

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

INNOVATIVE DISPLAY	§	
TECHNOLOGIES LLC, et al.,	§	
<i>Plaintiffs,</i>	§	CASE NO. 2:14-CV-201-JRG
	§	(LEAD CASE)
v.	§	
HYUNDAI MOTOR CO., et al.,	§	
<i>Defendants.</i>	§	

MEMORANDUM OPINION AND ORDER

Before the Court are the opening brief filed by Plaintiffs Innovative Display Technologies LLC and Delaware Display Group LLC (collectively, “Plaintiff”) (Dkt. No. 216), the response filed by Defendants Hyundai Motor Company, Hyundai Motor Manufacturing Alabama, LLC, Kia Motors Manufacturing Georgia, Inc., Kia Motors America, Inc., Kia Motors Corporation, Mercedes-Benz U.S. International, Inc., Mercedes-Benz USA, LLC, Nissan Motor Co., Ltd., Nissan North America, Inc., Toyota Motor Corp., Toyota Motor Sales, U.S.A., Inc., Toyota Motor Manufacturing, Kentucky, Inc., Toyota Motor Manufacturing, Indiana, Inc., Toyota Motor Manufacturing, Texas, Inc., Toyota Motor Manufacturing, Mississippi, Inc., Subaru of Indiana Automotive, Inc., Gulf States Toyota, Inc., American Honda Motor Co., Inc., Honda of America Mfg., Inc., Honda Manufacturing of Alabama, LLC, Honda Manufacturing of Indiana, LLC, Sprint Spectrum L.P., Sprint Solutions, Inc., Boost Mobile, LLC, Virgin Mobile USA, L.P., BMW of North America, LLC, BMW Manufacturing Co., LLC, Volkswagen Group of America, Inc. and Volkswagen Group of America Chattanooga Operations, LLC (collectively, “Defendants”) (Dkt. No. 221), and Plaintiff’s reply (Dkt. No. 224).

The Court held a claim construction hearing on April 29, 2015.

Table of Contents

I. BACKGROUND.....	3
II. LEGAL PRINCIPLES	4
III. THE PARTIES' AGREED CONSTRUCTIONS.....	9
IV. CONSTRUCTION OF DISPUTED TERMS PREVIOUSLY CONSTRUED	10
A. “continuous side walls”.....	10
B. “transition region”	14
C. “an air gap between the film, sheet, plate or substrate and the panel member”	16
D. “predetermined”	20
E. “well defined optical elements or deformities” and “optical elements or deformities of well defined shape”.....	21
F. “pass through a liquid crystal display with low loss”	23
V. CONSTRUCTION OF DISPUTED TERMS NOT PREVIOUSLY CONSTRUED.....	26
A. “one or more secondary flat, angled, faceted or curved reflective or refractive surfaces”.	26
B. “in close proximity”	28
C. “positioned near,” “positioned near the light emitting surface . . . and air gap between,” and “positioning a film near”.....	31
D. “optical elements”	34
E. “facilitate better mixing of light rays within the cavity or recess”.....	37
F. “more in the width direction”	39
G. “output distribution defined by a greater width component than height component”.....	44
H. “greater cross-sectional width than thickness”	48
I. “edge of said panel assembly”.....	48
J. “for shining light through said panel member”	50
K. “one or more light emitting diodes along said light input surface for receiving light from said light emitting diodes and conducting the light from said edge for emission of the light from at least one of said sides”	52
VI. CONCLUSION.....	55

I. BACKGROUND

Plaintiff brings suit alleging infringement of United States Patents No. 7,300,194 (“the ’194 Patent”), 7,384,177 (“the ’177 Patent”), 7,404,660 (“the ’660 Patent”), 7,434,974 (“the ’974 Patent”), 7,537,370 (“the ’370 Patent”), and 8,215,816 (“the ’816 Patent”) (collectively, the “Display Patents”) and United States Patents No. 6,508,563 (“the ’563 Patent”) and 6,886,956 (“the ’956 Patent”) (collectively, the “Auto Patents”).

All of the Display Patents are titled “Light Emitting Panel Assemblies” and “relate to the field of backlights, which can be used, for example, to illuminate LCDs [(liquid crystal displays].” (Dkt. No. 216, at 1). All of the Display Patents claim priority to a common ancestor patent and bear an earliest priority date of June 27, 1995. The Display Patents, at least for purposes of the present claim construction proceedings, share a common written description and figures. The Abstract of the ’194 Patent is generally representative and states:

Light emitting assemblies include at least one light source and at least one film, sheet, plate or substrate having optical elements or deformities of well defined shape on at least one surface that have reflective or refractive surfaces for controlling the light output ray angle distribution of the emitted light. The film, sheet, plate or substrate may be positioned near the light emitting surface of a light emitting panel member with an air gap therebetween or over a cavity or recess in a tray through which light from a light source in the cavity or recess is emitted.

Both of the Auto Patents are titled “Light Emitting Panel Assemblies for Use in Automotive Applications and the Like.” Plaintiff submits that “[t]he Auto Patents generally relate to exterior auto lights such as taillights and headlights.” (Dkt. No. 216, at 1.) The ’563 Patent bears an earliest priority date of January 16, 1996. The ’956 Patent is a continuation of the ’563 Patent, and Plaintiff submits that the Auto Patents have “nearly identical written descriptions.” (Dkt. No. 216, at 1.) The Abstract of the ’563 Patent states:

Light emitting panel assemblies include in one form of the invention a light emitting panel member made of a transparent resiliently deformable elastomeric material that absorbs impact without breakage for use in automotive lighting applications of various types. In another form of the invention, a rigid light emitting panel member may be used with dome switches for switch area lighting or to backlight control buttons/key pads by providing holes or openings in the panel member for the control buttons/key pads. Also, a rigid light emitting panel member may be used as a structural member, and two or more such light emitting panel members may be stacked together and used to light an instrument panel or the like. One or more light sources may be mounted within one or more light transition areas adjacent one or more light input surfaces of the light emitting panel members. Also one or more light sources may be positioned adjacent one side of the light emitting panel members for causing light to shine through the panel members or through holes in the panel members for performing specified lighting functions.

Less than a year ago, the Court construed terms in the Display Patents in *Innovative Display Technologies LLC v. Acer Inc., et al.*, No. 2:13-CV-522, Dkt. No. 101, 2014 WL 4230037 (E.D. Tex. Aug. 26, 2014) (Payne, J.) (“Acer”),¹ objections overruled, Dkt. No. 219 (Dec. 15, 2014) (Gilstrap, J.). Acer also construed terms in United States Patent No. 6,755,547 (“the ’547 Patent”), which is related to the Display Patents but which is not asserted in the present case. Below, the Court divides the presently disputed terms into terms that the Court previously construed in Acer and terms that the Court has not previously construed, as Plaintiff has done in its briefing.

II. LEGAL PRINCIPLES

It is understood that “[a] claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using or selling the protected invention.” *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed. Cir. 1999). Claim construction is clearly an issue of law for the court to decide. *Markman v.*

¹ Citations to Acer herein are to the slip opinion, which Plaintiff has attached to its opening brief as Exhibit I.

Westview Instruments, Inc., 52 F.3d 967, 970-71 (Fed. Cir. 1995) (en banc), *aff'd*, 517 U.S. 370 (1996).

To ascertain the meaning of claims, courts look to three primary sources: the claims, the specification, and the prosecution history. *Markman*, 52 F.3d at 979. The specification must contain a written description of the invention that enables one of ordinary skill in the art to make and use the invention. *Id.* A patent's claims must be read in view of the specification, of which they are a part. *Id.* For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claims. *Id.* “One purpose for examining the specification is to determine if the patentee has limited the scope of the claims.” *Watts v. XL Sys., Inc.*, 232 F.3d 877, 882 (Fed. Cir. 2000).

Nonetheless, it is the function of the claims, not the specification, to set forth the limits of the patentee’s invention. Otherwise, there would be no need for claims. *SRI Int'l v. Matsushita Elec. Corp.*, 775 F.2d 1107, 1121 (Fed. Cir. 1985) (en banc). The patentee is free to be his own lexicographer, but any special definition given to a word must be clearly set forth in the specification. *Intellicall, Inc. v. Phonometrics, Inc.*, 952 F.2d 1384, 1388 (Fed. Cir. 1992). Although the specification may indicate that certain embodiments are preferred, particular embodiments appearing in the specification will not be read into the claims when the claim language is broader than the embodiments. *Electro Med. Sys., S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 1054 (Fed. Cir. 1994).

This Court’s claim construction analysis is substantially guided by the Federal Circuit’s decision in *Phillips v. AWH Corporation*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc). In *Phillips*, the court set forth several guideposts that courts should follow when construing claims. In particular, the court reiterated that “the claims of a patent define the invention to which the

patentee is entitled the right to exclude.” 415 F.3d at 1312 (quoting *Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc.*, 381 F.3d 1111, 1115 (Fed. Cir. 2004)). To that end, the words used in a claim are generally given their ordinary and customary meaning. *Id.* The ordinary and customary meaning of a claim term “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 1313. This principle of patent law flows naturally from the recognition that inventors are usually persons who are skilled in the field of the invention and that patents are addressed to, and intended to be read by, others skilled in the particular art. *Id.*

Despite the importance of claim terms, *Phillips* made clear that “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.” *Id.* Although the claims themselves may provide guidance as to the meaning of particular terms, those terms are part of “a fully integrated written instrument.” *Id.* at 1315 (quoting *Markman*, 52 F.3d at 978). Thus, the *Phillips* court emphasized the specification as being the primary basis for construing the claims. *Id.* at 1314-17. As the Supreme Court stated long ago, “in case of doubt or ambiguity it is proper in all cases to refer back to the descriptive portions of the specification to aid in solving the doubt or in ascertaining the true intent and meaning of the language employed in the claims.” *Bates v. Coe*, 98 U.S. 31, 38 (1878). In addressing the role of the specification, the *Phillips* court quoted with approval its earlier observations from *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998):

Ultimately, the interpretation to be given a term can only be determined and confirmed with a full understanding of what the inventors actually invented and intended to envelop with the claim. The 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.

Phillips, 415 F.3d at 1316. Consequently, *Phillips* emphasized the important role the specification plays in the claim construction process.

The prosecution history also continues to play an important role in claim interpretation. Like the specification, the prosecution history helps to demonstrate how the inventor and the United States Patent and Trademark Office (“PTO”) understood the patent. *Id.* at 1317. Because the file history, however, “represents an ongoing negotiation between the PTO and the applicant,” it may lack the clarity of the specification and thus be less useful in claim construction proceedings. *Id.* Nevertheless, the prosecution history is intrinsic evidence that is relevant to the determination of how the inventor understood the invention and whether the inventor limited the invention during prosecution by narrowing the scope of the claims. *Id.*; see *Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1350 (Fed. Cir. 2004) (noting that “a patentee’s statements during prosecution, whether relied on by the examiner or not, are relevant to claim interpretation”).

Phillips rejected any claim construction approach that sacrificed the intrinsic record in favor of extrinsic evidence, such as dictionary definitions or expert testimony. The *en banc* court condemned the suggestion made by *Texas Digital Systems, Inc. v. Telegenix, Inc.*, 308 F.3d 1193 (Fed. Cir. 2002), that a court should discern the ordinary meaning of the claim terms (through dictionaries or otherwise) before resorting to the specification for certain limited purposes.

Phillips, 415 F.3d at 1319-24. According to *Phillips*, reliance on dictionary definitions at the expense of the specification had the effect of “focus[ing] the inquiry on the abstract meaning of words rather than on the meaning of claim terms within the context of the patent.” *Id.* at 1321.

Phillips emphasized that the patent system is based on the proposition that the claims cover only the invented subject matter. *Id.*

Phillips does not preclude all uses of dictionaries in claim construction proceedings.

Instead, the court assigned dictionaries a role subordinate to the intrinsic record. In doing so, the court emphasized that claim construction issues are not resolved by any magic formula. The court did not impose any particular sequence of steps for a court to follow when it considers disputed claim language. *Id.* at 1323-25. Rather, *Phillips* held that a court must attach the appropriate weight to the intrinsic sources offered in support of a proposed claim construction, bearing in mind the general rule that the claims measure the scope of the patent grant.

The Supreme Court of the United States “read[s] [35 U.S.C.] § 112, ¶ 2 to require that a patent’s claims, viewed in light of the specification and prosecution history, inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2129 (2014); *see Biosig Instruments, Inc. v Nautilus, Inc.*, --- F.3d ----, 2015 WL 1883265, at *4 (Fed. Cir. Apr. 27, 2015). “A 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.” *Datamize, LLC v. Plumtree Software, Inc.*, 417 F.3d 1342, 1347 (Fed. Cir. 2005) (citations and internal quotation marks omitted), *abrogated on other grounds by Nautilus*, 134 S. Ct. 2120.

In general, prior claim construction proceedings involving the same patents-in-suit are “entitled to reasoned deference under the broad principals of *stare decisis* and the goals articulated by the Supreme Court in *Markman*, even though *stare decisis* may not be applicable *per se.*” *Maurice Mitchell Innovations, LP v. Intel Corp.*, No. 2:04-CV-450, 2006 WL 1751779, at *4 (E.D. Tex. June 21, 2006) (Davis, J.); *see TQP Development, LLC v. Inuit Inc.*, No. 2:12-

CV-180, 2014 WL 2810016, at *6 (E.D. Tex. June 20, 2014) (Bryson, J.) (“[P]revious claim constructions in cases involving the same patent are entitled to substantial weight, and the Court has determined that it will not depart from those constructions absent a strong reason for doing so.”); *see also Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831, 839-40 (2015) (“prior cases will sometimes be binding because of issue preclusion and sometimes will serve as persuasive authority”) (citation omitted).

The Court nonetheless conducts an independent evaluation during claim construction proceedings. *See, e.g., Texas Instruments, Inc. v. Linear Techs. Corp.*, 182 F. Supp. 2d 580, 589-90 (E.D. Tex. 2002); *Burns, Morris & Stewart Ltd. P'ship v. Masonite Int'l Corp.*, 401 F. Supp. 2d 692, 697 (E.D. Tex. 2005); *Negotiated Data Solutions, Inc. v. Apple, Inc.*, No. 2:11-CV-390, 2012 WL 6494240, at *5 (E.D. Tex. Dec. 13, 2012).

III. THE PARTIES’ AGREED CONSTRUCTIONS

The Parties have agreed to the following constructions:

<u>Term</u>	<u>Agreed Construction</u>
“deformities” (‘194 Patent, Claims 1, 16, 28, 31; ‘660 Patent, Claims 1, 33; ‘974 Patent, Claims 1, 7, 13; ‘370 Patent, Claims 1, 4, 8, 13, 29, 47; ‘816 Patent, Claim 1; ‘177 Patent, Claim 14)	“any change in the shape or geometry of a surface and/or coating or surface treatment that causes a portion of the light to be emitted”
“vary randomly” (‘177 Patent, Claim 26; ‘370 Patent, Claim 37)	Plain meaning

“posts, tabs, or other structural features that provide a mount” (’974 Patent, Claims 1, 7)	Plain meaning
“transreflector” (’563 Patent, Claim 9)	Plain meaning
“pattern of deformities” (’660 Patent, Claims 1, 33)	“a pattern of deformities, including, but not limited to, a random placement pattern or a variable pattern”
“pattern of light extracting deformities” (’974 Patent, Claims 1, 7, 13; ’370 Patent, Claims 1, 13, 29, 47; ’816 Patent, Claim 1)	“a pattern of deformities, including, but not limited to, a random placement pattern or a variable pattern”
“pattern of individual optical elements” (’196 Patent, Claim 1)	“a pattern of individual optical elements including, but not limited to, a random placement pattern or a variable pattern”

(Dkt. No. 202, 2/20/2015 P.R. 4-3 Joint Claim Construction and Prehearing Statement, at 3-4;

Dkt. No. 228, 4/15/2015 P.R. 4-5 Joint Claim Construction Chart, at 3-4.)

IV. CONSTRUCTION OF DISPUTED TERMS PREVIOUSLY CONSTRUED

A. “continuous side walls”

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain meaning	“side walls free of discontinuities”

(Dkt. No. 216, at 2; Dkt. No. 221, at 20-21.) The parties submit that this disputed term appears

in Claims 1 and 15 of the ’177 Patent.

(1) The Parties’ Positions

Plaintiff argues that Defendants’ proposal should be rejected for the same reasons the Court rejected the proposal of “free of breaks” in *Acer*. (Dkt. No. 216, at 2.)

Defendants respond that what is shown in Figure 6 “is the only tray depicted,” and Defendants cite prosecution history involving the “Kitizawa” reference that was addressed in *Acer*. (Dkt. No. 221, at 21-22; *see Acer* at 15-16.)

Plaintiff replies that “Defendants’ ‘free of discontinuities’ construction is essentially the same one the Court already rejected [in *Acer*] (‘free of breaks’).” (Dkt. No. 224, at 1.)

(2) Analysis

Defendants urge:

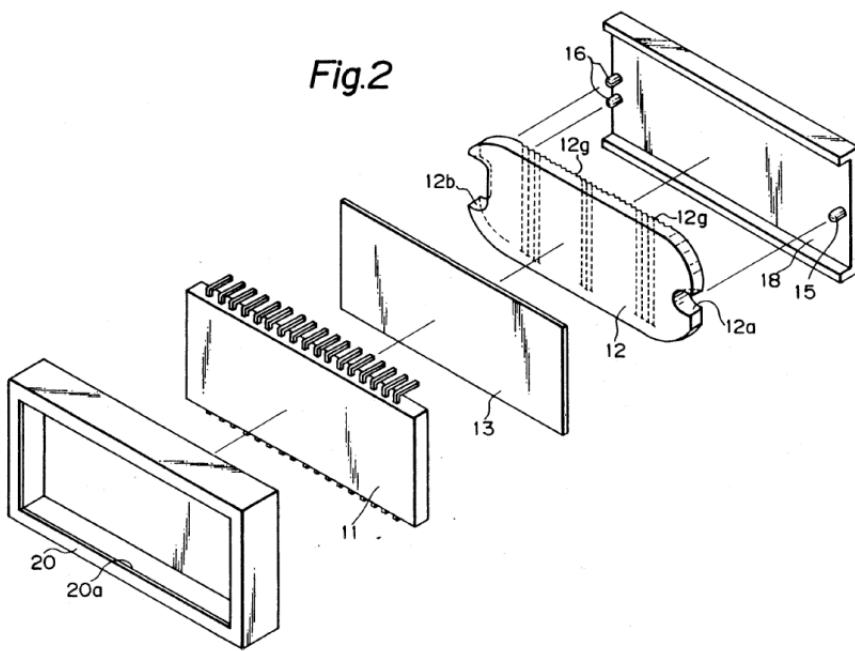
[T]he applicant amended claims 1 and 15 to further limit the tray to one “having a back wall and continuous side walls that forms form a hollow cavity or recess completely surrounded by the side walls.” [(Dkt. No. 221,) Ex. 16, IDT0000278-287. And, the applicant argued, *inter alia*, that “the so-called tray 12 of Kitazawa does not have a back wall and continuous side walls that form a hollow cavity or recess completely surrounded by the side walls. . . .” *Id.* The applicant, thus, relied on the continuous side walls disclosed in Figure 6 of the specification, side walls free of discontinuities, to distinguish over the prior art.

(Dkt. No. 221, at 21 (additions underlined and deletions in strikethrough, as in original; italics omitted).)

In *Acer*, the defendants proposed construing this disputed term to mean “uninterrupted walls that are free of breaks on the side of the tray.” The Court found:

As for the prosecution history, the patentee added the term “continuous side walls,” as well as the phrase “completely surrounded by the side walls,” in response to a rejection based on United States Patent No. 5,070,431 (“Kitazawa”). *See* [No. 2:13-CV-522,] Dkt. No. 75, Ex. H, 1/22/2008 Reply to Office Action of October 3, 2007, at 2 (p. 56 of 94 of Ex. H). The patentee stated: “[I]t is respectfully submitted that the so-called tray 12 of Kitazawa does not have a back wall and continuous side walls that form a hollow cavity or recess completely surrounded by the side walls in which at least one light source is located, mounted or positioned as recited in claims 1 and 16 as amended.” *Id.* at 8 (p. 62 of 94 of Ex. H). Figure 2 of Kitazawa is reproduced here:

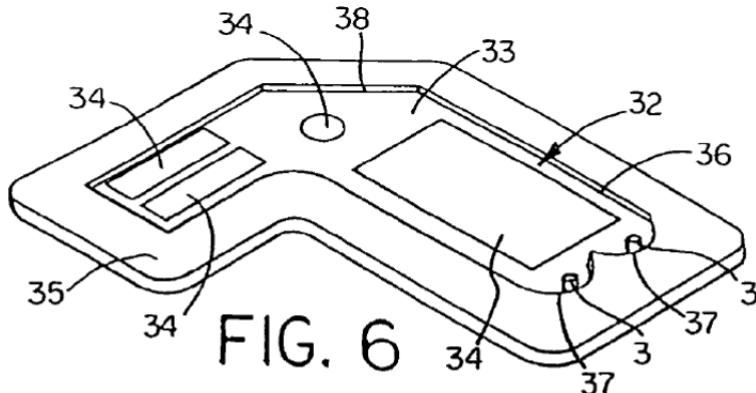
Fig.2



Because the “light guide plate 12” of Kitazawa (*see* Kitazawa at 2:27-3:45) includes “recesses 12a and 12b” (*see id.* at 3:15-20) that are illustrated as being completely open-ended, the patentee’s statements distinguishing Kitazawa cannot be fairly read as requiring that “continuous” side walls must be uninterrupted, as Defendants here propose. *See Omega Eng’g v. Raytek Corp.*, 334 F.3d 1314, 1324 (Fed. Cir. 2003) (“As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public’s reliance on *definitive* statements made during prosecution.”) (emphasis added); *see also id.* at 1325-26 (“[F]or prosecution disclaimer to attach, our precedent requires that the alleged disavowing actions or statements made during prosecution be both *clear and unmistakable*”) (emphasis added).

Acer at 15-16. Defendants have not justified departing from this finding in *Acer*. (*See* Dkt. No. 221, at 21.) Indeed, the above-discussed “light guide plate 12” of Kitazawa, which the patentee referred to as a “so-called tray,” was apparently not a tray at all. *See Acer* at 15-16. *Acer* construed the term “continuous side walls” to have its plain meaning. *Id.* at 17.

Finally, Defendants rely on Figure 6 of the ’177 Patent as illustrating side walls that are free of discontinuities. Figure 6 is reproduced here:



Defendants' reliance on the illustration in Figure 6 is rejected as importing a limitation from a particular disclosed embodiment. *See MBO Labs. Inc. v. Becton, Dickinson & Co.*, 474 F.3d 1323, 1333 (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 [i]nto the claim[s] from the specification, which is fraught with danger.").

Defendants' proposed construction is therefore hereby expressly rejected, and no further construction is necessary. *See U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997) ("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."); *see also O2 Micro Int'l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1362 (Fed. Cir. 2008) ("[D]istrict courts are not (and should not be) required to construe every limitation present in a patent's asserted claims."); *Finjan, Inc. v. Secure Computing Corp.*, 626 F.3d 1197, 1207 (Fed. Cir. 2010) ("Unlike *O2 Micro*, where the court failed to resolve the parties' quarrel, the district court rejected Defendants' construction.").

The Court accordingly hereby construes "**continuous side walls**" to have its **plain meaning**.

B. “transition region”

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“a region configured to transmit light”	“an area used to make the transition from the light source to the light emitting area of the panel member [’370] / optical conductor [’660]” ²

(Dkt. No. 216, at 2; Dkt. No. 221, at 22 (square brackets Defendants’).) The parties submit that this disputed term appears in Claims 1, 3, 10, and 33 of the ’660 Patent and Claims 13 and 47 of the ’370 Patent.

(1) The Parties’ Positions

Plaintiff argues that Defendants’ proposal would improperly limit the disputed term to a particular embodiment in a manner that the Court rejected in *Acer*. (Dkt. No. 216, at 3.)

Defendants respond that they propose the construction proposed by Plaintiff in *Acer*. (Dkt. No. 221, at 22.) Defendants urge that the “transition region” is “the area after the light source but before the light emitting region,” and “[t]he specifications of both patents confirm that the transition region receives light from the light source and transmits that light to the light emitting portion.” (*Id.*, at 23.) Defendants conclude:

The Court should not adopt the *Acer* construction—“region configured to transmit light”—because it is overbroad and omits the structure and function implicit in the term. The prior construction encompasses *any region* in the light emitting assembly configured to transmit light, which is so broad it could encompass the light source and the light emitting portion of the light guide. Defendants’ construction appropriately differentiates between the light source, the transition region, and the light emitting portion according to the patent’s disclosure.

² The word “used” appears in Defendants’ proposal in the parties’ February 20, 2015 P.R. 4-3 Joint Claim Construction and Prehearing Statement (Dkt. No. 200, at 9) and in the parties’ April 15, 2015 P.R. 4-5 Joint Claim Construction Chart (Dkt. No. 228, at 4) but does not appear in Defendants’ proposal in their response brief (Dkt. No. 221, at 22).

(*Id.*, at 24.) Defendants have also submitted expert opinion. (*See id.*, Ex. 3, 3/3/2015 Gillespie Decl., at ¶ 48 (“Since light from the source is often emitted over a broad range of angles, it is necessary to constrain the light for injection into the light guide’s emission zone. The region where this takes place is typically termed the entry zone or, in the Display Patents and [Auto] Patents, the ‘transition area.’”).)

Plaintiff replies that “the claim limitations themselves demarcate the transition region from the light source and light emitting area, by claiming them all as separate limitations.” (Dkt. No. 224, at 1.)

(2) Analysis

In *Acer*, the Court rejected the defendants’ proposal to require that a “transition region” is “a region that *spreads* and transmits light.” *See Acer* at 18-22 (emphasis added). The Court in *Acer* nonetheless did not adopt Plaintiff’s proposal of plain meaning or Plaintiff’s alternative proposed construction (which is the construction proposed here by Defendants). *See id.* Instead, the Court arrived at a construction based upon a review of the specification. *See id.* (citing ’547 Patent at 2:62-3:7 & 7:13-31). The Court construed this disputed term to mean “a region configured to transmit light” (*Acer* at 22), and Plaintiff proposes that the Court adopt the *Acer* construction in the present case.

The Summary of the Invention of the ’660 Patent states:

Referring now in detail to the drawings, and initially to FIG. 1, there is schematically shown . . . a light transition member or area 4 used to *make the transition from the light source 3 to the light emitting panel 2*, as well known in the art.

’660 Patent at 2:59-66 (emphasis added).

Figures 10 and 11 of the ’370 Patent and the ’660 Patent purportedly show a transition area 63 that transmits light to a light output area 62. *See ’660 Patent at 7:55-8:5.* Defendants

also submit that Figure 3 of the '370 Patent and the '660 Patent shows that transition areas 12 emit light "into the light input surface 19 of the light emitting panel 14." '660 Patent at 3:39-50.

The thrust of Defendants' argument thus appears to be that a "transition region" must be distinct from both a light source and a light emitting area. Defendants have failed to justify limiting the disputed term to particular illustrations. *See MBO Labs.*, 474 F.3d at 1333 ("[P]atent coverage is not necessarily limited to inventions that look like the ones in the figures."). Also of note, although Defendants' brief cites Figure 10 and annotates the figure with a line drawn around transition area 63 (Dkt. No. 221, at 23), no such demarcation line appears in Figure 10 in the patents.³

Thus, to the extent Defendants maintain that the disputed term necessarily refers to a structure distinct from a light source and a light emitting area, the Court hereby expressly rejects Defendants' proposed construction. Likewise, to whatever extent Defendants are proposing that a "transition region" cannot emit any light, the Court hereby rejects any such argument as unsupported. Nonetheless, the construction should specify what the "transition" is from and to.

The Court accordingly hereby construes "**transition region**" to mean "**a region configured to transmit light from a light source to a light emitting area.**"

C. "an air gap between the film, sheet, plate or substrate and the panel member"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
Plain meaning	"the film, sheet, plate or substrate and the panel member are held apart and do not fit snugly together"

³ Finally, both sides have cited *Textron Innovations Inc. v. Am. Eurocopter Corp.*, 498 F. App'x 23, 28 (Fed. Cir. 2012) ("In certain circumstances functional language may be used to add limitations to an apparatus claim."). *Textron* has not significantly impacted the Court's analysis here.

(Dkt. No. 216, at 3; Dkt. No. 221, at 24.) The parties submit that this disputed term appears in Claim 1 of the '194 Patent.

(1) The Parties' Positions

Plaintiff argues that Defendants are attempting to “import limitations into claims with no basis in either the intrinsic or extrinsic evidence.” (Dkt. No. 216, at 4.) In particular, Plaintiff submits that “Defendants mistakenly rely upon statements made in the prosecution of a *different* Display Patent that were directed to a claim with an important difference in its claim language.”

(*Id.*)

Defendants respond that “[t]he patentee indicated that no air gap exists when two surfaces fully adhere to one another.” (Dkt. No. 221, at 25 (citing '194 Patent at 3:60-62 & 6:39-51).) Defendants also cite prosecution history of related patent applications. (*See id.*, at 25-26.)

Plaintiff replies that the prosecution history cited by Defendants is either inapplicable or was rejected by the Court in *Acer*. (Dkt. No. 224, at 1-2.)

(2) Analysis

In *Acer*, the Court construed this disputed term to have its plain meaning. *See Acer* at 30-35.

As for the prosecution history, Defendants have cited the “Hou” reference, United States Patent No. 6,129,439, which the Court addressed in *Acer*. (*See* Dkt. No. 221, Ex. 21, 8/5/2003 Reply to Office Action, at 11 (IDT000044); *see also Acer* at 33-34.) For the same reasons set forth in *Acer*, the Court finds that the prosecution history involving *Hou* does not warrant finding any disclaimer or otherwise narrowing the meaning of the disputed term as proposed by Defendants. *See id.*

Defendants have also cited prosecution history of the '974 Patent in which the patentee distinguished the "Sakuma" reference (United States Patent No. 5,184,888) in which, the patentee stated, components "fit snugly." (Dkt. No 221, Ex. 23, 8/8/2008 Reply to Final Office Action, at 10 (IDT0000567).) There, however, the relevant claim language recited that "at least one of a tab, hole, cavity, or protrusion holds the additional component away from the panel member to create an air gap between the panel member and the additional component." *Id.* Claim 1 of the '194 Patent does not require a tab, hole, cavity, or protrusion. The '974 Patent prosecution history cited by Defendants thus does not warrant finding any disclaimer or otherwise narrowing the meaning of the disputed term as proposed by Defendants.

The remaining prosecution history⁴ cited by Defendants involves the "Ohtsuki" reference, United States Patent No. 5,786,665. The patentee stated:

According to the Examiner, Figs. 20b or 23a of Ohtsuki disclose a transparent member 80 overlying the LED light sources 74 in spaced relation therefrom to provide an air gap therebetween. Although an air gap is shown in these two figures, as column 21, lines 1-11 of Ohtsuki makes clear, the LED lamps 70 and the block-shaped member 91 are pressed on the transparent gel layer 80 formed on the light incident surface 50a of the light directing plate 50 so as to be held closely in contact therewith to eliminate an air layer between the light directing plate 50 and the LED lamps. Thus there is no open gap between the light source and the transparent member for mixing of the light before passing through the transparent member

(Dkt. No. 221, Ex. 20, 8/26/2005 Reply to Office Action, at 10.)

Even if this prosecution history is read as meaning that "held closely in contact" refers to the absence of an air gap, it does not necessarily follow that the presence of an air gap between

⁴ Defendants submit that this prosecution history is of a related patent, United States Patent No. 7,077,544, which is a divisional of United States Patent No. 6,712,481. The '194 Patent is a divisional of United States Patent No. 6,712,481. See *Omega Eng'g*, 334 F.3d at 1333-34 (prosecution history of related patents may be relevant where there is "a common term in dispute").

two surfaces requires that those surfaces be “held apart,” as Defendants have proposed. For example, Defendants’ argument presumably breaks down if the surfaces at issue have bumps or are otherwise not flat. Of note, *Acer* addressed this issue and rejected the defendants’ proposal of “no direct physical contact.” *See Acer* at 31-35, esp. at 35 (“Defendants have failed to identify any persuasive reason for finding that a point of contact defeats the existence of an air gap. Instead, as Plaintiff has argued, points of contact may indeed facilitate maintaining an air gap.”).

On balance, the prosecution history submitted by Defendants is not sufficiently clear to warrant finding any disclaimer or otherwise narrowing the meaning of the disputed term as proposed by Defendants. *See Golight, Inc. v. Wal-Mart Stores, Inc.*, 355 F.3d 1327, 1332 (Fed. Cir. 2004) (“Because the statements in the prosecution history are subject to multiple reasonable interpretations, they do not constitute a clear and unmistakable departure from the ordinary meaning of the term ‘rotating.’”); *see also Omega Eng’g*, 334 F.3d at 1324 (“As a basic principle of claim interpretation, prosecution disclaimer promotes the public notice function of the intrinsic evidence and protects the public’s reliance on *definitive* statements made during prosecution.”) (emphasis added); *id.* at 1325-26 (“[F]or prosecution disclaimer to attach, our precedent requires that the alleged disavowing actions or statements made during prosecution be both *clear and unmistakable*”) (emphasis added).

Finally, Defendants’ proposal of “held apart and do not fit snugly together” would tend to confuse rather than clarify the scope of the claims. For example, presumably two *non-flat* sheets could be held “snugly” together such that some portions would be in contact while other portions would be held apart.

Defendants' proposed construction is therefore hereby expressly rejected, and no further construction is necessary. *See U.S. Surgical*, 103 F.3d at 1568; *see also O2 Micro*, 521 F.3d at 1362; *Finjan*, 626 F.3d at 1207.

The Court accordingly hereby construes “**an air gap between the film, sheet, plate or substrate and the panel member**” to have its **plain meaning**.

D. “predetermined”

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“fixed”	Plain and ordinary meaning

(Dkt. No. 216, at 5; Dkt. No. 221, at 28.) The parties submit that this disputed term appears in Claims 1, 13, 29, and 47 of the ’370 Patent, Claims 1 and 33 of the ’660 Patent, and Claim 1 of the ’177 Patent.

(1) The Parties’ Positions

Plaintiff argues that “Defendants[’] ‘plain meaning’ construction runs the risk that that [sic] the jury may improperly interpret this term as ‘chosen in advance,’ or some other similar construction that would import a process limitation into apparatus claims or require an unnecessary actor or choice.” (Dkt. No. 216, at 5.)

Defendants respond that the Court’s construction in *Acer*, proposed here by Plaintiff, was based on extrinsic dictionary definitions, and Defendants note that Plaintiff has not submitted any evidence at all as to this disputed term in the present case. (Dkt. No. 221, at 28-29.) Defendants urge that “[a]bsent any evidence, intrinsic or otherwise, that ‘predetermined’ means ‘fixed,’ the term’s plain and ordinary meaning controls.” (*Id.*, at 29.)

Plaintiff replies that Defendants have shown no reason why the Court should depart from its prior construction. (Dkt. No. 224, at 2.)

(2) Analysis

In *Acer*, the Court construed “predetermined” to mean “fixed,” and reasoned as follows in rejecting the defendants’ proposal of “chosen in advance”:

Plaintiff properly objects that the word “chosen” may raise issues as to who does the choosing. Likewise, the phrase “in advance” may raise issues as to “in advance” of what. Nonetheless, the above-quoted dictionary definitions suggest that “predetermined” means “fixed,” and at the July 30, 2014 hearing, Plaintiff was amenable to such a construction, at least in principle. Further, such a construction gives meaning to the prefix “pre-” by requiring a degree of immutability that the word “determined” might not by itself demand.

Acer at 42; *see id.* at 41 (citing dictionary definitions submitted by the defendants). Defendants have not justified departing from the *Acer* construction.

The Court therefore hereby construes “**predetermined**” to mean “**fixed**.”

E. “well defined optical elements or deformities” and “optical elements or deformities of well defined shape”

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“well defined” means “distinct” (otherwise, plain meaning)	Indefinite

(Dkt. No. 216, at 6; Dkt. No. 221, at 8-9.) The parties submit that these disputed terms appear in Claims 1, 16, 28, and 31 of the ’194 Patent.

(1) The Parties’ Positions

Plaintiff argues that the Court should reject Defendants’ indefiniteness argument for the same reasons as in *Acer*. (Dkt. No. 216, at 6.)

Defendants respond:

While the specification and figures 4a-4d provide examples of *deformities* on the panel member (*i.e.*, “dots, squares, diamonds, ellipses, stars, random shapes, and the like,” and “prismatic surfaces, depressions or raised surfaces of various shapes[,]” Ex. 4, ’194 Patent, at 5:43-52; 5:67-6:17), and how *deformities* may be produced (“molded, etched, stamped, thermoformed, hot stamped or the like into or on one or more areas of the panel member,” *id.*), the specification never

distinguishes between “*deformities*” and “*well defined deformities*.¹” See Gillespie Decl., ¶¶168-171.

(Dkt. No. 221, at 8.) Defendants also argue that interpreting “well-defined” as meaning “distinct” does not avoid indefiniteness because “a person of ordinary skill in the art at the time of the alleged invention would have no sure way of delineating between films that have optical elements or deformities that are ‘distinct’ or of a ‘distinct shape,’ and those that do not contain ‘distinct’ features.” (*Id.*, at 9.) In other words, Defendants argue, “‘distinct’ is just as ambiguous as ‘well defined,’ and again lacks support in the specification.” (*Id.* (citing *MediaTek, Inc. v. Sanyo Electric Co.*, 513 F. Supp. 2d 778, 791 (E.D. Tex. 2007))).

Plaintiff replies that “Defendants restate the same argument that the Court rejected [in *Acer*], namely that ‘distinct’ is just as ambiguous as ‘well defined.’” (Dkt. No. 224, at 2 (internal quotation marks omitted).)

(2) Analysis

In *Acer*, the Court found:

The best reading of the claims, in light of the above-quoted passages from the specification, is that the patentee used “well defined” to mean “distinct.” See *Phillips*, 415 F.3d at 1314 (“In some cases, the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.”). At the July 30, 2014 hearing, Plaintiff stated that it accepted and agreed with the Court’s preliminary construction in this regard. Such a construction gives proper meaning to “well defined” in the context of the claims by distinguishing deformities from, for example, a gradual change in thickness (or some other property) across the entire claimed panel or plate.

Such a construction also comports with the extrinsic dictionary definitions cited by Plaintiff, which define “well-defined” as meaning “having clearly distinguishable limits or boundaries.” [No. 2:13-cv-522,] Dkt. No. 69, Ex. C, *The Merriam-Webster Dictionary* 599 (1998); see *id.*, Ex. D, *Merriam-Webster’s Collegiate Dictionary* 1338 (10th ed. 2002) (“having clearly distinguishable limits, boundaries, or features”).

Finally, as to the examiner’s use of the term “well defined” in the context of a prior art rejection, the examiner did not explain the meaning of the term, so the examiner’s remark is of limited weight.

Nonetheless, the examiner’s use of the term without objection provides further support for finding that “well defined” has a readily understandable meaning in the context of the claims and the specification.

Acer at 46-47 (citations omitted); *see also Acer* at 45-46 (citing ‘547 Patent at 5:41-50 & 5:65-6:16).)

Acer thus construed “well defined” to mean “distinct” and found no further construction necessary. *Acer* at 47. On balance, Defendants have not justified departing from the findings reached in *Acer*. *See, e.g.*, ’194 Patent at 5:43-58 (disclosing examples of deformity shapes);⁵ *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1260 (Fed. Cir. 2014) (“For other terms like, for example, terms of degree, specific and unequivocal examples may be sufficient to provide a skilled artisan with clear notice of what is claimed.”); *Biosig*, 2015 WL 1883265, at *2, *5.

The Court therefore hereby construes “well defined” to mean “distinct.”

F. “pass through a liquid crystal display with low loss”

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
“[This term] does not limit the claims in which it appears.”	Indefinite

(Dkt. No. 216, at 8; Dkt. No. 221, at 3-4.) The parties submit that this disputed term appears in Claims 1 and 29 of the ’370 Patent and Claims 1, 16, and 28 of the ’194 Patent.

⁵ (*See also* Dkt. No. 216, Ex. L, 3/12/2015 Smith-Gillespie dep., at 77:22-78:10 (acknowledging that deformities illustrated in Figures 4B and 4C are “distinct”).)

(1) The Parties' Positions

Plaintiff argues that here as in *Acer*, the Court should find that this term is analogous to a non-limiting whereby clause. (Dkt. No. 216, at 8.) Alternatively, Plaintiff argues: “One of ordinary skill would further be informed of the scope of the term through the passage from the specification that discusses low loss, and would have understood the term to cover the situation when a more efficient light output is created by using deformities to cause light rays to emit at predetermined ray angles from the backlight panel.” (*Id.*, at 10 (citing ’194 Patent at 5:25-32).)

Defendants respond that this term is limiting because every word in a claim is presumed to have meaning and because “the patentee deliberately added it during prosecution specifically to secure allowance.” (Dkt. No. 221, at 4.) Defendants conclude that the disputed term “renders the claim indefinite because no objective basis is provided by which the public can judge the metes and bounds of the claims.” (*Id.*, at 5.) Specifically, Defendants submit that “the patent specification provides no standard or public notice as to what would constitute ‘*low loss*’ versus, e.g., *moderate* or *high* loss.” (*Id.*) Defendants also submit the opinion of their expert that “there was not a well-recognized industry-wide standard in 1995 for quantifying ‘loss’ of emitted light in liquid crystal displays, or that would allow a person of ordinary skill to characterize any such ‘loss’ of emitted light as ‘*low loss*,’ as opposed to loss that was not ‘*low loss*.’” (*Id.*, Ex. 3, 3/3/2015 Smith-Gillespie Decl., at ¶ 149.)

Plaintiff replies that “[t]he Court’s previous decision is supported by extensive case law explaining that a simple expression of intended result does not limit claims.” (Dkt. No. 224, at 3.)

(2) Analysis

In *Acer*, the Court found that “the specification reveals that the disputed term is a statement of an objective of the claimed invention.” *Acer* at 53 (citing ’547 Patent at 1:21-25, 1:64-2:2 & 5:23-30)⁶; *Acer* at 54 (“The . . . clause ‘such that the light will pass through a liquid crystal display with low loss’ merely states a result of the claim limitations and adds nothing to the substance of the claim.”). “The Court therefore conclude[d] that the ‘low loss’ term is analogous to a whereby clause and does not limit the claims in which it appears.” *Id.* (citing *Tex. Instruments Inc. v. U.S. Int'l Trade Comm'n*, 988 F.2d 1165, 1172 (Fed. Cir. 1993); *Lockheed Martin Corp. v. Space Sys./Loral, Inc.*, 324 F.3d 1308, 1319 (Fed. Cir. 2003)).

Although Defendants here argue that, in *Acer*, “Magistrate Judge Payne did not have the benefit of the opinion of one skilled in the art when deciding whether the term ‘low loss’ limited the claims in which it appears” (Dkt. No. 221, at 4 n.2), the extrinsic expert opinions and testimony cited by Defendants do not warrant departing from the conclusion reached in *Acer*. See *Phillips*, 415 F.3d at 1318-19. Finally, although Defendants have cited authority for the proposition that “when the ‘whereby’ clause states a condition that is material to patentability, it cannot be ignored in order to change the substance of the invention,” *Hoffer v. Microsoft Corp.*, 405 F.3d 1326, 1329 (Fed. Cir. 2005), Defendants have not demonstrated that the disputed term states a condition or limitation rather than an objective or result.

The Court therefore concludes that the “. . . with low loss” term does not limit the claims in which it appears, and no further construction is necessary.

⁶ These passages also appear in the ’194 Patent and the ’370 Patent.

V. CONSTRUCTION OF DISPUTED TERMS NOT PREVIOUSLY CONSTRUED

A. “one or more secondary flat, angled, faceted or curved reflective or refractive surfaces”

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain meaning	“reflective or refractive surfaces that reflect or refract a portion of the light around one or more corners or curves in a non-rectangular shaped tray”

(Dkt. No. 216, at 11; Dkt. No. 221, at 26-27.) The parties submit that this disputed term appears in Claims 1 and 15 of the ’177 Patent.

(1) The Parties’ Positions

Plaintiff argues that “Defendants have not shown that a clear indication exists in the intrinsic record that the inventor of the ’177 patent intended to limit this claim term to the written description of the embodiment shown in Figure 6.” (Dkt. No. 216, at 11.)

Defendants respond that “the inventor supplied his own definition for ‘secondary . . . surfaces’ with reference to Figure 6 (shown below): ‘[O]ne or more secondary reflective or refractive surfaces 38 may be provided on the panel member 33 and/or the tray 35 *to reflect a portion of the light around one or more corners or curves in a non-rectangular shaped panel member 33.*’” (Dkt. No. 221, at 27 (quoting ’177 Patent at 7:3-7) (emphasis Defendants’).)

Defendants urge, for example, that “while back reflectors direct the light back through the opposite side of the panel member, the distinct purpose of the secondary surface is to reflect around one or more corners or curves.” (Dkt. No. 221, at 28 (citing ’177 Patent at 6:18-29, 6:67-7:3, Fig. 5 & Abstract; citing Dkt. No. 221, Ex. 3, 3/3/2015 Smith-Gillespie Decl., at ¶¶ 86-87 & 185-189).)

Plaintiff replies that “Defendants’ argument confuses a description of a single embodiment with an explicit definition of a term.” (Dkt. No. 224, at 4.)

At the April 29, 2015 hearing, Defendants emphasized that the language of the disputed term matches disclosure in the specification that corresponds with Figure 6. Defendants also urged that because the claims separately recite a “back,” “side edge,” and “end edge” in addition to a “secondary” edge, the claims imply that the tray is not rectangular. Plaintiff replied that the disputed term refers to secondary surfaces, not secondary edges.

(2) Analysis

Defendants have cited Figure 6 and the accompanying description, but no lexicography or disclaimer is apparent. *See Bell Atl. Network Servs., Inc. v. Covad Commc’ns Grp., Inc.*, 262 F.3d 1258, 1268 (Fed. Cir. 2001) (“The specification acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication.”) (citation and internal quotation marks omitted); *see also Abbott Labs. v. Syntron Bioresearch, Inc.*, 334 F.3d 1343, 1354 (Fed. Cir. 2003) (“patentee’s lexicography must, of course, appear with reasonable clarity, deliberateness, and precision”) (citation and internal quotation marks omitted).

Instead, the claims merely use the term “secondary” to distinguish the “secondary . . . surfaces” from the recited “back, side edge, and end edge.” *See ’177 Patent at Claims 1 & 15*. The Court hereby expressly rejects Defendants’ proposal to limit the disputed term to the embodiment illustrated in Figure 6. *See MBO Labs.*, 474 F.3d at 1333 (“[P]atent coverage is not necessarily limited to inventions that look like the ones in the figures.”).

No further construction is necessary. *See U.S. Surgical*, 103 F.3d at 1568; *see also O2 Micro*, 521 F.3d at 1362; *Finjan*, 626 F.3d at 1207.

The Court accordingly hereby construes “**one or more secondary flat, angled, faceted or curved reflective or refractive surfaces**” to have its **plain meaning**.

B. “in close proximity”

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain meaning	Indefinite

(Dkt. No. 216, at 11; Dkt. No. 221, at 10.) The parties submit that this disputed term appears in Claim 7 of the ’177 Patent.

(1) The Parties’ Positions

Plaintiff notes that the defendants in *Acer* did not challenge the definiteness of this term, and “[t]he term ‘in close proximity’ is a simple term, and one of ordinary skill in the art would have had a common sense understanding of the scope of this term in light of the subject matter of the patent.” (Dkt. No. 216, at 13.)

Defendants respond that “[t]he intrinsic record provides no guidance as to when a light source is ‘in close proximity’ to ‘a group of the refractive or reflective surfaces.’” (Dkt. No. 221, at 10.)

Plaintiff replies: “Although Fig. 6 shows a reflective surface (37) in close proximity to a light source, Defendants argue that it is irrelevant because element 37 is allegedly not a *secondary* surface. But the mere use of the word ‘secondary’ in the claims does not render incomprehensible an otherwise easily understood example of a reflector in close proximity that is sufficient to disclose the full scope of the term.” (Dkt. No. 224, at 5.)

(2) Analysis

Claim 7 of the ’177 Patent depends from Claim 6, which in turn depends from Claim 1.

Claims 1, 6, and 7 recite (emphasis added):

1. A light emitting assembly comprising a tray having a back wall and continuous side walls that form a hollow cavity or recess completely surrounded by the side walls, at least one light source located, mounted or positioned in the cavity or recess, and at least one sheet, film or substrate overlying the assembly for

controlling the light emitted from the assembly to fit a particular application, wherein the tray acts as at least one of a back, side edge, and end edge reflector and has *one or more secondary flat, angled, faceted or curved reflective or refractive surfaces* to redirect at least a portion of the light emitted by the light source in a predetermined manner within the cavity or recess.

* * *

6. The assembly of claim 1 wherein there are at least two light sources located, mounted or positioned in the cavity or recess.

7. The assembly of claim 6 wherein each light source is positioned *in close proximity* to a group of the refractive or reflective surfaces.

The specification does not use the terms “close” or “proximity.” Defendants’ expert opines that a person of skill in the art would not have understood the scope of “in close proximity.” (Dkt. No. 221, Ex. 3, 3/3/2015 Smith-Gillespie Decl., at ¶¶ 11, 180, 194 & 196; *but see* Dkt. No. 216, Ex. L, 3/12/2015 Smith-Gillespie dep., at 82:9-14.) Plaintiff’s expert has stated that “in close proximity” is “a comparative judgment” and “no specific measurement applies.” (Dkt. No. 221, Ex. 2, 3/9/2015 Werner dep., at 88:5-9; *see id.*, at 89:7-9 (“‘Close proximity’ specifies things that are close relative to the overall structure or in the context of the overall structure.”).) Also, Plaintiff’s expert has testified that he could not determine, for example, whether elements 53 and 55 in Figure 9 of the ’177 Patent depict elements that are “in close proximity” to each other. (*Id.*, at 89:10-19.)

In some cases, “proximity” has been found indefinite. *See Abdou v. Alphatec Spine, Inc.*, No. 12-CV-1804, 2014 WL 6611422, at *9 (S.D. Cal. Nov. 19, 2014) (Benitez, J.) (finding that “in proximity to” “does not state with reasonable certainty what that proximity is”). The Court reached a similar conclusion in *Acer* as to the term “quite small.” *See Acer* at 47-51.

Yet, Plaintiff has cited several authorities finding that terms such as “near” or “close proximity” are not necessarily indefinite. *See Accentra, Inc. v. Staples, Inc.*, 500 F. App’x 922,

930-31 (Fed. Cir. 2013); *see also Young v. Lumenis, Inc.*, 492 F.3d 1336, 1345-46 (Fed. Cir. 2007); *Rosemount, Inc. v. Beckman Instruments, Inc.*, 727 F.2d 1540, 1547 (Fed. Cir. 1984); *Power-One, Inc. v. Artesyn Techs, Inc.*, 599 F.3d 1343, 1348 (Fed. Cir. 2010).

Further, in these cases, including *Accentra*, the court found sufficient context set forth in the claims and the specifications:

Nor do we believe that the use of the term “near” in the claims (“a pressing area near a front end of the handle”) renders the . . . patent indefinite. “Near” is a word whose meaning is dictated by context. We have previously held that the term “near” is not indefinite when used to denote a particular location and when the context does not create insoluble ambiguity. Staplers require leverage on the handle to operate and, as the patent makes clear, users typically apply pressure near the front of the handle, where the lever’s mechanical advantage is the greatest. In this context, we find that the term is sufficiently precise to describe the location of the area that is pressed to discharge staples. The word is used throughout the . . . patent in a variety of contexts, including in other claims. Consistent with its ordinary meaning, we construe it to mean “at or in the vicinity of.” Whatever play remains in that construction is not enough to render the patent indefinite.

Accentra, 500 F. App’x at 930-31 (citations and footnote omitted); *see Young*, 492 F.3d at 1345-46 (discussing disclosures in the specification and finding that, in the relevant art, “the term ‘near’ is not insolubly ambiguous and does not depart from the ordinary and customary meaning of the phrase ‘near’ as meaning ‘close to or at’”); *Rosemount*, 727 F.2d at 1547 (“close proximity” found not indefinite, the court noting the challenger’s “own ease in applying ‘close proximity’ to the prior art at trial and in its briefs here, the use of ‘close proximity’ in the claims of one of its references, its own use of ‘close proximity’ in describing its pH meters, its own witness’ statement that he had no trouble understanding the claims of the . . . patent, the specific acceptance of ‘close proximity’ by the examiner and by the industry, and the district court’s finding that ‘close proximity’ is as precise as the subject matter permits”); *Power-One*, 599 F.3d at 1348 (“Claims using relative terms such as ‘near’ or ‘adapted to’ are insolubly ambiguous

only if they provide no guidance to those skilled in the art as to the scope of that requirement.

Here, a person of ordinary skill in the field would understand the meaning of ‘near’ and ‘adapted to’ because the environment dictates the necessary preciseness of the terms.”) (citations omitted).

Admittedly, *Young*, *Rosemount*, and *Power-One* all predate the Supreme Court’s decision in *Nautilus*. Nonetheless, after *Nautilus* the Federal Circuit set forth similar principles on remand and in the *DDR Holdings* case cited by Plaintiff in its reply brief. *See Biosig*, 2015 WL 1883265, at *3 (“terms of degree” not inherently indefinite); *see also DDR Holdings*, 773 F.3d at 1260 (“For other terms like, for example, terms of degree, specific and unequivocal examples may be sufficient to provide a skilled artisan with clear notice of what is claimed.”).

In sum, the disputed term “in close proximity,” in the context of surrounding claim language and the specification, “inform[s] those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus*, 134 S. Ct. at 2129. The Court therefore hereby expressly rejects Defendants’ indefiniteness argument, and no further construction is necessary. *See U.S. Surgical*, 103 F.3d at 1568; *see also O2 Micro*, 521 F.3d at 1362.

The Court accordingly hereby construes “**in close proximity**” to have its **plain meaning**.

C. “positioned near,” “positioned near the light emitting surface . . . and air gap between,” and “positioning a film near”

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain meaning	Indefinite

(Dkt. No. 216, at 14; Dkt. No. 221, at 14-15.) The parties submit that these disputed terms appear in Claims 1 and 23 of the ’194 Patent and Claims 1, 3, 5, 7, and 13 of the ’974 Patent.

(1) The Parties’ Positions

Plaintiff incorporates its arguments as to the term “in close proximity,” above, and submits that the meaning of “near” is further illuminated by examples such as film 27 positioned

near the light emitting surface of panel 14 in Figure 5, as well as at least one LED light source positioned near or against the light entrance surface. (Dkt. No. 216, at 14-15.)

Defendants respond that “[n]either the surrounding claim language, nor the specifications (where ‘near’ only appears in the Abstracts), provide . . . objective boundaries or any explanation of what constitutes ‘near’ in this context.” (Dkt. No. 221, at 15 (citing, e.g., *Advanced Display Techs. of Texas, LLC v. AU Optronics Corp.*, No. 6:11-CV-391, 2012 WL 2872121, at *14-*15 (E.D. Tex. July 12, 2012) (Davis, J.) (finding “highly modulated” and “smooth bumps” indefinite because patent disclosed no objective anchor or standard)).)

Plaintiff replies by reiterating that “[i]n his 96-page declaration, Defendants’ expert never even alleges indefiniteness for these terms,” and “the specification includes examples of ‘positioned near’ as cited in Plaintiffs’ Opening Brief.” (Dkt. No. 224, at 5.)

(2) Analysis

Claim 1 of the ’194 Patent, for example, recites (emphasis added):

1. A light emitting assembly comprising at least a light emitting panel member having a light emitting surface, at least one light source, at least one film, sheet, plate or substrate *positioned near* the light emitting surface through which light from the panel member is emitted, and an air gap between the film, sheet, plate or substrate and the panel member, wherein at least one surface of the film, sheet, plate or substrate has one or more reflective or refractive surfaces, and at least one of the reflective or refractive surfaces has well defined optical elements or deformities for controlling the emitted light such that at least some of the light is redirected to pass through a liquid crystal display with low loss.

On one hand, “[w]hen a proposed construction requires that an artisan make a separate infringement determination for every set of circumstances in which the composition may be used, and when such determinations are likely to result in differing outcomes (sometimes infringing and sometimes not), that construction is likely to be indefinite.” *Halliburton Energy Servs. v. M-I LLC*, 514 F.3d 1244, 1254-55 (Fed. Cir. 2008). Defendants have cited various

statements by Plaintiff's expert, such as that "near" is a "foggy," relative term. (*See* Dkt. No. 221, Ex. 3, 3/9/2015 Werner dep., at 83:6-19, 88:1-89:19, 127:17-128:3, 128:12-129:1, 129:14-130:1 & 131:4-133:8.)

On the other hand, Plaintiff's expert has also opined that a person of ordinary skill in the art would have an understanding of "near" as applied in particular circumstances. *See id.* at 130:11-131:3; *see also id.* at 131:13-15. The specification provides context. *See* '194 Patent at 4:65-5:2, 6:29-33 ("a transparent film, sheet or plate 27 may be attached or positioned against the side or sides of the panel member from which light is emitted using a suitable adhesive 28 or other method in order to produce a desired effect"), 6:39-54, Abstract ("The film, sheet, plate or substrate may be positioned *near* the light emitting surface of a light emitting panel member with an air gap therebetween or over a cavity or recess in a tray through which light from a light source in the cavity or recess is emitted.") (emphasis added) & Figs. 3 & 5. Also of note, although Defendants have submitted a declaration by Defendants' expert opining that the term "in close proximity" (addressed above) is indefinite, Defendants' expert's declaration does not address the "positioned near" terms.

On balance, the specification provides sufficient context for a person of ordinary skill in the art to understand the disputed terms with "reasonable certainty." *Nautilus*, 134 S. Ct. at 2129. The Court therefore hereby expressly rejects Defendants' indefiniteness argument, and no further construction is necessary. *See U.S. Surgical*, 103 F.3d at 1568; *see also O2 Micro*, 521 F.3d at 1362.

The Court accordingly hereby construes "**positioned near**," "**positioned near the light emitting surface . . . and air gap between**," and "**positioning a film near**" to have their **plain meaning**.

D. “optical elements”

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain meaning	Indefinite

(Dkt. No. 216, at 15; Dkt. No. 221, at 6-8.) The parties submit that this disputed term appears in Claims 1, 16, and 31 of the ’194 Patent and Claims 13 and 47 of the ’370 Patent.

(1) The Parties’ Positions

Plaintiff submits that “the specification clearly describes ‘elements’ that one of ordinary skill would understand as ‘optical elements.’” (Dkt. No. 216, at 16 (citing ’194 Patent at 5:43-50).)

Defendants respond that “optical elements” and “deformities” “are presumed to have different meanings because they appear in the same claim.” (Dkt. No. 221, at 7.) Defendants urge that “[w]ithout any discussion of ‘optical elements’ or how ‘optical elements’ differ from ‘deformities,’ a person of ordinary skill in the art could not determine the scope of the claims with reasonable certainty.” (*Id.*)

Plaintiff replies that “optical elements” and “deformities” are used interchangeably. (Dkt. No. 224, at 5-6.)

At the April 29, 2015 hearing, Defendants urged that the broad meaning of the disputed term in the art, coupled with the broad meaning of “deformity” set forth in the specification, leaves a person of ordinary skill in the art unable to ascertain the difference between the two.

(2) Analysis

Claim 1 of the ’194 Patent, for example, recites (emphasis added):

1. A light emitting assembly comprising at least a light emitting panel member having a light emitting surface, at least one light source, at least one film, sheet, plate or substrate positioned near the light emitting surface through which light from the panel member is emitted, and an air gap between the film, sheet, plate or

substrate and the panel member, wherein at least one surface of the film, sheet, plate or substrate has one or more reflective or refractive surfaces, and at least one of the reflective or refractive surfaces has well defined *optical elements* or *deformities* for controlling the emitted light such that at least some of the light is redirected to pass through a liquid crystal display with low loss.

The specification discloses:

Print patterns of light extracting *deformities* 21 may vary in shapes such as dots, squares, diamonds, ellipses, stars, random shapes, and the like, and are desirably 0.006 square inch per *deformity/element* or less. Also, print patterns that are 60 lines per inch or finer are desirably employed, thus making the deformities or shapes 21 in the print patterns nearly invisible to the human eye in a particular application thereby eliminating the detection of gradient or banding lines that are common to light extracting patterns utilizing larger *elements*. Additionally, the deformities may vary in shape and/or size along the length and/or width of the panel members. Also, a random placement pattern of the deformities may be utilized throughout the length and/or width of the panel members. The deformities may have shapes or a pattern with no specific angles to reduce moiré or other interference effects.

'194 Patent at 5:43-58 (emphasis added).

On one hand, the reference to “deformity/element” might be read as meaning that the terms “deformity” and “element” are synonymous and are used interchangeably. *See Baran v. Med. Device Techs., Inc.*, 616 F.3d 1309, 1316 (Fed. Cir. 2010) (“th[e] implication [that the use of different terms implies that they have different meanings] is overcome where, as here, the evidence indicates that the patentee used the two terms interchangeably”); *see also Tehrani v. Hamilton Medical, Inc.*, 331 F.3d 1355, 1361 (Fed. Cir. 2003) (“We agree . . . that the intrinsic evidence indicates that the patentee meant for those two terms [‘indicative of’ and ‘representing’] to be interchangeable and to carry the same meaning within the claims.”); *TQP Development, LLC v. Intuit Inc.*, No. 2:12-CV-180, 2014 WL 706056, at *5 (E.D. Tex. Feb. 21, 2014) (Bryson, J.) (noting that the inference of different meanings “can be overcome if the contrary evidence is strong,” and finding that “[t]he specification shows that the two verbs [‘produced’ and ‘generated’] are used interchangeably in the patent”).

On the other hand, “we must presume that the use of . . . different terms in the claims connotes different meanings.” *CAE Screenplates, Inc. v. Heinrich Fiedler GmbH & Co. KG*, 224 F.3d 1308, 1317 (Fed. Cir. 2000); *accord Primos, Inc. v. Hunter’s Specialties, Inc.*, 451 F.3d 841, 848 (Fed. Cir. 2006) (“[T]he 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.”); *Chi. Bd. Options Exch., Inc. v. Int’l Sec. Exch., LLC*, 677 F.3d 1361, 1369 (Fed. Cir. 2012) (noting “[t]he general presumption that different terms have different meanings”). Also, Defendants’ persuasively argued at the April 29, 2015 hearing that the use of a slash does not necessarily indicate synonyms, Defendants having suggested the example of a “pass/fail” examination.

On balance, Plaintiff has not overcome this presumption here. The recital in the above-quoted claim of “optical elements or deformities,” read in view of the above-quoted disclosure in the specification, demonstrates that “deformities” are a type of optical element.

As to whether the scope of the disputed term is reasonably certain, Defendants’ expert has acknowledged that the term “optical elements” can refer to “a broad spectrum of . . . components,” and “it’s an element that’s placed in a - - in a light path to do something to the light, to condition the light in some form,” such as “lenses, beam splitters, polarizers, [and] diffraction gratings.” (Dkt. No. 216, Ex. L, 3/12/2015 Smith-Gillespie dep., at 33:6-34:6.) A “deformity,” by contrast, as the parties have agreed, is “any change in the shape or geometry of a surface and/or coating or surface treatment that causes a portion of the light to be emitted.” (Dkt. No. 202, 2/20/2015 P.R. 4-3 Joint Claim Construction and Prehearing Statement, at 3; Dkt. No. 228, 4/15/2015 P.R. 4-5 Joint Claim Construction Chart, at 3.) Further, the specification provides examples of deformities, as quoted above. See ’194 Patent at 5:43-58; *see also DDR*

Holdings, 773 F.3d at 1260 (“specific and unequivocal examples may be sufficient to provide a skilled artisan with clear notice of what is claimed”).

Defendants’ indefiniteness argument, namely that the distinction between “elements” and “deformities” cannot be understood with reasonable certainty, is therefore hereby expressly rejected. No further construction is necessary. *See U.S. Surgical*, 103 F.3d at 1568; *see also O2 Micro*, 521 F.3d at 1362.

The Court accordingly hereby construes “**optical elements**” to have its **plain meaning**.

E. “facilitate better mixing of light rays within the cavity or recess”

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain meaning	Indefinite

(Dkt. No. 216, at 16; Dkt. No. 221, at 12.) The parties submit that this disputed term appears in Claim 15 of the ’177 Patent.

(1) The Parties’ Positions

Plaintiff argues: “The question of how to determine whether ‘better mixing’ exists is clear: when the claimed secondary surface is present in an apparatus is there better mixing than without the claimed secondary surface?” (Dkt. No. 216, at 17.)⁷

Defendants respond that “[n]o standards, thresholds, or examples are provided to identify ‘better mixing.’” (Dkt. No. 221, at 12.)

⁷ Plaintiff has also quoted the transcript of a deposition of Defendants’ expert, but the cited page of the transcript is not included with the excerpts submitted by Plaintiff. (Dkt. No. 216, at 16 & n.81 (citing “Gillespie Transcript at 93:12-18”); *see* Dkt. No. 216, Ex. L, 3/12/2015 Smith-Gillespie dep.; *see also* Dkt. No. 221, Ex. 26.)

Plaintiff replies that “Defendants’ inaccurate interpretation of the deposition of Mr. Werner [(Plaintiff’s expert)] cannot erase the clear disclosure of the intrinsic record,” such as “the claim language cited in Plaintiff’s Opening Brief.” (Dkt. No. 224, at 6.)

At the April 29, 2015 hearing, Defendants argued that without a starting point of reference for comparison, the comparative term “better” has no understandable meaning. Plaintiff replied that the point of reference is whatever mixing would occur in the absence of a secondary surface. Alternatively, Plaintiff argued that the Court could find that this disputed term is not a limitation and instead merely refers to a use of the secondary surfaces.

(2) Analysis

Claim 15 of the ’177 Patent recites (emphasis added):

15. A light emitting assembly comprising a tray having a back wall and continuous side walls that form a hollow cavity or recess completely surrounded by the side walls, at least two light sources located, mounted or positioned in the cavity or recess, and at least one sheet, film or substrate overlying the assembly for controlling the light emitted from the assembly to fit a particular application, wherein the tray acts as at least one of a back, side edge and end edge reflector and has at least one secondary flat, angled, faceted or curved reflective or refractive surface to *facilitate better mixing of light rays within the cavity or recess* to produce a desired light output color or uniformity.

The specification discloses configuring light sources so as to improve mixing:

The light sources 3 may be oriented at different angles relative to each other and offset to *facilitate better mixing of the light rays 67 in the transition area 63* as schematically shown in FIG. 10 and/or to permit a shorter length transition area 63 to be used.

’177 Patent at 8:12-16 (emphasis added); *see id.* at Fig. 10.

A plain reading of the claim language, particularly in light of the use of “better mixing” in the specification, is that “better mixing” means that the mixing is better than the mixing would be without the secondary surface. Plaintiff’s expert agrees. (Dkt. No. 216, Ex. O, 3/9/2015 Werner dep., at 80:2-7.)

The Court therefore hereby expressly rejects Defendants' indefiniteness argument. No further construction is necessary. *See U.S. Surgical*, 103 F.3d at 1568; *see also O2 Micro*, 521 F.3d at 1362.

The Court accordingly hereby construes “**facilitate better mixing of light rays within the cavity or recess**” to have its **plain meaning**.

F. “more in the width direction”

Plaintiff's Proposed Construction	Defendants' Proposed Construction
Plain meaning	Indefinite

(Dkt. No. 216, at 17; Dkt. No. 221, at 13.) The parties submit that this disputed term appears in Claim 1 of the '816 Patent.

(1) The Parties' Positions

Plaintiff argues: “(1) the specification does specify the width dimension; and (2) one of ordinary skill in the art would have known the width dimension with reasonable certainty without any direct statements defining ‘width’ in the specification.” (Dkt. No. 216, at 18.) Further, Plaintiff argues that all of the disclosures in the Display Patents point to the same identification of dimensions: (1) the length correlates to the dimension that spans the edge where light enters to the panel to the far opposite edge of the panel; (2) the thickness correlates to the smallest dimension, which gives the panel depth, and (3) the width correlates to the remaining dimension, i.e., the dimension of the light source that is parallel with line 13 in Fig. 1.” (*Id.*) Finally, Plaintiff urges that “[f]rom reading th[e] claim limitation, one of ordinary skill in the art would know that the ‘more’ comparison is made between the ‘width’ dimension and the other dimension(s) in which light is refracted by the input edge.” (Dkt. No. 216, at 22.)

Defendants respond that “one of ordinary skill in the art could not determine with reasonable certainty the various refractive input edge structures that fall within the scope of the claim that redirect light ‘more in the width direction.’” (Dkt. No. 221, at 13.) Defendants submit that “[b]ecause there is *no disclosure* concerning this limitation, it is impossible for a person of skill in the art to select among . . . equally reasonable alternative meanings.” (*Id.*, at 14.)

Plaintiff replies that “the only two dimensions of refraction for this claim limitation are width and height, and ‘more in the width direction’ must mean more in the width direction than the height direction.” (Dkt. No. 224, at 7.)

At the April 29, 2015 hearing, Defendants reiterated that “more” could refer to a comparison with the light output distribution as emitted from the light source before reaching the recited refractive surface. Defendants concluded that the existence of multiple reasonable but divergent interpretations renders the claim indefinite.

(2) Analysis

Claim 1 of the ’816 Patent recites (emphasis added):

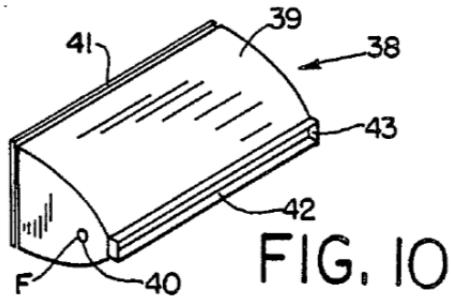
1. A light emitting assembly comprising at least one light source, a light emitting panel member having at least one input edge for receiving light from the light source and a light emitting surface, a tray or housing having a cavity or recess in which the panel member is entirely received, wherein the panel member has a pattern of light extracting deformities on or in at least one surface to cause light to be emitted from the light emitting surface of the panel member, end edge reflectors and side edge reflectors, and an additional component overlying the panel member, wherein the panel member has a greater width than height, and the light input edge has a refractive surface that redirects the light output distribution of the light source *more in the width direction* as the light enters the panel member.

The specification of United States Patent No. 4,897,771 (“the ’771 Patent,” incorporated by reference in the ’816 Patent, *see ’816 Patent at 4:20-23*), discloses:

In still another form of reflector and light system 38 shown in FIG. 10, the collecting reflector 39 is elongated in the transverse plane to accommodate a line

filament lamp 40 located substantially at the focus F of the collecting reflector which extends substantially the full *width* thereof. Also, the back reflector 41 may be a flat rectangular mirror whose focus is outside a long narrow optical window 42 extending substantially the full *width* of the smaller open end 43 of the collecting reflector.

'771 Patent at 7:41-49 (emphasis added). Figure 10 of the '771 Patent is reproduced here:



The specification of the '816 Patent discloses:

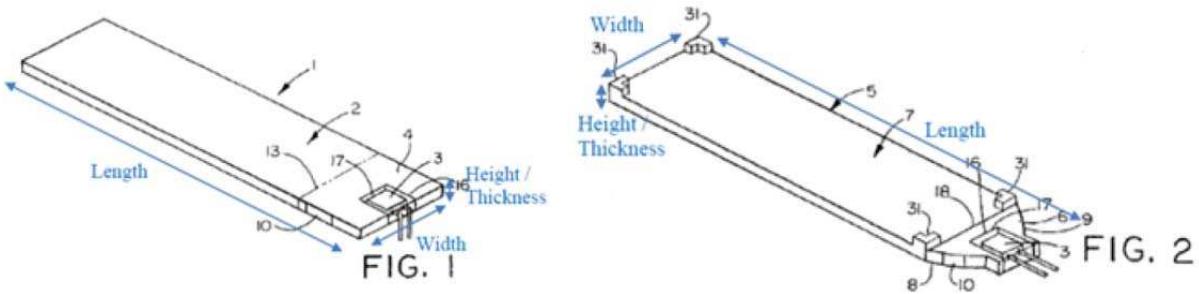
The light that is transmitted by the light transition area 4 to the transparent light emitting panel 2 may be emitted along the entire length of the panel or from one or more light output areas along the *length* of the panel as desired to produce a desired light output distribution to fit a particular application.

'816 Patent at 3:6-11 (emphasis added); *see id.* at 5:52-55 (“deformities may vary in shape and/or size along the length and/or width of the panel members”).

Providing one or more transition areas at one or both ends of the panel member of any desired dimension to accommodate one or more light sources, with reflective and/or refractive surfaces on the transition areas for redirecting the light rays into the panel member at relatively low angles allows the light emitting panel member to be made much *longer and thinner* than would otherwise be possible. For example the panel members of the present invention may be made very thin, i.e., 0.125 inch thick or less.

Id. at 8:24-32 (emphasis added).

Plaintiff's expert identifies the width dimensions in Figures 1 and 2 of the '816 Patent as shown in figures annotated by Plaintiff's expert, which are reproduced here:



(Dkt. No. 216, Ex. K, 3/4/2015 Werner Decl. at ¶ 12 (p. 10).) This is also consistent with surrounding claim language that recites “the panel member has a greater width than height,” as quoted above.

Ultimately, however, Defendants have focused not on which direction is the “width” direction but rather on the comparative term “more.”

Defendants maintain that “[a]s Mr. Smith-Gillespie [(Defendants’ expert)] has explained, there are at least three reasonable interpretations of this phrase to a person of skill in the art: (i) light is redirected ‘more in the width direction’ than the light was otherwise traveling after exiting the light source; (ii) light is redirected ‘more in the width direction’ than in the height direction; or (iii) light is redirected ‘more in the width direction’ than in the length direction.” (Dkt. No. 221, at 13-14.) In some circumstances, “if a person of ordinary skill would determine that there are multiple equally plausible but materially dissimilar constructions of a claim term, the claim would fail the ‘reasonable certainty’ standard, even if none of the competing constructions are ‘insolubly ambiguous.’” *Diamond Coating Techs., LLC v. Hyundai Motor Am.*, No. 8:13-CV-01480, -01481, 2014 WL 5698445, at *4 (C.D. Cal. Aug. 25, 2014) (Pfaelzer, J.).

As a threshold matter, Plaintiff has urged that Defendants’ interpretation “(iii)” is not plausible because “light can never refract in the length dimension; it only refracts along the

dimensions of the input edge, *i.e.*, width and height.” (Dkt. No. 224, at 7.) For the sake of argument, the Court assumes, without deciding, that Plaintiff is correct in this regard.

Plaintiff argues that Defendants’ interpretation “(ii)” is the appropriate interpretation because, as explained by Plaintiff’s expert, “[o]ne of ordinary skill in the art would understand that height/thickness is a comparison dimension because it is the only other dimension that light can be refracted in the claimed scenario.” (Dkt. No. 216, Ex. K, 3/4/2015 Werner Decl., at ¶ 12, pp. 14-15.) Thus, the parties evidently agree that this is a plausible interpretation. The remaining issue, then, is whether Defendants’ interpretation “(i)” is plausible.

Plaintiff urges that Defendants’ interpretation “(i)” is not plausible because “the word ‘more’ implies a comparison to another dimension.” (Dkt. No. 216, at 7 (citing Dkt. No. 216, Ex. K, 3/4/2015 Werner Decl., at ¶ 12).)

This is far from clear. Plaintiff has failed to adequately demonstrate that the word “more” cannot refer to what might colloquially be referred to as a “before and after” comparison. The relevant above-quoted claim language recites that “the light input edge has a refractive surface that *redirects* the light output distribution of the light source more in the width direction *as the light enters the panel member.*” Thus, a person of ordinary skill in the art could reasonably interpret the claim as requiring merely that, when light enters the panel member, the refractive surface widens the light distribution.

This interpretation differs substantially from the dimensional comparison that Plaintiff suggests is the only plausible interpretation. In particular, under Defendants’ interpretation “(i),” so long as the refractive surface causes the light distribution to be wider than it would be otherwise, the “more in the width direction” limitation is satisfied. This would apparently be

true even if the refractive surface also causes the light distribution to be expanded in the height direction to an even greater extent than in the width direction.

Defendants have shown that both of these divergent interpretations are plausible, and Plaintiff has failed to adequately demonstrate that its preferred interpretation is necessarily the correct one. Instead, Plaintiff essentially proposes replacing “more in the width direction” with “more in the width direction than the height direction.” This would amount to an impermissible redrafting of the claim. *See K-2 Corp. v. Salomon S.A.*, 191 F.3d 1356, 1364 (Fed. Cir. 1999) (“Courts do not rewrite claims; instead, we give effect to the terms chosen by the patentee.”); *see also Chef Am., Inc. v. Lamb-Weston, Inc.*, 358 F.3d 1371, 1374 (Fed. Cir. 2004) (“[C]ourts may not redraft claims, whether to make them operable or to sustain their validity.”). As a result, the claim language at issue fails to “inform those skilled in the art about the scope of the invention with reasonable certainty.” *Nautilus*, 134 S. Ct. at 2129.

The Court accordingly hereby finds that “**more in the width direction**” is **indefinite**.

G. “output distribution defined by a greater width component than height component”

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain meaning	Indefinite

(Dkt. No. 216, at 22; Dkt. No. 221, at 19.) The parties submit that this disputed term appears in Claims 1, 33, and 34 of the ’660 Patent.

(1) The Parties’ Positions

Plaintiff argues that the reference to the “width component” is clear for the reasons set forth as to the term “more in the width direction,” above. (Dkt. No. 216, at 23.) As to the “height component,” Plaintiff argues that “[o]ne of ordinary skill in the art would have understood that the height dimension and the thickness dimension both represent the same

directional dimension.” (*Id.*) Further, Plaintiff argues, “the phrase ‘light output distribution’ is scattered throughout the specification of the Display Patents, each time informing one of ordinary skill in the art about its scope.” (*Id.*, at 24.)

Defendants respond that “[t]his phrase is indefinite because the patent lacks any disclosure as to where the ‘output distribution’ is measured to determine whether it has a ‘greater width component.’” (Dkt. No. 221, at 19.)

Plaintiff replies: “The plain reading of that term shows that the output distribution is measured at the light sources – the light sources themselves are ‘generating light having an output distribution defined by a greater width component than height component.’” (Dkt. No. 224, at 8.)

(2) Analysis

Defendants’ expert has acknowledged that “light output distribution” refers to spatial uniformity. (Dkt. No. 216, Ex. L, 3/12/2015 Smith-Gillespie dep., at 28:15-29:4.) Also, the parties do not appear to substantially dispute the meaning of “width” and “height” or “thickness,” at least for purposes of this disputed term.⁸

Instead, the dispute appears to concern how the “distribution” is measured. Defendants argue: “the ’660 Patent provides no reasonable certainty as to whether the dimensions of the ‘output distribution’ are measured (i) from each individual light source in isolation, (ii) at some other point within the panel assembly (e.g., following the transition area), (iii) from the output region of the panel assembly; or (iv) at each of the aforementioned locations.” (Dkt. No. 221,

⁸ Height and thickness, if not necessarily identical, are closely related. For example, United States Patent No. 5,005,108, which the ’660 Patent incorporates by reference (*see* ’660 Patent at 4:12-16), discloses a “wave” panel in which the height of the wave is approximately twice the thickness of the panel.

at 19.) Defendants have also cited testimony by Plaintiff's expert that purportedly demonstrates inherent confusion regarding this disputed term. (*See* Dkt. No. 221, Ex. 2, 3/9/2015 Werner dep., at 57:1-6, 67:5-7 & 137:12-22.)

On balance, however, the disputed term is sufficiently clear on its face, when read in the context of the surrounding claim language, that whatever light source is directed into the optical conductor provides more light along a width direction than along a height direction. Also of note, the examiner, in the Notice of Allowability, relied upon the language of the disputed term. (*See* Dkt. No. 224, Ex. O, Reasons for Allowance.) The Court therefore hereby expressly rejects Defendants' indefiniteness argument. No further construction is necessary. *See U.S. Surgical*, 103 F.3d at 1568; *see also O2 Micro*, 521 F.3d at 1362.

Some discussion is nonetheless appropriate to address the parties' dispute as to where the output distribution is measured. At the April 29, 2015 hearing, Plaintiff submitted that it has always maintained that the output distribution is measured at the light source. Plaintiff further explained that where a claim refers to an individual light source, the output distribution is measured at that light source, and where a claim refers to multiple light sources, the output distribution is measured at a "combined" point. The claims at issue are Claims 1, 33, and 34, which recite (emphasis added):

1. A light emitting panel assembly comprising:
 - a generally planar optical conductor having at least one input edge with a greater cross-sectional width than thickness; and
 - a plurality of light sources configured to generate light having an output distribution defined by a greater width component than height component*, the light sources positioned adjacent to the input edge, thereby directing light into the optical conductor;
 - the optical conductor having at least one output region and a predetermined pattern of deformities configured to cause light to be emitted from the output region,
 - the optical conductor having a transition region disposed between the light source and the output region.

* * *

33. A light emitting panel assembly comprising:
 - a generally planar optical conductor having at least one input edge with a greater cross-sectional width than thickness; and
 - a plurality of LED light sources* each having a greater width than height positioned adjacent to the input edge, thereby directing light into the optical conductor, *each light source being configured to generate light having an output distribution defined by a greater width component than height component*;
 - the optical conductor having at least one output region and a predetermined pattern of deformities configured to cause light to be emitted from the output region,
 - the optical conductor having a transition region disposed between the light source and the output region.

34. The assembly of claim 33 wherein each light source has a light output distribution with a greater width component than height component.

Claim 33 thus explicitly refers to the output distribution of *each* LED (light emitting diode) light source. Claim 1, likewise, can readily be read as consistent with Claim 33 such that the “configured to . . .” phrase in Claim 1 modifies “light sources” rather than “a plurality.” *See Phillips*, 415 F.3d at 1314 (“Other claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment as to the meaning of a claim term.”). The Court therefore concludes that the disputed term refers to output distribution measured as to each individual light source.⁹

The Court accordingly hereby construes “**output distribution defined by a greater width component than height component**” to have its **plain meaning**.

⁹ To whatever extent dependent Claim 34 is redundant of language recited in independent Claim 33, any such redundancy does not affect the Court’s analysis here. *See N. Am. Vaccine, Inc. v. Am. Cyanamid Co.*, 7 F.3d 1571, 1577 (Fed. Cir. 1993) (“While it is true that dependent claims can aid in interpreting the scope of claims from which they depend, they are only an aid to interpretation and are not conclusive. The dependent claim tail cannot wag the independent claim dog.”).

H. “greater cross-sectional width than thickness”

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain meaning	Indefinite

(Dkt. No. 216, at 24; Dkt. No. 200, at 77.) The parties submit that this term appears in Claims 1, 5, 11, and 22 of the ’563 Patent.

Plaintiff submits that Defendants “did not provide any expert opinion as to whether a person of ordinary skill in the art could understand the term with reasonable certainty.” (Dkt. No. 216, at 24-25.)

Neither Defendants’ response brief nor Plaintiff’s reply brief addresses this term. (*See* Dkt. No. 221; *see also* Dkt. No. 224.) This term does not appear in the parties’ April 15, 2015 P.R. 4-5 Joint Claim Construction Chart. (*See* Dkt. No. 228.)

At the April 29, 2015 hearing, the parties confirmed that this term is no longer in dispute. The Court therefore does not address this term.

I. “edge of said panel assembly”

Plaintiff’s Proposed Construction	Defendants’ Proposed Construction
Plain meaning	Indefinite

(Dkt. No. 216, at 25; Dkt. No. 221, at 16.) The parties submit that this disputed term appears in Claims 1, 5, 11, and 22 of the ’563 Patent.

(1) The Parties’ Positions

Plaintiff argues that in the context of surrounding claim language, “a person of ordinary skill would understand that the claimed ‘edge of said panel assembly’ is a surface through which the panel assembly receives light from the light source – namely, the light input edge of the panel member.” (Dkt. No. 216, at 25.) In particular, “[a]rmed with the ’563 [Patent] disclosure and

general knowledge of the subject matter, a person of ordinary skill would have no trouble identifying the light input edge of the panel member and would understand that this is also the claimed ‘edge of said panel assembly.’” (*Id.*, at 26.)

Defendants respond that “[n]either the claims nor the specification describes *an edge* of a *panel assembly* or explains how light that is received by this undefined edge is then emitted from *a surface of the panel member*.” (Dkt. No. 221, at 16.) Defendants submit that Plaintiff “re-writes the claim by arguing that the plain meaning must be that the ‘edge of said panel assembly’ is the same as the ‘light input edge of the panel member.’” (*Id.*, at 17.)

Plaintiff replies that “there is no logical or technical reason why the light-receiving edge of a panel *member* cannot also be a light-receiving edge of the overall *assembly*.” (Dkt. No. 224, at 9.) In other words, Plaintiff submits, Plaintiff’s interpretation “does not conflate ‘panel member’ with ‘panel assembly,’ or ‘re-write’ the claims as Defendants allege. It reflects the technical and logical reality that the edge of a component can also be the edge of an assembly that includes the component.” (*Id.*)

(2) Analysis

Claim 1 of the ’563 Patent, for example, recites (emphasis added):

1. A *light emitting panel assembly* mounted on a body portion of a vehicle, said panel assembly comprising at least one solid light emitting panel member having top and bottom surfaces and a greater cross sectional width than thickness, *said panel assembly having at least one light input surface for receiving light from at least one light source and directing the light through said panel assembly from an edge of said panel assembly* for emission of the light from one of said top and bottom surfaces of said panel member, said panel member being located on an exterior surface of said body portion with said panel member wrapped around a corner of said vehicle to provide illumination around said corner.

The disputed term thus refers, in the context of the surrounding claim language, to an edge of the panel assembly that has a light input surface. Such a reading is also consistent with

Figures 3 and 4 of the '563 Patent. *See* '563 Patent at 9:13-19 ("FIG. 3 shows the light source 9 at the left end of panel member 28 mechanically held in place by a holder 63 received in a slot in an edge of the panel member."). Defendants have failed to demonstrate any inconsistency between such an interpretation and interpreting "panel assembly" and "panel member" as have distinct meanings. That is, the recited "panel member" is part of the recited "panel assembly."

The Court therefore hereby expressly rejects Defendants' indefiniteness argument. No further construction is necessary. *See U.S. Surgical*, 103 F.3d at 1568; *see also O2 Micro*, 521 F.3d at 1362.

The Court accordingly hereby construes "**edge of said panel assembly**" to have its **plain meaning**.

J. "for shining light through said panel member"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
Plain meaning	"designed to cause light to shine through the panel member"

(Dkt. No. 216, at 28; Dkt. No. 221, at 29.) The parties submit that this disputed term appears in Claim 5 of the '563 Patent.

(1) The Parties' Positions

Plaintiff argues that "Defendants propose to rewrite the claims in a way that is unnecessary, unsupported and unhelpful." (Dkt. No. 216, at 28.) Further, Plaintiff argues, "[t]he proposed phrase 'designed to cause' risks distracting the factfinder by introducing an element of intent that is speculative at best and irrelevant to the inquiry." (*Id.*)

Defendants respond that their proposal "clarifies that 'for shining' is a recitation of the purpose of the other light source – i.e., the other light source is 'designed to cause' light to shine through the panel member." (Dkt. No. 221, at 29.) Defendants argue:

It is not enough that another light source exists, or that some *de minimis* portion of the light from the other source happens to shine through said panel member. The claim requires that the purpose of the other light source is “for shining light through the panel member.” Only a light source that is designed to carry out this purpose can fall within the scope of the claim. *See Acco Brands, Inc. v. Micro Security Devices, Inc.*[,] 346 F.3d 1075, 1077-80 (Fed. Cir. 2003) (construing “for extending”).

(Dkt. No. 221, at 30.)

Plaintiff replies that Defendants do not “propose any criteria by which one would judge the ‘purpose’ of a light source or whether it is ‘designed to carry out this purpose,’” and “[r]equiring the trier of fact to discern the mental intent of a designer of prior-art devices or accused products is an exercise fraught with peril, and an improper construction of an apparatus claim, which does not involve an inquiry into ‘intent.’” (Dkt. No. 224, at 10.)

(2) Analysis

Claim 5 of the ’563 Patent recites (emphasis added):

5. A light emitting panel assembly mounted on a body portion of a vehicle, said panel assembly comprising at least one solid light emitting panel member having top and bottom surfaces and a greater cross sectional width than thickness, said panel assembly having at least one light input surface for receiving light from at least one light source and directing the light through said panel assembly from an edge of said panel assembly for emission of the light from one of said top and bottom surfaces of said panel member, and an other [sic] light source located directly behind said panel member *for shining light through said panel member* independently of the light emitted by said panel member from said light source.

The specification discloses:

An additional array of light sources 31 such as LEDs or incandescent or halogen lamps (with or without reflectors) may also be strategically mounted inwardly (i.e., behind) the inner surface of the light emitting panel members 29 and/or 30 to cause a more intense light to *shine through the panel members* and a trans reflector 32 if provided on the panel members or through one or more clear areas or holes 33 through the panel members where no print pattern, back reflector or trans reflector is provided on the panel members as also schematically shown in FIGS. 3 and 4 for specific applications, for example, to provide brake or turn signal lights, turning or backup illumination, etc. By locating the light sources 9 for illuminating the panel members 29 themselves adjacent one or more ends of

the panel members, they will not interfere with or obstruct the visibility of the array of light sources 31 *shining through the panel members*.

'563 Patent at 9:21-26 (emphasis added).

The disputed term is a limitation of the claim. Beyond that, however, Defendants have failed to demonstrate that design intent is a necessary or appropriate claim limitation here. The Court therefore hereby expressly rejects Defendants' proposed construction, and no further construction is necessary. *See U.S. Surgical*, 103 F.3d at 1568; *see also O2 Micro*, 521 F.3d at 1362; *Finjan*, 626 F.3d at 1207.

Finally, Defendants' above-noted concern, regarding "some *de minimis* portion of the light from [another] source," relates to questions of fact in relation to whatever particular instrumentalities are accused, and such questions of fact are not appropriate for the Court to resolve as part of claim construction. *See PPG Indus. v. Guardian Indus. Corp.*, 156 F.3d 1351, 1355 (Fed. Cir. 1998) ("[A]fter the court has defined the claim with whatever specificity and precision is warranted by the language of the claim and the evidence bearing on the proper construction, the task of determining whether the construed claim reads on the accused product is for the finder of fact.").

The Court accordingly hereby construes "**for shining light through said panel member**" to have its **plain meaning**.

K. "one or more light emitting diodes along said light input surface for receiving light from said light emitting diodes and conducting the light from said edge for emission of the light from at least one of said sides"

Plaintiff's Proposed Construction	Defendants' Proposed Construction
Plain meaning	Indefinite

(Dkt. No. 216, at 28; Dkt. No. 221, at 17-18.) The parties submit that this disputed term appears in Claim 1 of the '956 Patent.

(1) The Parties' Positions

Plaintiff argues that “the common-sense understanding [of] the final claim language, regardless of its grammatical parsing, specifies the properties of the light guide as a whole, not of the LEDs.” (Dkt. No. 216, at 30.) Plaintiff explains that LEDs do not receive light but rather emit light, and a “light input surface” is a boundary and does not conduct light. (*Id.*, at 29.)

Defendants respond that because “[t]he grammatically correct reading is that the light emitting diodes (LEDs) receive and conduct the light from the LEDs,” “the claim is indefinite because it claims something that is not possible.” (Dkt. No. 221, at 17-18.) Alternatively, Defendants argue, if the claim is read such that the light input surface receives and conducts the light, “a surface is a two-dimensional boundary that cannot *conduct* light.” (*Id.*, at 18.)

Plaintiff replies that “both from a practical standpoint and in view of the ’956 disclosure, a person of ordinary skill would understand that ‘receiving light’ and ‘conducting the light’ are properties of the *light guide* – a fact that Defendants’ expert admits he did not consider.” (Dkt. No. 224, at 10 (footnotes omitted).)

At the April 29, 2015 hearing, Defendants urged that Plaintiff’s interpretation—that the “conducting” is by the light guide—impermissibly re-writes the claim.

(2) Analysis

Claim 1 of the ’956 Patent recites (emphasis added):

1. A light emitting assembly for vehicle illumination comprising a light guide having opposite sides and at least one light input surface along at least one edge of said light guide, *one or more light emitting diodes along said light input surface for receiving light from said light emitting diodes and conducting the light from said edge for emission of the light from at least one of said sides*, a plurality of light extracting deformities on at least one of said sides, said deformities having shapes for controlling an output ray angle distribution of emitted light to suit a particular application, and a transparent substrate overlying at least one of said sides, said substrate providing an exterior portion of a vehicle for vehicle illumination at said exterior portion.

The plain language of the claim thus recites that the phrase “for receiving light from said light emitting diodes and conducting the light from said edge for emission of the light from at least one of said sides” modifies “said light input surface,” not “one or more light emitting diodes.” Plaintiff’s expert agrees. (*See* Dkt. No. 216, Ex. K, 3/4/2015 Werner Decl., at ¶ 17, pp. 28-31.) Such a reading is consistent with the “light input surface” being introduced in the claim as “along at least one edge of said light guide,” which is the antecedent basis for “said edge” in the phrase “conduct[s] the light from said edge.” Such a reading is also consistent with the ’956 Patent’s prosecution history involving the “Serizawa” reference, United States Patent No. 4,733,335, which the parties have addressed. (*See* Dkt. No. 216, Ex. S, 9/29/2004 Reply to Office Action, at 8-9 (distinguishing Serizawa as “shining light through the lens assembly from one side to the other”).)

Finally, any argument that “a surface is a two-dimensional boundary that cannot conduct light” (Dkt. No. 221, at 18; *see* Dkt. No. 221, Ex. 3, 3/3/2015 Smith-Gillespie Decl., at ¶ 225; *see also id.*, Ex. 2, 3/9/2015 Werner dep., at 126:10-16) is unavailing because the claim itself, as quoted above, recites that the “light input surface” is a surface of a “light guide.” That is, the “conducting”—recited in the phrase “conducting the light from said edge for emission of the light from at least one of said sides”—is through the light guide. (*See id.*, at 126:14-16.)

Under this interpretation, as Defendants’ expert acknowledges, the disputed term is not indefinite. (*See* Dkt. No. 216, Ex. L, 3/12/2015 Smith-Gillespie dep., at 142:15-144:12.)

The Court therefore hereby expressly rejects Defendants’ indefiniteness argument. Construction is appropriate, however, to clarify the potentially confusing wording of this disputed term and thereby assist the finder of fact. *See TQP Dev., LLC v. Merrill Lynch & Co., Inc.*, No. 2:08-CV-471, 2012 WL 1940849, at *2 (E.D. Tex. May 29, 2012) (Bryson, J.) (“The

Court believes that some construction of the disputed claim language will assist the jury to understand the claims.”).

The Court accordingly hereby construes “**one or more light emitting diodes along said light input surface for receiving light from said light emitting diodes and conducting the light from said edge for emission of the light from at least one of said sides**” to mean “**one or more light emitting diodes along said light input surface, wherein said light input surface receives light from said light emitting diodes and said light guide conducts the light from said edge for emission of the light from at least one of said sides.**”

VI. CONCLUSION

The Court adopts the constructions set forth in this opinion for the disputed terms of the patents-in-suit. The parties are ordered that they may not refer, directly or indirectly, to each other’s claim construction positions in the presence of the jury. Likewise, the parties are ordered to refrain from mentioning any portion of this opinion, other than the actual definitions adopted by the Court, in the presence of the jury. Any reference to claim construction proceedings is limited to informing the jury of the definitions adopted by the Court.

Having found that the term “more in the width direction” in Claim 1 of the ’816 Patent is indefinite, as discussed above, the Court hereby finds that Claim 1 of the ’816 Patent is invalid.

Within thirty (30) days of the issuance of this Memorandum Opinion and Order, the parties are hereby ORDERED, in good faith, to mediate this case with the mediator agreed upon by the parties. As a part of such mediation, each party shall appear by counsel and by at least one corporate officer possessing sufficient authority and control to unilaterally make binding decisions for the corporation adequate to address any good faith offer or counteroffer of settlement that might arise during such mediation. Failure to do so shall be deemed by the Court

as a failure to mediate in good faith and may subject that party to such sanctions as the Court deems appropriate.

So Ordered and Signed on this

May 4, 2015



RODNEY GILSTRAP
UNITED STATES DISTRICT JUDGE