordance with the Court’s instructions during the December 6, 2016 Hearing.</p>
<p>Term 7b (Claim 1) Term 8b (Claim 16)</p>	<p>Magna Construction</p>	<p>Valeo Construction</p>
<p>“Is operable to adjust at least one of said image data set and said image processing”</p>	<p>The control is operable to adjust at least one of (1) the image data set of the captured image and (2) the image processing of the captured image.</p>	<p>The control is operable to adjust at least one of (1) the data set for the entire captured image and (2) the image processing of the captured image.</p>

b. Term 5a

The differences between the parties on construction of the phrase “processing [the] image data set to a reduced image data set” form revolves around the manner of seeing what the camera has captured. As put by Magna in its Supplemental Brief (Doc. 88), quoting from the PTAB’s decision, “capturing a reduced image data set differs from capturing an image that comprises the image data set and then algorithmically processing it into a reduced image data set.” What is happening is the image has been made smaller – fewer data points are displayed.

Magna’s construction is correct.

c. Term 5a (Subpart)

The differences between the parties on construction of the phrase “said image data set,” is easily resolved. Valeo’s construction ignores the word “said,” which refers to a limitation previously stated in the claim.

Magna’s construction is correct.

d. Term 6 and Term 7

Magna's construction of the words and phrases of Term 6 and of Term 7 are not challenged by Valeo. Accordingly, Magna's construction is correct. No further discussion is required.

e. Term 7b and Term 8b

The differences between the parties on the construction of "operable to adjust at least one of said image data set and said image processing," results from Valeo ignoring the "image data set" being defined in limitation 4b of Claim 1 of the '175 Patent, and the like limitation in Claim 16. Magna's construction is correct.

V. Conclusion

The Court recognizes that this discussion as to the construction of the ambiguous claim terms identified by Valeo (Doc. 64) as compared to the prolix and complex arguments reflected in the parties' briefs may appear simplified.² Notwithstanding its brevity, the Court is satisfied that it is sufficient to enable this case to go forward. Valeo is obviously proposing constructions that will take the infringing devices outside the metes and bounds of the paradigm claims. The saving grace is that claim construction is always tentative and subject to review as a case moves forward.

²An example of the turgid and complexity of the parties papers is illustrated over the interpretation of term 5a of the '175 patent which essentially centers on the interpretation of the processing of the "said image data set." Magna says the processing is through the use of software. Valeo, however, says that the "logical procedure" may be carried out by other measures such as through logical circuitry and need not be limited to software, citing JA 175 0706. An excerpt from the file history which Valeo cites in support for its construction is attached as Exhibit I.

As has been previously observed, the Court in a Markman proceeding has little appreciation of the consequences of its decision in the resolution of a patent dispute. A Markman proceeding is not the forum for deciding issues of validity and infringement.

The Court is satisfied that proper application of Markman principles to the patents in suit leads to the conclusion that Magna's proposed constructions of ambiguous terms and phrases are correct.



AVERN COHN
UNITED STATES DISTRICT JUDGE

Dated: 5-22-2017
Detroit, Michigan