IN THE UNITED STATES DISTRICT COURT
DISTRICT OF NEW JERSEY

SECOR VIEW TECHNOLOGIES LLC,	:	Civil No. 12-3306 (FSH)
	:	Civil No. 12-3308 (FSH)
Plaintiff,	:	Civil No. 12-3310 (FSH)
	:	
v.	:	**OPINION**
	:	
NISSAN NORTH AMERICA, INC., et al.,	:	
	:	
Defendants.	:	DATE: November 21, 2013
	:	

HOCHBERG, District Judge:

This case comes before the Court on a request for claim construction from Plaintiff Secor View Technologies LLC, ("Secor View" or "Plaintiff") together with Defendants Nissan North America, Inc., Jaguar Land Rover North America, LLC, BMW of North America, LLC, and Rolls-Royce Motor Cars NA, LLC (collectively "Defendants"). The parties submitted their Joint Claim Construction and Prehearing Statement on March 20, 2013. On May 6, 2013, the parties filed their opening claim construction briefs, and on July 15, 2013, they filed their responsive briefs. The parties filed an amended Joint Claim Construction and Prehearing Statement on October 3, 2013. A *Markman* hearing took place on October 17, 2013.[1]

[1] The Court notes that all of the attorneys that participated in the *Markman* hearing on October 17, 2013 were exceptionally well prepared and provided cogent arguments that assisted the Court in this matter. Nor did an unexpected fire drill detract from the effectiveness of the lawyers or the hearing.

I. BACKGROUND

Secor View brings this action alleging infringement of U.S. Patent No. 5,289,321 ("the '321 patent") by Defendants. The parties ask the Court to construe 10 claim terms found in a number of claims of the '321 patent. The '321 patent is titled "Consolidated Rear View Camera and Display System for Motor Vehicle." James O. Secor filed the patent application that would later issue as the '321 patent on February 12, 1993. The '321 patent issued February 22, 1994. The '321 patent describes a rear view camera system that seeks to improve upon the existing rear view mirror system. The relevant claims are reproduced below and the disputed terms are underlined and bolded.[2]

Claim 1

Rear viewing arrangement for a motor vehicle to permit an operator in a driver's position within the vehicle a **view of traffic conditions to rearward** from left and right sides of the motor vehicle, comprising:

left and right video camera arrangements respectively mounted on the left and right sides of the motor vehicle at a position at or forward of the said driver's position; and each said arrangement including a miniature video camera having **a viewing angle directed generally rearwards**, and a **housing that is formed of a fairing** **disposed over the associated camera to protect same** and **minimize lateral protuberance from the side of the vehicle** while **avoiding unnecessary air flow turbulence**, and a window on a **rearward side of said fairing**; and

at least one viewing screen coupled to said video camera arrangements and disposed at said driver's position within the vehicle to reproduce left and right **rearward views of the traffic conditions** as viewed by said video cameras.

Claim 2

Rear viewing arrangement as recited in claim 1 wherein said fairings have a shape that is **elongated in the longitudinal direction of said vehicle**.

Claim 3

Rear viewing arrangement as recited in claim 2 wherein said fairings each have a forward edge forming a **low angle** between an outer surface of the fairing and the side of the vehicle.

[2] Later claims that merely repeat disputed claim terms are not included.

Claim 4

Rear viewing arrangement as recited in claim 1, wherein said at least one viewing screen includes left and right LCD displays **coupled respectively** to the left and right video camera arrangements.

II. STANDARD OF REVIEW

In a patent infringement analysis, the first step is to define the meaning and scope of the claims of the patent. *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 976 (Fed. Cir. 1995) (*en banc*), *aff'd*, 517 U.S. 370 (1996). The construction of patent claims is a matter of law reserved exclusively for the court. *Markman*, 52 F.3d at 977-79. There are two categories of evidence available to the Court when construing patent claims: (i) intrinsic evidence; and (ii) extrinsic evidence, such as expert testimony.[3] "When construing a claim, a court principally consults the evidence intrinsic to the patent, including the claims, the written description, and any relevant prosecution history." *Mantech Environmental Corp. v. Hudson Environmental Services, Inc.*, 152 F.3d 1368, 1371 (Fed. Cir. 1998); *see also Markman*, 52 F.3d at 979 ("To ascertain the meaning of claims, we consider three sources: The claims, the specifications, and the prosecution history.").

The court's analysis must begin with the language of the claims themselves, "for it is that language that the patentee chose to use to 'particularly point[] out and distinctly claim[] the subject matter which the patentee regards as his invention.'" *Interactive Gift Express, Inc. v. Compuserve, Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001) (quoting 35 U.S.C. § 112, ¶ 2).[4] Claims are "examined through the viewing glass of a person skilled in the art" as of the effective date of the patent, and claim terms are deemed to be read "not only in the context of the particular claim

[3] The use of extrinsic evidence is limited in purpose and scope.

[4] The Court notes that 35 U.S.C. § 112 was recently amended and ¶ 2 was renamed § 112(b).

in which the disputed term appears, but in the context of the entire patent, including the specification." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (*en banc*). When a patentee specifically defines a claim term in the specification, it is that definition that controls. *Id*., at 1316. When the patentee has not provided an explicit definition of a claim term, the words of a claim are given their plain and ordinary meaning to a person of ordinary skill in the art. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

To determine how a person of skill in the art would understand a patent's claim language, a court must first examine the intrinsic record, *i.e.*, the patent itself, including the claims, the specification and the prosecution history. *Id*. (citing *Markman*, 52 F.3d at 979). The specification "acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication." *Id*. The Federal Circuit has explained that the specification is "usually . . . dispositive . . . [and is the] best guide to the meaning of a disputed term." *Phillips*, 415 F.3d at 1315 (quoting *Vitronics*, 90 F.3d at 1582) (internal quotations omitted). Therefore, a court should "rely heavily on the written description for guidance as to the meaning of the claims." *Id*., at 1317.

A patent's prosecution history is another useful source of guidance, as it "provides evidence of how the PTO and the inventor understood the patent." *Id*. The prosecution history is the complete record of the proceedings before the USPTO, and "can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower than it would otherwise be." *Id*. The Federal Circuit has made clear the need to consult the prosecution history to "exclude any interpretation that was disclaimed during prosecution." *See Rhodia Chimie v. PPG Indus., Inc.*, 402 F.3d 1371, 1384 (Fed. Cir. 2005) (the prosecution

history limits the interpretation of claim terms so as to exclude any interpretation that was either disclaimed or disavowed during prosecution).

If the ambiguities of a disputed claim term have not been resolved after analysis of the intrinsic evidence, a court may also consider extrinsic evidence. *Vitronics*, 90 F.3d at 1582-83. While a court may rely on extrinsic evidence to construe a claim, "what matters is for the court to attach the appropriate weight to be assigned to those sources." *Phillips*, 415 F.3d at 1324. Extrinsic evidence ordinarily should not contradict intrinsic evidence. *Id*., at 1322-23.

III. DISCUSSION

The Court addresses the disputed terms in two parts. First, the Court addresses the claim terms Defendants allege to be indefinite. Second, the Court addresses the terms the parties agree are definite, but where the parties disagree on the proper construction.

a. The Terms Alleged to Be Indefinite

Defendants argue that the following claim terms are indefinite: (1) "minimize lateral protuberance from the side of the vehicle"; (2) "avoiding unnecessary air flow turbulence"; and (3) "low angle." The first and second of these terms are found in claim 1, an independent claim on which all other claims in the '321 patent depend. The third term is found in dependent claim 3. The Court addresses these terms in order below.

Section 112(b) of the Patent Act requires that "[t]he specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention." 35 U.S.C. § 112(b). A claim is sufficiently definite "[i]f one skilled in the art would understand the bounds of the claim when read in light of the specification." *Exxon Research & Eng'g Co. v. United States*, 265 F.3d 1371, 1375 (Fed. Cir. 2001). "If the meaning of the claim is discernible, even though the task may be

formidable and the conclusion may be one over which reasonable persons will disagree, we have held the claim sufficiently clear to avoid invalidity on indefiniteness grounds." *Id*.

A claim is indefinite when "an accused infringer shows by clear and convincing evidence that a skilled artisan could not discern the boundaries of the claim based on the claim language, the specification, and the prosecution history, as well as her knowledge of the relevant art area." *Halliburton Energy Servs., Inc. v. M-I LLC*, 514 F.3d 1244, 1249-50 (Fed. Cir. 2008). In other words, absolute clarity is not required—"[o]nly claims 'not amenable to construction' or 'insolubly ambiguous' are indefinite." *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005). "In and of itself, a reduction of the meaning of a claim term into words is not dispositive of whether the term is definite . . . . And if reasonable efforts at claim construction result in a definition that does not provide sufficient particularity and clarity to inform skilled artisans of the bounds of the claim, the claim is insolubly ambiguous and invalid for indefiniteness." *Biosig Instruments, Inc. v. Nautilus, Inc.*, 715 F.3d 891, 898 (Fed. Cir. 2013) (internal citations and quotation marks omitted). Moreover, "[w]hen a word of degree is used the district court must determine whether the patent's specification provides some standard for measuring that degree." *Seattle Box Co. v. Indus. Crating & Packing, Inc.*, 731 F.2d 818, 826 (Fed. Cir. 1984); *see also Halliburton*, 514 F.3d at 1256; *Datamize*, 417 F.3d at 1351. Indefinite claims are invalid. *Datamize*, 417 F.3d at 1356.

The "determination of claim indefiniteness is a legal conclusion that is drawn from the court's performance of its duty as the construer of patent claims." *Exxon*, 265 F.3d at 1376. This issue is properly raised during claim construction because an analysis of claim indefiniteness under § 112(b) is "inextricably intertwined with claim construction." *Atmel Corp. v. Information Storage Devices, Inc.*, 198 F.3d 1374, 1379 (Fed. Cir. 1999).

i. "minimize lateral protuberance from the side of the vehicle"

In its briefing, Plaintiff argues that the phrase "minimize lateral protuberance from the side of the vehicle" does not require construction. In the alternative, Plaintiff argues that it means "minimize outward projection(s) from the side of the vehicle."[5] In its responsive *Markman* briefing, Plaintiff argued that this phrase is non-limiting and therefore does not require construction by the Court. At the *Markman* hearing, Plaintiff reiterated its position that this phrase is non-limiting.[6]

Defendants argue that the phrase is indefinite because the claims and specification do not give any indication as to what "minimized" means or how to determine when lateral protuberance is "minimize[d]."[7] According to Defendants, because there is no guidance as to the smallest degree of "lateral protuberance" allowable, the claim is indefinite.

First, the phrase "minimize lateral protuberance from the side of the vehicle" is a term of degree. Therefore, the patent must provide "some standard for measuring that degree." *Seattle Box Co.*, 731 F.2d at 826. The patent's specification is searched for that standard. Claim 1 requires that there be "a housing that is formed of a fairing disposed over the associated camera to protect same and minimize lateral protuberance from the side of the vehicle." ('321 Patent at claim 1.) By its terms, the claim requires that the fairing "minimize lateral protuberance from

[5] Of course, as noted below, the fact that Plaintiff was able to rephrase this term is not determinative for the indefiniteness inquiry. Rather, the definition must provide "sufficient particularity and clarity to inform skilled artisans of the bounds of the claim." *Biosig Instruments*, 715 F.3d at 898.

[6] Facing challenges in the language of the patent claims and specification, counsel for Plaintiff did an admirable job arguing Plaintiff's case at the *Markman* hearing.

[7] Jaguar Land Rover and Nissan offer an alternative construction of this term: "minimize lateral bulge from the side of the vehicle relative to the lateral bulge associated with a side view mirror."

the side of the vehicle." Notably, the '321 patent does not discuss lateral protuberance anywhere in the specification. A person of skill in the art is not provided with a standard to determine when lateral protuberance becomes "minimized."[8,9]

In its briefing, Plaintiff argues that one of skill in the art would understand the phrase "minimizing lateral protuberance from the side of the vehicle" and relies on the declaration of its expert, Steven R. Thompson, for support. Mr. Thompson opines that one of skill in the art would understand that this phrase describes a design objective related to the housing that protects the camera. Mr. Thompson then goes on to describe the benefits of minimizing lateral protuberance, *e.g.*, reduced drag, increased safety, and increased fuel efficiency. Mr. Thompson also opines that one of skill in the art could determine whether a housing design meets the design criteria of minimizing outward projection from the vehicle "by viewing the structure and evaluating its design in light of the other constraints for that particular vehicle, the miniature video camera used, the size of the vehicle and its shape, and any other factors that would affect the

[8] Plaintiff argues that a person of skill in the art would know when protuberance is minimized depending on the design goals of the vehicle. But this still fails to provide any standard by which to determine when protuberance is minimized. Instead, Plaintiff argues that "it depends on the design." But this does not let a designer know she is approaching that degree of "minimization" that crosses the line into infringement. *See Datamize*, 417 F.3d at 1350 (Affirming indefiniteness and finding that "Datamize has offered no objective definition identifying a standard for determining when an interface screen is 'aesthetically pleasing.' In the absence of a workable objective standard, 'aesthetically pleasing' does not just include a subjective element, it is completely dependent on a person's subjective opinion.").

[9] At the *Markman* hearing, Plaintiff argued that one of skill in the art would know when protuberance is minimized and cited support in 49 C.F.R. § 571.111, a federal regulation for motor vehicles related to mirrors. Section 571.111, subpart S5.2.2—the portion of the regulation relied upon by Plaintiff during the hearing—states that "neither the mirror nor the mounting shall protrude farther than the widest part of the vehicle body except to the extent necessary to produce a field of view meeting or exceeding the requirements of S5.2.1." *Id.* But § 571.111 does provides objective criteria by which a person may determine whether they comply with the regulation—*i.e.*, subpart S5.2.1.

performance of the camera and housing." (Dkt. No. 68-15 (Civ. No. 12-3306), Thomas Decl. ¶ 29.) But this does not answer the question of when protuberance is minimized. Rather, it merely states that "it depends."[10] As there is no standard for determining when protuberance is "minimized" this term is indefinite. *Seattle Box Co.*, 731 F.2d at 826.

Plaintiff also argues that the phrase "to protect same and minimize lateral protuberance from the side of the vehicle while avoiding unnecessary air flow turbulence" is not limiting because it is merely "aspirational." For support, Plaintiff cites *In re Jasinski*, 508 F. App'x 950 (Fed. Cir. 2013).[11] But the *Jasinski* decision does not support Plaintiff's argument in this case. The *Jasinski* Court reversed the Board of Patent Appeals and Interferences' finding that the phrase "to verify the accuracy of said logical-to-physical mapping software" was ***not*** limiting. *Jasinski*, 508 F. App'x at 952. Like *Jasinski*, the patent claim phrase "to protect same and minimize lateral protuberance from the side of the vehicle while avoiding unnecessary air flow turbulence" is limiting. This phrase provides the criteria by which the fairings are analyzed: the fairing must protect the camera, must "minimize lateral protuberance" from the side of the vehicle, and it must avoid "unnecessary" air flow turbulence. The conclusion that this phrase is

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[10] Claim terms that depend on a purely subjective determination by a designer are not definite. *See Datamize*, 417 F.3d 1350-52.

[11] At the *Markman* hearing, Plaintiff cited to *Boehringer Ingelheim Vetmedica, Inc. v. Schering-Plough Corp.*, 320 F.3d 1339 (Fed. Cir. 2003) as support for the proposition that "[a]n intended use or purpose usually will not limit the scope of the claim because such statements usually do no more than define a context in which the invention operates." *Id.*, at 1345. *Boehringer* addressed whether or not preambles to claims are limiting. The typical rule is that a preamble that simply states the intended use or purpose of an invention will usually not limit the claims. *Id*. Here, the phrase Plaintiff argues is non-limiting is in the body of the claim, not in the preamble. The *Boehringer* Court also noted that, even in the preamble, language will be limiting if "it recites not merely a context in which the invention may be used, but the essence of the invention without which performance of the recited steps is nothing but an academic exercise." *Id*. The Federal Circuit went on to find the language at issue ***was*** limiting. *Id*. Here, the patentee claimed a fairing with certain attributes, and those attributes are limiting.

intended to be limiting is further underscored by the fact that the USPTO Examiner explicitly relied on these aspects of the claimed fairings to distinguish prior art:

> The following is an Examiner's Statement of Reasons for Allowance:
>
> While most of the features of the rear viewing apparatus of Petrossian et al. '591 are recited in the present independent claim 1, the above patent fails to teach the arrangement of the video cameras in left and right fairings, each having a window to accommodate viewing.
>
> As recited in the claim, **these fairings not only protect the cameras and minimize the protuberance thereof they also avoid unnecessary air flow turbulence**.
>
> No suggestion was found in the prior art cited that can lead to the modification of the apparatus of the '591 patent to arrive at the present claim 1.
>
> Thus, the present claim 1 is patentable thereover.

(Dkt. No. 70-11 (Civ. No. 12-3306), Ex. J (Prosecution History) (emphasis added).) This phrase is this not merely aspirational and is intended to be limiting.

This term is indefinite because it is not amenable to claim construction and is insolubly ambiguous to a person of ordinary skill in the art. Because this term is indefinite, claim 1 is invalid. *Datamize*, 417 F.3d at 1356. All other claims in the '321 patent depend from claim 1. Therefore, these dependent claims are also invalid. *Id*. This Court will proceed to construe the remaining contested claim terms as separate and independent holdings.

ii. <u>"avoiding unnecessary air flow turbulence"</u>

In its briefing, Plaintiff argues that this phrase does not need construction. In the alternative, Plaintiff argues that "avoiding unnecessary air flow turbulence" should have its plain and ordinary meaning to one of skill in the art. As discussed above, in its responsive brief and at the *Markman* hearing, Plaintiff took the position that "avoiding unnecessary air flow turbulence" was aspirational and non-limiting. If the patent had stated the words "in order to" rather than "while" before the word "minimizing," plaintiff would have a good argument. But the patent claim is not worded that way. In addition, for the reasons stated above, the phrase "avoiding

unnecessary air flow turbulence" is limiting. For example, the USPTO Examiner explicitly relied on the "unnecessary air flow turbulence" aspect of the claimed fairing to distinguish prior art. (Dkt. No. 70-11 (Civ. No. 12-3306), Ex. J (Prosecution History) ("As recited in the claim, **these fairings** not only protect the cameras and minimize the protuberance thereof[,] they **also avoid unnecessary air flow turbulence**." (emphasis added)).) This prosecution history further supports the fact that "avoiding unnecessary air flow turbulence" is a claim limitation, not an aspirational goal.

Defendants argue that the phrase is indefinite because the claims and specification fail to provide any objective way to teach a person skilled in the art to what extent air flow turbulence around the fairings is necessary or unnecessary.[12]

The claims and the specification provide no standard to evaluate to what extent "air flow turbulence" around the fairings is necessary or unnecessary. The only reference to "turbulence" in the specification is with respect to the design choice of a particular fairing: "The fairing 64 has an outer surface that meets the fender of the vehicle 10 at a low angle at the fairing front edge 68. This design is selected for minimal turbulence in the flow of air moving past the vehicle." ('321 patent at 5:18-22.) This brief reference to turbulence does not explain what type or how much turbulence is necessary or unnecessary for the invention to be practiced or infringement to be avoided. Without some standard for measuring the degree of necessary or unnecessary turbulence, the claim term is indefinite. *Seattle Box Co.*, 731 F.2d at 826 ("When a word of degree is used the district court must determine whether the patent's specification provides some standard for measuring that degree."). Moreover, the phrase "unnecessary

[12] In the alternative, Jaguar Land Rover and Nissan argue that the phrase "avoiding unnecessary air flow turbulence" means "reducing the level of air flow turbulence caused by a side view mirror." This construction is not supported by the claims, specification, or prosecution history.

turbulence" is a subjective term, varying from vehicle to vehicle and from design goal to design goal. There will always be some turbulence, both on the leading edge and at the rear of the structure. This claim term does not give a personal skilled in the art the standards to evaluate whether this criterion is met. In sum, the phrase is indefinite, *see Datamize*, 417 F.3d 1350-52, and is a separate and independent ground for invalidity of claim 1 and its dependent claims. *Id.*, at 1356.

iii. "low angle"

Plaintiff argues that the phrase "low angle" does not need construction. In the alternative, Plaintiff argues the phrase should be given its plain and ordinary meaning to one of skill in the art. Plaintiff relies on its expert to argue that the one of ordinary skill in the art would understand what "low angle" means when taking into account the various attributes of a particular vehicle.

Defendants argue that this phrase is indefinite. In support of this position, Defendants argue that the '321 patent does not provide any metric for measuring what would qualify as a "low angle."

Claim 3 requires that the "fairings each have a forward edge forming a low angle between an outer surface of the fairing and the side of the vehicle." ('321 patent at claim 3.) While it is clear that the low angle is formed from the leading edge of the fairing and ranges from the side of the vehicle to the outer surface of the fairing, a standard for measuring what angle or range of angles would qualify as "low" is not provided in the claim language.

The specification does not greatly illuminate matters. "The fairing 64 has an outer surface that meets the fender of the vehicle 10 at a low angle at the fairing front edge 68. This

design is selected for minimal turbulence in the flow of air moving past the vehicle."[13] ('321 patent at 5:18-22.) While the specification states that the claimed angle is sufficiently "low" to achieve "minimal turbulence in the flow of air moving past the vehicle,"[14] the specification does not give a threshold or measurement for what degree of turbulence is "minimal." Assuming, but not deciding, that the turbulence referred to is front edge turbulence, the specification does not state a range of measurement of such turbulence that would constitute "minimal" turbulence. Proof has not been adduced about whether a person skilled in the art could measure the turbulence with sufficient precision to know what "minimal" turbulence produced by the "low angle" would be—nor is there a standard provided by the specification. Thus, there is no objective guidance on how to achieve or what qualifies as a "low angle." Defining an indefinite term with another indefinite term does not resolve its ambiguity.

Plaintiff's suggested construction of "low angle" is "an acute angle, typically less than 45 degrees." An acute angle, of course, is an angle less than 90 degrees, so the Court presumes that the proposed construction is a subset of acute angles that is generally less than 45 degrees. Thus, under Plaintiff's suggested construction, a 45 degree angle sticking out from the side of a car is "low." Moreover, Plaintiff's assertion that the degree of the low angle would be an acute angle

[13] The figures in the '321 patent do not assist a person skilled in the art to construe this claim because the images contain no measurements and do not show the surface of the vehicle such that a skilled person could deduce the angle depicted.

[14] The specification also indicates that the fairing should be "stream lined as to cause minimal disruption of the laminar flow of air passing over the car body." ('321 patent at 5:14-16.) This passage similarly fails to provide any guidance on what is a "low angle" beyond noting the result of a low angle should be "minimal disruption of the laminar flow of air." Just as with "minimal turbulence" above, nothing indicates when "minimal disruption" is achieved, and it fails to provide a teachable and testable standard for measuring the "low angle." *See Seattle Box Co.*, 731 F.2d at 826 ("When a word of degree is used the district court must determine whether the patent's specification provides some standard for measuring that degree.").

that "depend[s] upon many things including the shape of the vehicle, the exact location of the fairing and how it is mounted in relation to the side of the vehicle, as well as the size of the housing itself" even if read into this patent, provides too little guidance to the skilled artisan as to which angles infringe because they are "low." (Pl. Opp. Br. at 30 (citing Mr. Thompson's Declaration).) Because the wording of the patent provides little alternative, Plaintiff argues, in essence, that the selection of a "low angle" is a subjective design choice made by the designer based on a multitude of facts.[15] Such a subjective description of the term "low angle" underscores the conclusions that it is indefinite. *Datamize*, 417 F.3d at 1350 ("The scope of claim language cannot depend solely on the unrestrained, subjective opinion of a particular individual purportedly practicing the invention."). The '321 patent fails to provide standards to guide a skilled artisan on the meaning of "low angle"; it is insolubly ambiguous, rendering the phrase indefinite. *See Halliburton*, 514 F.3d at 1249; *see also Datamize*, 417 F.3d at 1350-52.[16]

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[15] Plaintiff also argues that a "low angle" would not include "a non-streamlined protrusion from the vehicle such as a conventional radio antenna or many hood ornaments that extend directly out from the surface of the vehicle." But even this description is not drawn from the specification and does not give a standard by which a person of skill in the art could determine what qualifies as a "low angle."

[16] Plaintiff's reliance on *Young v. Lumenis, Inc.*, 492 F.3d 1336 (Fed. Cir. 2007) is inapposite. In *Young*, the Federal Circuit reversed a finding of indefiniteness for the term "near" in the context of a claim for a surgical method for removing a claw from a domesticated cat. *Id.*, at 1347. There, the context of the claim and the specification made it clear that "near" described a location on an animal (one that could vary depending on the size of the particular animal)—but the term was akin to "approximately" in that a person of ordinary skill in the art would know that the cut would need to be made "close to or at the most distal edge of the ungula crest" based on the specification and the knowledge of one of skill in the art. *Id*. In contrast to *Young*, "low" is not akin to "approximately." Rather, "low" is a matter of degree, and the patent fails to provide any standard for determining when "low" is met.

b. The Remaining Terms

i. "view of traffic conditions to rearward" and "rearward views of the traffic conditions"

Plaintiff argues that "rearward views of the traffic conditions" does not require construction. In the alternative, Plaintiff argues that the phrase should be given its plain and ordinary meaning. Specifically, Plaintiff states that "rearward views of the traffic conditions" means to provide the driver inside the vehicle a view that includes the conditions outside the vehicle to the rear of the left and right video camera arrangements.

The Defendants offer two different definitions for this term. Jaguar Land Rover and Nissan argue that this phrase means "views of vehicles moving along a route as typically provided by side view mirrors." BMW and Rolls Royce argue that this phrase means "[rearward views of] passage or flow of vehicles along transportation routes."

The Court finds that this phrase does not require construction and has a well understood plain and ordinary meaning to one of skill in the art. The phrase "rearward views of the traffic conditions" refers to the traffic conditions towards the rear of the vehicle. Moreover, the phrase "traffic conditions" is not as limited as Defendants claim. The '321 patent explicitly discloses using the disclosed cameras to view vehicles as well as other objects, such as children. *(E.g.*, '321 patent at 3:67-68, 4:19-22.) The patentee never limited "traffic conditions" to "views of vehicles moving along a route as typically provided by side view mirrors" or "[rearward views of] passage or flow of vehicles along transportation routes." Without a clear disavowal of claim scope, claims should be given their full scope. *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1366 (Fed. Cir. 2012) ("The patentee may demonstrate intent to deviate from the ordinary and accustomed meaning of a claim term by including in the specification expressions

of manifest exclusion or restriction, representing a clear disavowal of claim scope." (internal citations omitted)); *see also Home Diagnostics, Inc. v. LifeScan, Inc.*, 381 F.3d 1352, 1358 (Fed. Cir. 2004) ("Absent a clear disavowal or contrary definition in the specification or the prosecution history, the patentee is entitled to the full scope of its claim language."). In any event, even conventional side view mirrors can be used to monitor more than just vehicles travelling along a route. The patent also notes that the invention was meant to improve upon conventional mirrors and eliminate some of their drawbacks. (*E.g.*, '321 patent at 1:24-25, 1:46-48, 2:14-39.) Thus, the view provided by the cameras is not limited to those provided by conventional mirrors.

ii. "a viewing angle directed generally rearwards" and "generally rearwards"

Plaintiff asserts that no construction is necessary for the phrases "a viewing angle directed generally rearwards" and "generally rearwards." Plaintiff notes that there are many cases where the term "generally" is not construed.[17] In the alternative, Plaintiff argues that the phrase should mean "having a field of view encompassing the area to the rear of the viewing arrangement."

Jaguar Land Rover and Nissan argue that this phrase means "a viewing angle directed mostly toward the rear of the vehicle." They argue that the general understanding of "generally

[17] *See, e.g.*, *U.S. Ring Binder, LP v. Staples the Office Superstore LLC*, 2009 U.S. Dist. LEXIS 21783 (E.D. Mo. Mar. 18, 2009) (declining to construe the phrase "generally corresponding to" as it was readily comprehensible to the finder of fact); *ASM Am., Inc. v. Genus, Inc.*, 260 F. Supp. 2d 827, 850 (N.D. Cal. 2002) (declining to construe "generally circular" as the Court found there was no better way to define "generally circular").

rearward" is "mostly toward the rear." Jaguar Land Rover and Nissan also note that the Federal Circuit has affirmed constructions of "generally" in the past equating the term with "mostly."[18]

BMW and Rolls Royce argue that this phrase means "a viewing angle that provides the operator a view of a level road surface extending to the horizon behind the vehicle." In support of this construction they argue that in order to replace rear view mirrors, the replacement cameras must accomplish what rear view mirrors currently accomplish.

The Court finds that "a viewing angle directed generally rearwards" and "generally rearwards" to mean "a viewing angle directed mostly toward the rear of the vehicle." Terms like "generally" are words of approximation. Generally is a descriptive term "commonly used in patent claims to avoid a strict numerical boundary to the specified parameter." *Anchor Wall Sys., Inc. v. Rockwood Retaining Walls, Inc.*, 340 F.3d 1298, 1310-11 (Fed. Cir. 2003). The Court's construction meets that requirement. "Generally rearward" has a plain and ordinary meaning that corresponds to having the focus of the viewing angle towards the rear of the vehicle.[19,20]

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[18] *See N. Am. Container, Inc. v. Plastipak Packaging, Inc.*, 415 F.3d 1335, 1346 (Fed. Cir. 2005); *see also Schoell v. Regal Marine Indus., Inc.*, 247 F.3d 1202, 1208 (Fed. Cir. 2001).

[19] In contrast, Plaintiff's proposed construction would interpret "a viewing angle directed generally rearwards" as one that could include viewing angles that were focused on a forward viewing angle as long as an area to the rear of the camera was included. This construction does not comport with the plain and ordinary meaning of "generally rearward." Plaintiff points to a dictionary definition of "generally" as meaning "in disregard of specific instances with regard to an overall picture." (Pl. Opp. Br. at 9.) This definition is consistent with the Court's construction. Moreover, Plaintiff's proposed construction renders the terms "directed" and "generally" nullities, which is typically not permissible in claim construction. *Bicon, Inc. v. Straumann Co.*, 441 F.3d 945, 950 (Fed. Cir. 2006) ("[C]laims are interpreted with an eye toward giving effect to all terms in the claim."). The Court's construction also properly includes views beyond those that are rearward as long as the views are "mostly" or "generally" rearward.

[20] BMW's and Rolls Royce's suggested construction ("a viewing angle that provides the operator a view of a level road surface extending to the horizon behind the vehicle") imports limitations that are not present in the claims or specification. Furthermore, the stated purpose of the

iii. "fairing" and "housing that is formed of a fairing"

Plaintiff argues that "fairing" and "housing that is formed of a fairing" mean "an aerodynamic structure" and "a housing that is formed of an aerodynamic structure," respectively.

Jaguar Land Rover and Nissan argue that "fairing" means "a structure that forms an aerodynamically streamlined surface with the body of the vehicle." They also argue that the purpose of the invention is to eliminate side view mirrors. Thus, they argue, it is not enough to be aerodynamic—the fairing must be in lieu of side mirrors. According to Jaguar Land Rover and Nissan, there is a clear disavowal of side view mirrors as fairings.

BMW and Rolls Royce argue that "fairing" means "a shell that has the primary purpose of reducing wind drag over an enclosed object."

The Court construes "fairing" and "housing that is formed of a fairing" to mean "an aerodynamic structure" and "a housing that is formed of an aerodynamic structure," respectively. The ordinary meaning to one of skill in the art for the term "fairing" is an aerodynamic structure. The proposed construction captures this ordinary meaning. Moreover, the specification of the '321 patent supports this construction as it describes the fairings as "stream lined as to cause minimal disruption of the laminar flow of air passing over the car body." ('321 patent at 5:14-16.)

In contrast, the Defendants' proposed constructions add additional limitations that are not supported by the plain language of the claims or the specification. The proposed construction "a shell that has the primary purpose of reducing wind drag over an enclosed object" adds a requirement that the fairing be a "shell," but there are no references to shells in the claims or

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invention is to improve upon conventional side view mirrors—including offering a different and wider view of traffic conditions. This proposed construction is based on how conventional side mirrors operate and has no support in the intrinsic evidence.

specification of the ’321 patent. In addition, this construction requires a “primary function” when the specification discloses several functions for the fairing, such as protecting the camera. (’321 patent at 5:14-18, 6:4-8; Dkt. No. 70-11 (Civ. No. 12-3306), Ex. J (Prosecution History).) The construction “a structure that forms an aerodynamically streamlined surface with the body of the vehicle” fares no better as it imports limitations from examples in the specification without a clear disavowal of claim scope. *Thorner*, 669 F.3d at 1366; *see also Home Diagnostics*, 381 F.3d at 1358. Moreover, this proposed construction would render the phrase “left and right video camera arrangements respectively mounted on the left and right sides of the motor vehicle” redundant, which is disfavored. *See Primos, Inc. v. Hunter’s Specialties, Inc.*, 451 F.3d 841, 848 (Fed. Cir. 2006) (“Starting with the language of claim 21, the terms ‘engaging’ and ‘sealing’ are both expressly recited in the claim and therefore ‘engaging’ cannot mean the same thing as ‘sealing’; if it did, one of the terms would be superfluous.”).

iv. <u>“fairing disposed over the associated camera to protect same”</u>

Plaintiff argues that “fairing disposed over the associated camera to protect same” means “an aerodynamic structure disposed over the associated camera to protect same.” Plaintiff, BMW, and Rolls Royce agree that no construction is necessary beyond the term “fairing.”

Jaguar Land Rover and Nissan argue that the phrase means “fairing to cover and protect the camera.”

The principal dispute with the construction of the phrase “fairing disposed over the associated camera to protect same” is whether or not the recited “fairing” must cover the entire camera or only a portion of the camera. The Court finds that this term needs no construction as it has a clear meaning to one of skill in the art. It need not be construed beyond the term “fairing.” The remainder of the phrase describes an intended goal of the structure, but protection of the

camera can be achieved without necessarily covering the entire camera. Thus, Jaguar Land Rover and Nissan's construction is too narrow, essentially limiting the invention to specific embodiments found within the specification, without "a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction." *Martek Biosciences Corp. v. Nutrinova, Inc.*, 579 F.3d 1363, 1381 (Fed. Cir. 2009) (internal citation omitted). There is no indication that the patentee intended to limit "fairings" to those that completely covered the camera.

v. "[window on a] rearward side of said fairing"

Plaintiff argues that this phrase does not need construction. In the alternative, Plaintiff argues that it should receive its plain and ordinary meaning, *i.e.*, "an opening on or in the surface to allow a rearward view." Notably, Plaintiff agrees the window must be on "a rearward side" of the fairing. (Pl. Opp. Br. at 19.)

Jaguar Land Rover and Nissan argue that this phrase means "[window on a] side of the fairing facing towards the rear of the vehicle."

BMW and Rolls Royce argue that the phrase "[window on a] rearward side of said fairing" does not need construction.

The Court notes that there is essentially no dispute with respect to the phrase "[window on a] rearward side of said fairing." All parties agree that it means that there must be a window on a side of the fairing that is rearward facing. The Court declines to construe this term as the as the parties agree that it is clear and requires a window on a side of the fairing that faces towards the rear of the vehicle. *See U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) ("The *Markman* decisions do not hold that the trial judge must repeat or restate every claim term in order to comply with the ruling that claim construction is for the court. Claim

construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement. It is not an obligatory exercise in redundancy."). Its meaning is undisputed and would be clear to one of skill in the art.

vi. "elongated in the longitudinal direction of said vehicle"

Plaintiff argues that this phrase does not need construction. In the alternative, Plaintiff argues that the phrase "elongated in the longitudinal direction of said vehicle" should be given its plain and ordinary meaning to one of skill in the art.

Defendants argue that the phrase "elongated in the longitudinal direction of said vehicle" means "having a shape that is longer in the lengthwise direction of the vehicle than it is wide in the crosswise direction of the vehicle."

The Court construes "elongated in the longitudinal direction of said vehicle" to mean "having more length than width in the longitudinal direction of the vehicle."[21] In context, claim 2 of the '321 patent refers to the longitudinal length of the fairing when compared to its other dimensions. ('321 patent at claim 2.) The specification also supports this construction. The specification describes a fairing that is elongated "front to back" and "is of relatively small wind cross section." ('321 patent at 5:12-15.) This "relatively small wind cross section" refers to the relative cross section of the fairing in the longitudinal direction versus its latitudinal cross section. Thus, an elongated fairing should be longer than it is wide. Plaintiff did not provide a construction for this term, instead arguing that one of skill in the art would "understand" that an

[21] The dictionary defines "elongate" as "having a form notably long in comparison to its width."

elongated fairing would be a fairing "that is longer in the latitudinal direction than would be necessary to only enclose the protected object."[22]

vii. "[left and right LCD displays] coupled respectively [to the left and right video camera arrangement]" and "[left, center, and right LCD displays positioned at said driver's position and] respectively coupled [to said left side, center viewing and right side camera arrangements]"

Plaintiff argues that this phrase needs no construction. In the alternative, Plaintiff argues that the phrase should be given its plain and ordinary meaning to one of skill in the art.

Jaguar Land Rover and Nissan argue that these phrases mean "the left side video camera arrangement is connected to the left display and the right side video camera is connected to the right display" and "the left side camera arrangement is connected to the left display, the center viewing arrangement is connected to the center display, and the right side camera arrangement is connected to the right display," respectively.

BMW and Rolls Royce argue that no construction is necessary for this term.

The Court notes that there does not appear to be any dispute as to the meaning of this term. The Court finds that the meaning of this phrase would be clear to one of skill in the art and is essentially undisputed by the parties. *U.S. Surgical Corp.*, 103 F.3d at 1568 ("[*Markman*] is not an obligatory exercise in redundancy.").[23]

viii. "target market frame sized to correspond to a vehicle situated at a predetermined position [in the viewing range of one of said cameras]"

While the parties originally disputed this term, the parties now agree that "target market frame sized to correspond to a vehicle situated at a predetermined position [in the viewing range

[22] It is notable that here Plaintiff appears to be saying the fairing encloses the camera, in contrast to its position on the phrase "disposed over."

[23] The Court notes that no ***direct*** physical connections are required by this claim term. Rather, the displays must only be "coupled" to the camera arrangements—directly or indirectly.

of one of said cameras]" means "a frame on the display sized so that an approaching vehicle will fit approximately within the frame when that vehicle is situated at a predetermined position."

IV. CONCLUSION

For the reasons set forth in this opinion, the Court construes the disputed claim terms of the '321 patent in accordance with the discussion above. The table below summarizes the Court's constructions. An appropriate Order will issue.

/s/ Faith S. Hochberg
Hon. Faith S. Hochberg, U.S.D.J.

Claim Term	Construction
"minimize lateral protuberance from the side of the vehicle"	Indefinite
"avoiding unnecessary air flow turbulence"	Indefinite
"low angle"	Indefinite
"view of traffic conditions to rearward" and "rearward views of the traffic conditions"	No construction necessary. It has its plain and ordinary meaning to one of skill in the art.
"a viewing angle directed generally rearwards" and "generally rearwards"	"a viewing angle directed mostly toward the rear of the vehicle"
"fairing" and "housing that is formed of a fairing"	"an aerodynamic structure" and "a housing that is formed of an aerodynamic structure"

Claim Term	Construction
"fairing disposed over the associated camera to protect same"	No construction necessary. It has its plain and ordinary meaning to one of skill in the art.
"[window on a] rearward side of said fairing"	No construction necessary. It has its plain and ordinary meaning to one of skill in the art.
"elongated in the longitudinal direction of said vehicle"	"having more length than width in the longitudinal direction of the vehicle"
"[left and right LCD displays] coupled respectively [to the left and right video camera arrangement]" and "[left, center, and right LCD displays positioned at said driver's position and] respectively coupled [to said left side, center viewing and right side camera arrangements]"	No construction necessary. It has its plain and ordinary meaning to one of skill in the art.