IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

FUJINON CORPORATION,	:	
	:	
Plaintiff,	:	
	:	
v.	:	Civ. No. 07-533-GMS-LPS
	:	**[CORRECTED VERSION 9/18/09]**
MOTOROLA, INC.,	:	**[Typographical errors had appeared**
	:	**at pp. 16, 17, and 20 of original version]**
Defendant.	:	

REPORT AND RECOMMENDATION
REGARDING CLAIM CONSTRUCTION

Pending before the Court in this patent infringement action is the parties' request for construction of disputed claim terms. In this Report & Recommendation, I provide my recommendation as to the proper construction of the claims.

BACKGROUND

A. Procedure

Plaintiff, Fujinon Corporation ("Fujinon"), filed its complaint against Defendant, Motorola, Inc. ("Motorola"), on September 5, 2007. (D.I. 1) The parties submitted video tutorials, providing the Court with the relevant technical background, on October 31, 2008. (D.I. 44, 47) On February 3, 2009, the parties filed a Joint Claim Construction Chart and Exhibits ("JCCC"), identifying the claim terms they believe require construction and providing the intrinsic and extrinsic evidence on which their competing contentions rely. (D.I. 61, 62) Briefing on claim construction was completed on March 3, 2009 (D.I. 71, 72) and I held a claim construction hearing on April 6, 2009 (D.I. 81).

B. The Patents-In-Suit

There are two patents-in suit, both of which are directed to lens assemblies for cameras, permitting a compact size suitable for incorporation in mobile telephones. U.S. Patent No. 6,961,191 ("the '191 patent"), entitled "Single Focus Lens," was granted by the U.S. Patent and Trademark Office ("PTO") on November 1, 2005. U.S. Patent No. 6,795,253 ("the '253 patent"), entitled "Imaging Lens," was issued on September 21, 2004.

The '191 patent contains the following "Background of the Invention," which has general relevance to both patents:

> In recent years, . . . with the development of higher performance mobile cellular telephones, portable modular cameras for mounting in such cellular telephones and providing picture image input have . . . become more common. . . .
>
> Advancements in the miniaturization of camera elements in recent years have allowed these cameras to be designed to be extremely miniaturized as a whole. . . .
>
> . . .
>
> . . . [A]lthough cost and compactness have been the primary requirements for the imaging lens of a portable modular camera, as advancements providing larger numbers of pixels in image pickup elements continue in portable modular cameras, the demand for improvement of optical performance has also increased recently.
>
> . . . The development of an imaging lens that is low in cost and which also has high performance is required, along with satisfying the requirements of compactness that enable mounting the imaging lens in, for example, a portable modular camera, as well as giving ample consideration to the optical performance for mounting the imaging lens in a digital camera.

> In response to such demands, a three-lens or a four-lens construction may be used in order to satisfy the requirements of compactness and low cost, and consideration can be given to the aggressive use of aspheric surfaces[1] in order to achieve higher performance.

'191 patent, col. 1 lines 4-66 (JCCC at M00425)

The "Brief Summary of the Invention" adds:

> The present invention relates to a single focus lens that can be compact, uses a small number of lens components and lens elements, can be manufactured at low cost, and can achieve high optical performance by particular use of aspheric lens surfaces. The present invention relates particularly to such a single focus lens that can be mounted in small image capturing devices.

Id. col. 2 lines 19-26 (JCCC at M00425)

The claims at issue are reproduced below, with emphasis added to show the disputed claim terms.[2]

1. <u>The '191 Patent</u>

Independent claim 1 of the '191 patent reads, in pertinent part:

> A single focus lens comprising, arranged along an optical axis in order from the object side:
>
> > a first lens component having positive refractive power and having a convex surface on the object side;
> >
> > ***a stop***;

---

[1]"Aspherical surfaces" are "curves that do not form part of a sphere." (D.I. 47 at 8)

[2]The parties have agreed upon constructions for a number of other terms. (D.I. 61 at 2, 8) I recommend that the Court adopt each of these undisputed constructions, which are included in the "Recommended Constructions" section at the end of this Report & Recommendation.

> a second lens component having a meniscus shape with a concave surface ***near the optical axis*** on the object side, being made of plastic, and having at least one aspheric surface;
>
> a third lens component having a meniscus shape, positive refractive power, a convex surface on the object side near the optical axis, an aspheric object-side surface, and an aspheric image-side surface . . . .

Id. col. 8 lines 24-54 (JCCC at M00428)

Dependent claims 17-20 contain another disputed term. Exemplary is claim 17, which reads, in pertinent part:

> The single focus lens of claim 1, wherein:
>
> both the object-side surface and the image-side surface of the second lens component are aspheric;
>
> ***within an effective aperture range of the single focus lens***, the absolute value of the negative refractive power of the object-side surface of the second lens component decreases in a direction from the optical axis toward the periphery of the second lens component and the positive refractive power of the image-side surface of the second lens component decreases in a direction from the optical axis toward the periphery of the second lens component; and
>
> ***within an effective aperture range of the single focus lens***, the positive refractive power of the object-side surface of the third lens component decreases in a direction from the optical axis toward the periphery of the third lens component.

Id. col. 9 lines 43-58 to col. 10 lines 1-2 (JCCC at M00429)

2. The '253 Patent

Independent claim 1 of the '253 patent reads, in pertinent part:

> An imaging lens comprising, in order from the object side and without any intervening lens components, the following:
>
> a first lens component of positive refractive power and a meniscus shape with its convex lens surface on the object side,
>
> a second lens component of positive refractive power and a meniscus shape with its convex lens surface on the image side; and
>
> a third lens component of negative refractive power and having a concave lens surface on the image side;
>
> wherein
>
> both lens surfaces of said third lens component are aspheric; and
>
> the negative refractive power of said third lens component gradually decreases from the ***center*** of said third lens component toward the periphery of said third lens component and the ***peripheral region*** of said third lens component has positive refractive power.

'253 patent, col. 8 lines 26-47 (JCCC at M00024)

LEGAL STANDARDS

"It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (internal quotation marks omitted). Construing the claims of a patent is a question of law. *See Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 977-78 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370, 388-90 (1996). "[T]here is no magic formula or catechism for

conducting claim construction." *Phillips*, 415 F.3d at 1324. Instead, the court is free to attach the appropriate weight to appropriate sources "in light of the statutes and policies that inform patent law." *Id.*

"[T]he words of a claim are generally given their ordinary and customary meaning . . . [which is] the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1312-13 (internal citations and quotation marks omitted). "[T]he ordinary meaning of a claim term is its meaning to the ordinary artisan after reading the entire patent." *Id.* at 1321 (internal quotation marks omitted). The patent 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." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

While "the claims themselves provide substantial guidance as to the meaning of particular claim terms," the context of the surrounding words of the claim also must be considered. *Phillips*, 415 F.3d at 1314. Furthermore, "[o]ther claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment . . . [b]ecause claim terms are normally used consistently throughout the patent . . . ." *Id.* (internal citation omitted).

It is likewise true that "[d]ifferences among claims can also be a useful guide . . . . For example, the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim." *Id.* at 1314-15 (internal citation omitted). This "presumption is especially strong when the limitation in dispute is the only meaningful difference between an independent and dependent claim, and one party is urging that the limitation in the dependent claim should be read into the independent

claim." *SunRace Roots Enter. Co. v. SRAM Corp.*, 336 F.3d 1298, 1303 (Fed. Cir. 2003).

It is also possible that "the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." *Phillips*, 415 F.3d at 1316. It bears emphasis that "[e]ven when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction." *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004) (internal quotation marks omitted), *aff'd*, 481 F.3d 1371 (Fed. Cir. 2007).

In addition to the specification, a court "should also consider the patent's prosecution history, if it is in evidence." *Markman*, 52 F.3d at 980. The prosecution history, which is "intrinsic evidence," "consists of the complete record of the proceedings before the PTO [Patent and Trademark Office] and includes the prior art cited during the examination of the patent." *Phillips*, 415 F.3d at 1317. "[T]he prosecution history 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.*

A court also may rely on "extrinsic evidence," which "consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Markman*, 52 F.3d at 980. For instance, technical dictionaries can assist the court in determining the meaning of a term to those of skill in the relevant art because such dictionaries "endeavor to collect the accepted meanings of terms used in various fields of science

and technology." *Phillips*, 415 F.3d at 1318. In addition, expert testimony can be useful "to ensure that the court's understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field." *Id.* Nonetheless, courts must not lose sight of the fact that "expert reports and testimony [are] generated at the time of and for the purpose of litigation and thus can suffer from bias that is not present in intrinsic evidence." *Id.* Overall, while extrinsic evidence "may be useful" to the court, it is "less reliable" than intrinsic evidence, and its consideration "is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." *Id.* at 1318-19.

Finally, "[t]he construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998). It follows that "a claim interpretation that would exclude the inventor's device is rarely the correct interpretation." *Osram GmbH v. Int'l Trade Comm'n*, 505 F.3d 1351, 1358 (Fed. Cir. 2007) (internal quotation marks omitted). Thus, if possible, claims should be construed to uphold validity. *See In re Yamamoto*, 740 F.2d 1569, 1571 (Fed. Cir. 1984).

CONSTRUCTION OF THE DISPUTED TERMS

A. "A stop"

The parties disagree as to the proper construction of "a stop" as that term is used in all the claims of the '191 patent. Fujinon contends that "a stop" should be construed as "an element with a hole or opening that blocks or limits light." Motorola contends, by contrast, that "a stop"

is "the aperture stop." I recommend that the Court adopt Fujinon's construction, though I reach that conclusion through a different process than Fujinon proposes.

I start with the language of the claim itself. Most important is the fact that nowhere do any of the claims of the '191 patent use the term "aperture stop." Instead, claim 1 (on which all of the other claims depend) states that the invention has "a stop."

This is crucial because, as both parties agree, in the field of optical design the term "a stop" applies to multiple types of stops and is not limited just to "aperture stops." That is, one of ordinary skill in the art of optical design would understand that "stop" denotes a genus, whereas "aperture stop" is a particular species within this broader genus. Other types of "stops" that are pertinent to this art include "glare stops" and "field stops."[3]

Turning next to the specification,[4] I conclude that the specification confirms that the inventor claimed the genus of "a stop" in the claims and did not narrow his claim to just

---

[3]*See, e.g.*, D.I. 66 Ex. 5, Warren J. Smith, *Modern Optical Engineering* 141 (3d ed. 2000) (hereinafter "*MOE*") ("In every optical system, there are apertures (or stops) which limit the passage of energy through the system. . . . One of these apertures will determine the diameter of the cone of energy which the system will accept from an axial point on the object. This is termed the *aperture stop* . . . . Another stop may limit the size or angular extent of the object which the system will image. This is called the *field stop*."); D.I. 47 at 14 (Motorola citing *MOE* in its tutorial); D.I. 66 Ex. 2, G. Smith, "Stops and Pupils," in *Encyclopedia of Optical Engineering* 2707 (Ronald G. Driggers ed., 2003) ("Stops are used in an optical system to control either the beam width from various points in the object (aperture stop), or the size of the field of view (field stop) or block stray light (glare stops or baffles)."); *id.* at 2715 ("There are three types of stops: aperture stops, fields stops, and stray light stops (baffles).").

[4]*See Phillips*, 415 F.3d at 1313 ("Importantly, the person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification."); *Vitronics*, 90 F.3d at 1582 (describing specification as "the single best guide to the meaning of a disputed term," adding "[u]sually, it is dispositive"). I have also considered the prosecution histories of both the '191 and '253 patents and find that they are relevant to the extent cited herein and at no point contradict the constructions I recommend.

"aperture stops." It is true, as Motorola emphasizes, that the inventor used "the stop" to refer to an "aperture stop" when describing prior art, *see* '191 patent, col. 1 lines 29-38 (JCCC at M00425); *see also* Markman Hearing Transcript (D.I. 81 and hereinafter "Tr.") at 29-33; and when describing a preferred embodiment of the patent, '191 patent, col. 5 lines 36-38 (JCCC at M00427). But the inventor did not carry this limitation into the claim itself. In other words, in the portions of the specification on which Motorola relies, the inventor is describing prior art or he is disclosing a preferred embodiment of his invention – but he is not there limiting his claim to only those embodiments in which the claimed "stop" is "the aperture stop." Even if the only "stop" in such prior art or preferred embodiment was an "aperture stop," it does not follow that when the inventor turned to the different task of drafting his claims he likewise used "a stop" to refer narrowly to "the aperture stop."

As Fujinon acknowledges, "There is no dispute that the preferred embodiment of the '191 patent *discloses* an aperture stop." (D.I. 72 at 27) However, the Federal Circuit has "repeatedly warned against confining the claims to those [specific] embodiments" disclosed in the specification. *Phillips*, 415 F.3d at 1323; *see also MBO Labs., Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 1333-34 (Fed. Cir. 2007) ("[P]atent coverage is not necessarily limited to inventions that look like the ones in the figures. To hold otherwise would be to import limitations onto the claim from the specification, which is fraught with danger.") (internal citation omitted); *Liebel-Flarsheim*, 358 F.3d at 906 ("Even when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction.") (internal quotation marks omitted). To take the discussion

of the "stop" in the prior art and preferred embodiment from the specification and import it as a restriction in the claims would run afoul of this principle of claim construction.

In this regard, it is particularly noteworthy that the specification also uses the term "aperture stop." The one (and only one) use of this term appears in the "Detailed Description," at the end of a paragraph that begins "[a] general description of preferred embodiments of the single focus lens of the present invention will now be described." '191 patent, col. 2 lines 46-65 (JCCC at M00425) The patent states: "The single focus lens further includes a diaphragm stop St between the first lens element G1 and the second lens element G2 that operates as an aperture stop." *Id.* col. 2 lines 63-65 (JCCC at M00425) Clearly, the inventor knew how to say "aperture stop" when he meant "aperture stop." That he chose in his claim instead to claim "a stop" indicates that he meant to claim something broader than the "aperture stop" that is part of the preferred embodiment.[5] As Fujinon persuasively argues, if the inventor had wanted to limit his patent to the preferred embodiment, which says "aperture stop," "he could easily have done so, but he did not. All he had to say in the claim was aperture stop. . . . [Y]ou don't use these words lightly in the patent claims. By making a broader term, you expose yourself to prior art. . . . When you change 'an aperture stop' in the second element to 'stop,' that can have significance." Tr. at 53.

This same sole reference to an "aperture stop" is enlightening for another reason as well.

---

[5]Motorola elsewhere recognizes the power of this reasoning. In connection with the '253 patent, in arguing that the disputed term "center" means "geometric center," and not "center region," Motorola observes that the inventor three times said "center" and one time said "center region." (D.I. 71 at 25) From this Motorola concluded: "The inventor knew to say 'center' when he meant 'center.' . . . The inventor knew to say 'central region' when he meant 'central region.'" *Id.*

In this sentence – "The single focus lens further includes a diaphragm stop St between the first lens element G1 and the second lens element G2 that operates as an aperture stop." – the inventor makes reference to two types of stops: "a diaphragm stop" and an "aperture stop." The patentee's use of both terms in one sentence shows his awareness of the genus-species relationship between "stop" and "aperture stop," revealing, again, the significance of his choice to use "a stop" in the claim.

As Motorola rightly points out, the process by which Fujinon reaches its proposed construction is flawed. Fujinon begins by selecting a non-technical dictionary (*Webster's Third New International Dictionary* (2002)), takes one of that dictionary's twelve definitions of "stop," and then modifies this dictionary definition by, among other things, excising the definition's reference to an "aperture stop." D.I. 66 Ex. 1 at 2251 (showing *Webster's* definition number 3(b)(1) of "stop" is "an opaque barrier for preventing the passage of light through certain portions of an optical system (as at the margin, in the axial zone, or in radial sectors); *specif*: the aperture of a camera lens"). Fujinon's approach – with its suggestion that a single general dictionary is more probative of the proper construction than the patent's specification – is inconsistent with *Phillips*. *See* 415 F.3d at 1321 ("[H]eavy reliance on the dictionary divorced from the intrinsic evidence risks transforming the meaning of the claim term to the artisan into the meaning of the term in the abstract, out of its particular context, which is the specification.").[6]

---

[6]Motorola correctly observes that, for purposes of construing the claims now before the Court, there is no significance to claim 1's use of the term "a stop" as opposed to "the stop." "The first time an element or part is mentioned, it should not be preceded by a definite article ('the') or by 'said.' Instead the indefinite article ('a' or 'an') should be used . . . ." (D.I. 71 Ex. B at M2294939 (Robert C. Faber, *Landis on Mechanics of Patent Claim Drafting* § 23 (4th ed 2002))) Fujinon's U.S. patent counsel admitted that claim 1 would have been rejected by the PTO if it had been written as "the stop." (D.I. 71 Ex. D at 156)

However, Motorola's support for its proposed construction is unpersuasive, procedurally as well as substantively. Motorola contends that the inventor was his own lexicographer, arguing that in the specification the inventor "explicitly define[d]" "a stop" as "an aperture stop." (D.I. 67 at 6) Motorola relies for its contention on the same sentence already quoted above, which contains the specification's only use of the term "aperture stop": "The single focus lens further includes a diaphragm stop St between the first lens element G1 and the second lens element G2 that operates as an aperture stop." '191 patent, col. 2 lines 63-65 (JCCC at M00425) But this sentence does not state a definition of "a stop" with "reasonable clarity, deliberateness, and precision," as is necessary when an inventor wishes to be his own lexicographer. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994).

Two other flaws plague Motorola's lexicographer argument. First, as noted above, the sentence on which Motorola relies appears at the end of a paragraph that begins: "[a] general description of preferred embodiments of the single focus lens of the present invention will now be described." '191 patent, col. 2 lines 47-49 (JCCC at M00425) Hence, the statement on which Motorola relies is a statement about the preferred embodiment, not a definition that extends to the claims. Second, and more importantly, the paragraph immediately after the sentence on which Motorola relies does clearly, deliberately, and precisely define <u>other</u> terms. Indeed, the sentence that begins that next paragraph states: "Definitions of the terms 'lens element' and 'lens component' that relate to this detailed description will now be given." *Id.* col. 2 lines 66-67 to col. 3 line 1 (JCCC at M00425-26) That paragraph continues by providing several express definitions: "The term 'lens element' is herein defined as . . . . The term 'lens component' is herein defined as . . . ." *Id.* col. 3 lines 1-18; *see also id.* col. 3 lines 46-48 ("The term 'near the

optical axis' is herein defined as . . . .") (JCCC at M00426). Plainly, the sentence on which Motorola relies is not written in the manner this inventor used to define terms in this patent.

Motorola also seeks to rely on the post-patent comments of the inventor, from which Motorola divines that the inventor intended "a stop" in claim 1 to mean "the aperture stop." *See* D.I. 67 at 18 ("[T]here cannot be any better extrinsic evidence on how the skilled artisan would construe the '191 Patent than the inventor's own unbiased words that describe his invention."); *see also* Tr. at 42 ("[W]e believe the most telling piece of extrinsic evidence is the inventor's own words in later patents."); D.I. 67 at 17-19 (discussing patents issued to '191 inventor, Kenichio Sato, subsequent to his '191 patent, in which Mr. Sato described his '191 patent). However, as *Phillips* explains, in construing claims "the court looks to those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean." 415 F.3d at 1314 (emphasis added; internal quotation marks omitted). The undisclosed, subjective intent of an inventor is not, by definition, available to the public, and would not (and could not) be relied on by one of skill in the art.[7]

Motorola also contends that it is common for persons of ordinary skill in the art of optical design to use "stop" to refer to "aperture stop." *See* Tr. at 44; D.I. 77 Ex. J (Warren J. Smith, *Practical Optical System Layout* 49 (1997) ("Often the aperture stop is referred to simply as 'the

[7]The case Motorola cites to support its reliance on Mr. Sato's subsequent comments regarding his '191 patent, *Howmedica Osteonics Corp. v. Wright Med. Tech., Inc.*, 540 F.3d 1337, 1347 n.5 (Fed. Cir. 2008), states only that "[t]he testimony of an inventor, of course, may be pertinent as a form of expert testimony, for example, as to understanding established meaning of particular terms in the relevant art." *Howmedica* does not say that also pertinent is an inventor's factual testimony as to how the inventor intended a particular term to be understood. *See also E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1370 n.5 (Fed. Cir. 2003) ("[T]his court has often repeated that inventor testimony is of little probative value for purposes of claim construction.").

stop.'"). However, this extrinsic evidence is not enough to overcome the persuasive intrinsic evidence, cited above, which convinces me that, in the specific context of the '191 patent's claims, "a stop" refers to the genus of optical "stops" and is not limited to the species of "aperture stops."

Finally, Motorola argues that the disclosed invention cannot work unless the "stop" claimed in claim 1 is an aperture stop. According to Motorola, "The location of the aperture stop is critical in designing a lens system that has the telecentric properties touted by the inventor of the '191 Patent." D.I. 67 at 16; *see also* '191 patent, col. 4 lines 53-57 (noting "the requirements of orthogonality and telecentricity") (JCCC at M00426); *id.* col. 8 lines 24-54 (claim 1 requiring condition 1 to be satisfied) (JCCC at M00428); '191 Patent Notice of Allowability (examiner referring to "telecentric state") (JCCC at M00497). Whether or not this is correct as a matter of scientific reality, the relevant legal fact is that the invention claimed in claim 1 need not fulfill every – or even the central – purpose of the inventor's invention. *See Acumed LLC v. Stryker Corp.*, 483 F.3d 800, 805 (Fed. Cir. 2007) ("[Defendant's] argument is essentially an assertion that since the patent says broaching is desirable, the term 'curved' must be construed to cover only embodiments whose curvature allows them to be inserted into a broached hole . . . . That assertion is flawed: it is an attempt to import a feature from a preferred embodiment into the claims."), *cert. denied*, 128 S. Ct. 618 (2007); *E-Pass*, 343 F.3d at 1370 ("The court's task is not to limit claim language to exclude particular devices because they do not serve a perceived 'purpose' of the invention. Rather, the district court's function is to interpret claims according to their plain language unless the patentee has chosen to be his own lexicographer in the specification or has clearly disclaimed coverage during prosecution."). As Fujinon points out,

"telecentricity" does not appear in claim 1, or any other claim, and, "[w]hile a telecentric system (and the correction of distortion aberration) are mentioned as benefits of the invention, the examiner is clear that the reasons that he is allowing the claims is because of limitations present in the claims." (D.I. 72 at 24, 32)[8]

Motorola concedes that if the Court concludes, as I have, that the patentee claimed the entire genus of optical stops, then Fujinon's construction is appropriate. *See* Tr. at 26 (Motorola's counsel stating, "if the Court decides it's going to construe 'stop' to be the broad universe of all possible elements that are disclosed with 'stop' in their title anywhere in the art, then we do not have a problem with the definition that has been proposed by Fujinon"). Accordingly, I recommend that the Court construe "a stop" as "an element with a hole or opening that blocks or limits**[CORRECTED]** light."

B. "Near the optical axis"

The parties agree that "near the optical axis," as that term is used in claim 1 of the '191 patent, should be construed as "a central region that surrounds the optical axis but excludes a substantial peripheral region surrounding the central region." D.I. 61 at 6; *see also* '191 patent col. 3 lines 46-48 (JCCC at M00426). Motorola contends that this term, so construed, is indefinite under 35 U.S.C. § 112, ¶ 2. (D.I. 61 at 6; D.I. 66 at 19) As the parties have requested, I will defer consideration of indefiniteness until case-dispositive motions. *See* D.I. 63 at 3

[8]*See also* Tr. at 14-15 (Fujinon arguing: "When you are defining a claim in the patent law, you don't have to . . . claim a functioning structure. In fact, the '253 patent, which is very similar, doesn't even claim a stop until the dependent claims. . . . The claim does not have to meet all the features or all the objectives that are set forth in the specification. All it has to do is claim what the inventor claims is his elements and then determine whether or not that claim is clear.").

(Interim Status Report); *see also Ampex Corp. v. Eastman Kodak Co.*, 460 F. Supp.2d 541, 543 n.1 (D. Del. 2006) ("The validity of a claim is not an issue of claim construction . . . . I will not convert Defendants' claim construction argument into a motion for summary judgment.").

C. "Within an effective aperture range of the single focus lens"

Fujinon proposes that "within an effective aperture range of the single focus lens," as that term is used in claims 17-20 of the '191 patent, be construed as "the portion of the lens used for light transmission." Motorola proposes no construction, arguing that this claim term, as written, is indefinite under 35 U.S.C. § 112, ¶ 2. Motorola also faults Fujinon's proposed construction, largely because it appears to be built from general dictionary definitions.

Fujinon contends:

> The disputed term "within the effective aperture range" describes the area of the lens assembly where flattening in curvature occur[s]. As Federal Circuit precedent requires, Fujinon's claim construction analysis starts with the claim language itself. *See Phillips*, 415 F.3d at 1312. "Aperture" means "an opening or open space." (Ex. 1 at 99.) "Range" means "the space or extent included, covered or used." (*Id.* at 1880.) "Effective" means "capable of having its normal effect." (*Id.* at 724.) The normal effect of a lens is to transmit light. As a sum of its parts, "effective aperture range" means the extent of the open space of the lens that has the effect of transmitting light, or as simplified by Fujinon, the portion of the lens used for light transmission.

(D.I. 66 at 16-17)

I recommend that the Court adopt Fujinon's proposed construction. I am concerned that, as Motorola**[CORRECTED]** points out, Fujinon**[CORRECTED]** seems to have built its construction from separate definitions of three terms – "effective," "aperture," and "range" – found in a general dictionary (*Webster's*). However, Motorola has offered no alternative

construction and I see no reason in the instant circumstances to devise my own. Moreover, given that I recommend that the Court adopt Fujinon's proposed construction of "a stop," I believe that adoption of Fujinon's construction of "within an effective aperture range of the single focus lens" will satisfy Motorola's concern that this term be "construed consistently" with "a stop." (D.I. 71 at 19-20)

I will defer consideration of Motorola's indefiniteness contention until case-dispositive motions.

D. "Center"

During the Markman hearing, the parties reached agreement with respect to the meaning of the term "center" as it is used in claim 1 of the '253 patent. *See* Tr. at 64-65, 74. Accordingly, I recommend that the Court construe "center" as "the center region, including the geometric center."

E. "Peripheral region"

Finally, the parties disagree as to the meaning of "peripheral region," as that term is used in claim 1 of the '253 patent. Fujinon does not believe this term needs to be construed by the Court. *See* Tr. at 55, 58. If, however, the Court is to construe "peripheral region," Fujinon proposes the "outer" region or the area "located away from the center." *See id.* at 58. Motorola, on the other hand, contends that "peripheral region" is "an ambiguous term by . . . itself," making construction necessary. *Id.* at 68. Motorola proposes that "peripheral region" be construed as "the region outside 70% of the radius of the third lens."

I agree with Motorola that "peripheral region" is ambiguous and that the jury would be left confused without a construction of this term. Fujinon's proposed constructions do little to

reduce either the ambiguity or risk of confusion. I also agree with Motorola that the '253 patent indicates where the "peripheral region" is to be found: "outside 70% of the radius" of the lens. The Abstract states that "the peripheral region of the third lens component, outside 70% of its radius, has positive refractive power." '253 patent Abstract (JCCC at M00016); *see also Netcraft v. eBay*, 549 F.3d 1394, 1398 (Fed. Cir. 2008) (affirming district court's construction after finding support for it in patent's Abstract).

I do not agree, however, with Motorola's suggestion that the "peripheral region" must include the entirety of the area outside 70% of the radius. *See* Tr. at 71-72. According to Motorola, only the area from 71-100% is the "peripheral region;" subparts of that area are not, in Motorola's view, part of the "peripheral region." In other words, Motorola contends that if something happens in just the 91-100% area, for example, then that something is not happening in the "peripheral region." This is inconsistent with the specification, which explains that in the "peripheral region" the third lens component will have "positive refractive power," and adds that "the lens region that has positive refractive power is set at a relatively distant position from the optical axis X." '253 patent, col. 3 lines 58-60 & col. 4 lines 35-44 (emphasis added) (JCCC at M0007) These statements indicate that something happening in the positive refractive region "at a relatively distant position" from the optical axis X is happening in the peripheral region. Accordingly, I conclude that there is no basis to exclude from "peripheral region" any portion or subpart of the entire peripheral region.

Therefore, I recommend that the Court construe the "peripheral region" as "any portion of the region that begins outside 70% of the radius of the third lens."

RECOMMENDED CONSTRUCTIONS

For the reasons set forth above, I recommend that the Court adopt the following constructions:

1. "A stop," as that term is used in claims 1-20 of the '191 patent, be construed as "an element with a hole or opening that blocks or limits**[CORRECTED]** light."

2. As the parties have agreed, the term "near the optical axis," as used in claims 1-20 of the '191 patent, be construed as "a central region that surrounds the optical axis but excludes a substantial peripheral region surrounding the central region."

3. As the parties have agreed, the term "lens element," as used in claims 5, 7-9, 11-13, 15, 16, 19, and 20 of the '191 patent, be construed as "a single transparent mass of refractive material having two opposed refracting surfaces, which surfaces are positioned at least generally transversely of the optical axis of the single focus lens."

4. As the parties have agreed, the term "lens component," as used in claims 1-20 of the '191 patent and in claims 1-10 of the '253 patent, be construed as "(a) a single lens element spaced so far from any adjacent lens element that the spacing cannot be neglected in computing the optical image forming properties of the lens elements or (b) two or more lens elements that have their adjacent lens surfaces either in full overall contact or overall so close together that the spacings between adjacent lens surfaces of the different lens elements are so small that the spacings can be neglected in computing the optical image forming properties of the two or more lens elements."

5. "Center," as that term is used in claims 1-10 of the '253 patent, be construed as "the center region, including the geometric center."

6. "The peripheral region," as that term is used in claims 1-10 of the '191 patent, be construed as "any portion of the region that begins outside 70% of the radius of the third lens."

7. As the parties have agreed, the term "lens element," as used in claims 2 and 4 of the '253 patent, be construed as "a single transparent mass of refractive material having two opposed refracting surfaces, which surfaces are positioned at least generally transversely of the optical axis of the imaging lens."

8. As the parties have agreed, the term "diaphragm," as used in claims 5-8 of the '253 patent, be construed as "an element with a hole or opening that blocks or limits light."

This Report and Recommendation is filed pursuant to 28 U.S.C. § 636(b)(1)(B), Fed. R. Civ. P. 72(b)(1), and D. Del. LR 72.1. The parties may serve and file specific written objections **of no longer than ten (10) pages within ten (10) days after being served with a copy of this Report and Recommendation**. Fed. R. Civ. P. 72(b). The failure of a party to object to legal conclusions may result in the loss of the right to de novo review in the district court. *See Henderson v. Carlson*, 812 F.2d 874, 878-79 (3d Cir. 1987); *Sincavage v. Barnhart*, 171 Fed. Appx. 924, 925 n.1 (3d Cir. 2006). **A party responding to objections may do so within ten (10) days after being served with a copy of objections; such response shall not exceed ten (10) pages. No further briefing shall be permitted with respect to objections without leave of the Court.**

The parties are directed to the Court's Standing Order In Non-*Pro Se* Matters For Objections Filed Under Fed. R. Civ. P. 72, dated April 7, 2008, a copy of which is available on the Court's website, www.ded.uscourts.gov/StandingOrdersMain.htm.

Dated: September 11, 2009

Honorable Leonard P. Stark
UNITED STATES MAGISTRATE JUDGE