Paper 9 Entered: January 13, 2015

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LG DISPLAY CO, LTD., Petitioner,

v.

INNOVATIVE DISPLAY TECHNOLOGIES LLC, Patent Owner.

Case IPR2014-01092 Patent 7,434,974

Before THOMAS L. GIANNETTI, NEIL T. POWELL, and BEVERLY M. BUNTING, *Administrative Patent Judges*.

GIANNETTI, Administrative Patent Judge.

DECISION
Denying Institution of *Inter Partes* Review
37 C.F.R. § 42.108

Case IPR2014-01092 Patent 7,434,974

LG Display Co., Ltd. ("Petitioner") filed a Petition pursuant to 35 U.S.C. §§ 311–319 to institute an *inter partes* review of claims 1, 3–5, 7–11, 13, and 17 of U.S. Patent No. 7,434,974 ("the '974 patent"). Paper 2 ("Pet."). Innovative Display Technologies LLC ("Patent Owner") filed a Preliminary Response. Paper 7 ("Prelim. Resp."). Applying the standard set forth in 35 U.S.C. § 314(a), which requires demonstration of a reasonable likelihood that Petitioner would prevail with respect to at least one challenged claim, we deny the Petition and decline to institute an *inter partes* review of claims 1, 3–5, 7–11, 13, and 17.

I. BACKGROUND

A. The '974 patent (Ex. 1001)

The '974 patent is entitled "Light Emitting Panel Assemblies." The Abstract describes the subject matter as follows:

Light emitting panel assembly includes a light emitting panel member received in a cavity or recess in a tray or housing. The panel member has a pattern of light extracting deformities on or in at least one surface of the panel member to cause light received from at least one LED light source positioned near or against the light entrance surface of the panel member to be emitted from a light emitting surface of the panel member. The tray or housing acts as an end edge and/or side edge reflector for the panel member to reflect light that would otherwise exit the panel member through the end edge and/or side edge back into the panel member for causing additional light to be emitted from the panel member.

Ex. 1001, Abstract.

B. Illustrative Claim

Claim 1 is illustrative of the claims at issue:

1. A light emitting panel assembly comprising at least a light emitting panel member having a light entrance surface and a light emitting surface,

at least one LED light source positioned near or against the light entrance surface, and

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, and the tray or housing includes end walls and side walls that act as end edge reflectors and side edge reflectors for the panel member to reflect light that would otherwise exit the panel member through an end edge and/or side edge back into the panel member and toward the pattern of light extracting deformities for causing additional light to be emitted from the light emitting surface of the panel member,

wherein the tray or housing provides structural support to the panel member and has posts, tabs, or other structural features that provide a mount for mounting of the assembly into a larger assembly or device.

C. Related Proceedings

Patent Owner states that it has asserted infringement by Petitioner of the '974 patent in the following proceeding: Delaware Display Group LLC et al. v. LG Electronics Inc. et al., No. 1:13-cv-02109 (D. Del., filed Dec. 31, 2013). Paper 4.

Patent Owner identifies numerous other proceedings in which it has alleged infringement of the '974 patent. See Paper 4 for a listing.

In addition, there are four other pending requests for inter partes review by Petitioner for patents related to the '974 patent. Those are as follows:

- 1. IPR2014-01094 (U.S. Patent No. 7,404,660);
- 2. IPR2014-01095 (U.S. Patent No. 8,215,816);
- 3. IPR2014-01096 (U.S. Patent No. 7,537,370); and
- 4. IPR2014-01097 (U.S. Patent No. 7,300,194).

D. Claim Construction

The Board interprets claims of an unexpired patent using the broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); see also Office Patent Trial Practice Guide, 77 Fed. Reg. 48,756, 48,766 (Aug. 14, 2012).

The only claim term for which Petitioner proposes a construction is the term "deformities," appearing in all challenged claims. Petitioner asserts that the '974 patent "expressly defines" the term to mean "any change in the shape or geometry of a surface and/or coating or surface treatment that causes a portion of light to be emitted." Pet. 8 (citing '974 patent, Ex. 1001, col. 4, ll. 36–40). Patent Owner takes no position on claim construction. Prelim. Resp. 7. Patent Owner points out, however, that the construction of "deformities" proffered by Petitioner was agreed to and adopted by the district court. *Id*.

We have considered Petitioner's construction of "deformities" and determined that at this stage it should be adopted here.

We have further determined that, except as may be indicated in the discussion below, the remaining terms should be given their plain and ordinary meaning.

E. References

Petitioner relies on the following references¹:

| Funamoto | US 5,619,351 | May 10, 1994 | Ex. 1007 |
|------------|--------------|---------------|----------|
| Tsuchiyama | US 5,548,271 | Jun. 24, 1994 | Ex. 1008 |
| Nakayama | US 5,654,779 | Dec. 29, 1994 | Ex. 1009 |

Petitioner also states that it is relying on Admitted Prior Art ("APA") from the '974 patent specification. Pet. 9; Ex. 1001, col. 2, ll. 58-65. Petitioner also relies on a Declaration from Michael J. Escuti, Ph.D. ("Escuti Decl."). Ex. 1004.

F. Grounds Asserted

Petitioner challenges claims 1, 3–5, 7–11, 13, and 17 of '974 patent on the following grounds.

| References | Basis | Claims Challenged |
|-------------------------|----------|----------------------------|
| Funamoto . | § 103(a) | 1, 3–5, 7–11, and 13 |
| Tsuchiyama and Funamoto | § 103(a) | 1, 3–5, 7–8, 10–11, and 13 |
| | | and 15 |
| Funamoto and Nakayama | § 103(a) | 13 and 17 |

II. ANALYSIS

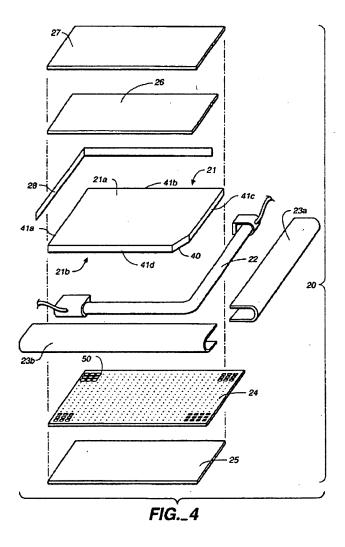
A. Asserted Grounds Based On Funamoto Alone (Claims 1, 3–5, 7–11, and 13)

¹ The references are ordered by exhibit number with effective dates asserted by Petitioner.

Petitioner contends that these claims are obvious over Funamoto under 35 U.S.C. § 103(a). Pet. 11–25. For the reasons that follow, we are not persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing on this ground.

1. Funamoto Overview

This patent describes a surface-type illumination device for providing backlight in a liquid crystal display. Ex. 1007, Abstract. As disclosed, the device makes use of a fluorescent tube and polarizer. This is illustrated in Figure 4 of Funamoto, reproduced here:



In the above Figure 4, polarizer 21 and fluorescent light 22 are shown. Ex. 1001, col. 6, ll. 32–48. Funamoto's objectives include providing a surface-type illumination device that displays a brightness higher than conventional illumination devices without increasing the number of driver circuits, and restricting heat radiation. *Id.* col. 2, ll. 10–14.

2. Discussion

Petitioner's discussion of Funamoto acknowledges that Funamoto does not "explicitly" disclose use of an LED light source, a requirement of claim 1 and all other challenged claims. Pet. 13. Petitioner contends, instead, that a person of ordinary skill "would easily substitute an LED for the fluorescent light source disclosed." *Id.* (citing Escuti Decl. ¶¶76–78).

Patent Owner disagrees, pointing out that "Funamoto explicitly states that a fluorescent light source is required." Prelim Resp. 13. Patent Owner cites to a discussion in Funamoto of the requirement of a "high output fluorescent light in the illumination device" to achieve sufficient brightness for the intended application. *Id.* (citing Ex. 1007, col. 1, ll. 41–42).

Patent Owner contends that Petitioner fails to consider Funamoto "as [a] whole." *Id.* at 13–14. Specifically, Patent Owner points out that to reduce temperature variations without increasing the number of driver circuits, Funamoto teaches using a single L or U-shaped fluorescent light source instead of a straight fluorescent light source. *Id.* Patent Owner contends that Petitioner has not shown how the "generic" substitution of LEDs for the fluorescent tube would meet the objectives of Funamoto discussed *supra*. *Id.* at 14.

We agree with Patent Owner that Petitioner has not demonstrated a reasonable likelihood of prevailing in showing obviousness of the challenged claims over Funamoto. In KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398 (2007), the Supreme Court warned that "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." Id. at 418.

Rather, the Court stated:

[I]t can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does . . . because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.

Id. at 418–419 (emphasis added); see also id. at 418 (requiring a determination of "whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue") (emphasis added).

Moreover, when evaluating claims for obviousness, "the prior art as a whole must be considered. The teachings are to be viewed as they would have been viewed by one of ordinary skill." *In re Hedges*, 783 F.2d 1038, 1041 (Fed. Cir. 1986). Accordingly, "[i]t is impermissible within the framework of section 103 to pick and choose from any one reference only so much of it as will support a given position, to the exclusion of other parts necessary to the full appreciation of what such reference fairly suggests to one of ordinary skill in the art." *Id.* (quoting *In re Wesslau*, 353 F.2d 238, 241 (CCPA 1965)).

We are, therefore, not persuaded by Petitioner's argument that a person of ordinary skill "would easily substitute an LED" for the fluorescent light tube in Funamoto. Petitioner does not provide a convincing rationale for making the substitution. See KSR, 550 U.S. at 417 (Obviousness showing requires "some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.") (quoting In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006)). Furthermore, the argument ignores Funamoto's stated requirement of a high output fluorescent light in the disclosed device. See discussion supra.

Patent Owner presents two additional reasons why the challenged claims are not obvious over Funamoto. First is that Funamoto's polarizer is not a "light emitting panel member" as recited in the claims. Prelim. Resp. 10–12. Second is the argument that the recitation in the claim 1 of "posts, tabs, or other structural features" is not met by Funamoto. According to Patent Owner, the structural features identified by Petitioner as meeting this limitation do not result in mounting the tray assembly into a larger assembly, as is called for in the claim. *Id.* at 15.

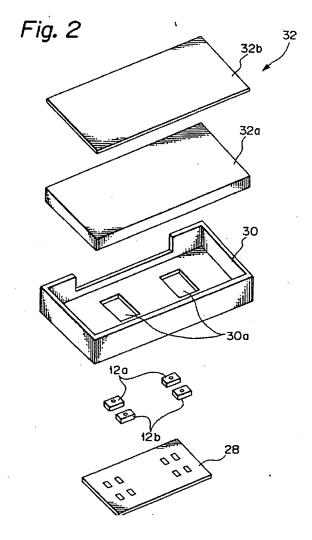
Because of our determination that Petitioner has failed to show that the use of LEDs in Funamoto would have been obvious, we do not reach those additional arguments.

B. Asserted Grounds Based On Tsuchiyama and Funamoto (Claims 1, 3–5, 7–8, 10–11, and 13)

Petitioner contends that these claims are obvious over Tsuchiyama and Funamoto under 35 U.S.C. § 103(a). Pet. 26–40. For the reasons that follow, we are not persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing on this ground.

1. Tsuchiyama Overview

This patent describes a miniature data display radio pager having a liquid crystal display (LCD). Ex. 1008, col. 1, ll. 4–7. The display is provided with a backlight for illuminating the LCD. *Id.* The structure includes a backlight, backlight LEDs, alert LEDs, and a light conducting plate. *Id.* col. 2, ll. 29–40. This is illustrated by Figure 2 of Tsuchiyama, reproduced here:



In Figure 2 above, backlight 32, backlight LEDs 12a, alert LEDs 12b, and light conducting plate 32a are shown. Tsuchiyama describes a structure that addresses a problem arising when the alert LEDs are placed next to the LCD display. *Id.* col. 1, ll. 39–50. This arrangement requires increasing the dimensions of the pager and prevents miniaturization. *Id.* Tsuchiyama avoids this problem by positioning the alert LEDs in the LCD display instead of next to the display. *Id.* col. 3, ll. 21–30.

2. Discussion

Petitioner acknowledges that Tsuchiyama does not "explicitly disclose the panel member having a pattern of light extracting deformities." Pet. 29. To meet this claim element, Petitioner contends that "[a] person of ordinary skill in the art would have been motivated to combine the teachings of Tsuchiyama with the teachings of Funamoto because they are both directed to a thinner and smaller device, including thinner and smaller LCD devices." Pet. 28. Petitioner further contends that "[a] person of ordinary skill in the art would have been motivated to combine the assembly of Tsuchiyama with the deformities of Funamoto because the deformities are used to control characteristics of the light, including output, uniformity, etc." *Id.* at 29.

Patent Owner responds that Petitioner's statement as to why Tsuchiyaman and Funaamoto should be combined "is conclusory and unsupported by sufficient evidence and analysis." Prelim. Resp. 21. Patent Owner asserts that the problem solved by Tsuchiyama (locating the alert LED in the backlight of a pager) is unrelated to the technical problems addressed by Funamoto (*see* discussion *supra*).

As discussed above, in determining obviousness, the prior art as a whole must be considered. Furthermore, a sufficient rationale for combining

the references must be articulated. Petitioner's argument, that the teachings of Tsuchiyama and Funamoto can be combined because they are both directed to thinner, smaller devices, is not convincing. The deformities missing from Tsuchiyama but present in Funamoto are used to effect control of characteristics of the light, not miniaturization of the device. Thus, we are not convinced by Petitioner's rationale for making the combination.

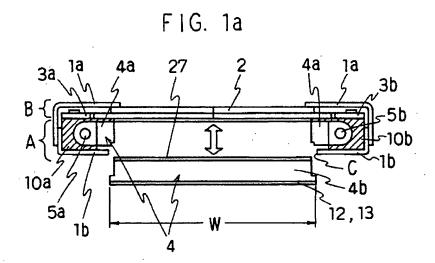
Alternatively, Patent Owner contends that the Tsuchiyama/Funamoto combination is lacking the "posts, tabs, or other structural features" recited in the claims. Prelim. Resp. 23. We agree with Patent Owner that Petitioner's argument is unavailing because Patent Owner has not identified sufficiently the "larger assembly or device" called for in the claims.

C. Asserted Grounds Based on Funamoto and Nakayama
(Claims 13 and 17)

Petitioner contends that these independent claims are obvious over Funamoto and Nakayama under 35 U.S.C. § 103(a). Pet. 40–51. For the reasons that follow, we are not persuaded that Petitioner has demonstrated a reasonable likelihood of prevailing on this ground.

1. Nakayama Overview

This patent describes a liquid crystal display device that includes a light emitting panel assembly. Figure 1a of Nakayama follows:



In Figure 1a above, frame 1a and 1b, display panel 2, light panel 4, lamps 5a and 5b, and lamp holders 10a and 10b are shown.

2. Discussion

Petitioner contends that Funamoto and Nakayama, together, disclose all elements of claims 13 and 17 of the '974 patent. Pet. 40. Petitioner further contends that "[a] person of ordinary skill in the art would have been motivated to combine the teachings of Funamoto and Nakayama because the patents were directed to the same goals." *Id*.

Patent Owner disputes this rationale. Prelim. Resp. 27-28. According to Patent Owner, Petitioner's allegations are "contradictory," and the Petition describes "two different and unrelated technical problems and objectives for Funamoto and Nakayama." *Id.* at 28. We are persuaded by Patent Owner's argument that Petitioner has not provided a sufficient rationale for combining the two references. As noted above, Funamoto is directed to providing a surface-type illumination device that displays a

brightness higher than conventional illumination devices without increasing the number of driver circuits, and restricting heat radiation. *Id.* col. 2, ll. 10–14. As described by Petitioner, "Nakayama is directed to an LCD device where part of the light guiding board can be removed without varying the outer dimensions and thickness of the device." Pet. 40. We agree with Patent Owner that these are two very different goals, and that Petitioner has failed to provide a sufficient rationale for combining Funamoto and Nakayama.

Claims 13 and 17 each recite "at least one LED light source." As noted above, Funamoto does not disclose an LED light source. Furthermore, we concluded above that Petitioner has not made a sufficient showing that it would have been obvious to substitute an LED light source for Funamoto's fluorescent tubes. We agree with Patent Owner that for this additional reason, Petitioner's obviousness argument directed to claims 13 and 17 is not persuasive. Prelim. Resp. 28–30, 33–34.

III. SUMMARY

The information presented does not show that there is a reasonable likelihood that Petitioner will prevail on any of the following challenges to patentability of the '974 patent:

- A. Obviousness of claims 1, 3–5, 7 and 13 over Funamoto;
- B. Obviousness of claims 1, 3–5, 7–8, 10–11, and 13 over Tsuchiyama and Funamoto; and
 - C. Obviousness of claims 13 and 17 over Nakayama.

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IV. ORDER

It is, therefore,

ORDERED that the Petition is *denied* as to all challenged claims, and no trial is instituted.

Case IPR2014-01092 Patent 7,434,974

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| filed in the U.S. Dist | trict Court | 5 U.S.C. § 1116 you are hereby advised that a court action has been District of Delaware on the following |
| | Patents. (the patent action | ion involves 35 U.S.C. § 292.): |
| DOCKET NO 2106-1264 | DATE FILED 12/31/2013 | U.S. DISTRICT COURT District of Delaware |
| PLAINTIFF Delaware Display Group Technologies LLC | LLC and Innovative Displa | DEFENDANT ay Amazon.com, Inc. |
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| | TRADEMARK NO. | OR TRADEMARK | |
| 1 | US 6,755,547 B2 | 6/29/2004 | Innovative Display Technologies LLC |
| 2 | US 7,300,194 B2 | 11/27/2007 | Innovative Display Technologies LLC |
| 3 | US 7,384,177 B2 | 6/10/2008 | Innovative Display Technologies LLC |
| 4 | US 7,404,660 B2 | 7/29/2008 | Innovative Display Technologies LLC |
| 5 | US 7,434,974 B2 | 10/14/2008 | Innovative Display Technologies LLC |
| 6 | US 7,537,370 B2 | 5/26/2009 | Innovative Display Technologies LLC |
| 7 | US 7,914,196 B2 | 3/29/2011 | Delaware Display Group LLC |
| 8 | US 8,215,816 B2 | 7/10/2012 | Innovative Display Technologies LLC |

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| DOCKET NO. 2:14-cv-00722 | DATE FILED 6/25/2014 | U.S. DISTRICT COURT Eastern District of Texas, Marshall Division |
| PLAINTIFF | | DEFENDANT |
| | TECHNOLOGIES LLC and | VERIZON COMMUNICATIONS, INC., and CELLCO |
| DELAWARE DISPLAY O | GROUP LLC | PARTNERSHIP d/b/a VERIZON WIRELESS |
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| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK |
| 1 U.S. No. 6,755,547 | 6/29/2004 | Innovative Display Technologies LLC |
| 2 U.S. No. 7,300,194 | 11/27/2007 | Innovative Display Technologies LLC |
| 3 U.S. No. 7,384,177 | 6/10/2008 | Innovative Display Technologies LLC |
| 4 U.S. No. 7,404,660 | 7/29/2008 | Innovative Display Technologies LLC |
| 5 U.S. No. 7,434,974 | 10/14/2008 | Innovative Display Technologies LLC |
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| DOCKET NO. 2:14-cv-00721 | DATE FILED 6/25/2014 | U.S. DISTRICT COURT Eastern District of Texas, Marshall Division |
| PLAINTIFF | | DEFENDANT |
| | TECHNOLOGIES LLC and BROUP LLC | SPRINT CORPORATION, SPRINT SPECTRUM L.P. and SPRINT SOLUTIONS, INC. |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK |
| 1 U.S. No. 7,537,370 | 5/26/2009 | Innovative Display Technologies LLC |
| 2 U.S. No. 7,914,196 | 3/28/2011 | Delaware Display Group LLC |
| 3 U.S. No. 8,215,816 | 7/10/2012 | Innovative Display Technologies LLC |
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| PLAINTIFF INNOVATIVE DISPLAY DELAWARE DISPLAY G | TECHNOLOGIES LLC and ROUP LLC | DEFENDANT SPRINT CORPORATION, SPRINT SPECTRUM L.P. and SPRINT SOLUTIONS, INC. |
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| PLAINTIFF | | | DEFENDANT | | 2/11/0 |
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| 4 U.S. No. 7,404,660 | 7/29/2008 | Inno | vative Display | Technologies LLC | |
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| In the abov | ve—entitled case, the followir | ng decision ha | s been rendered o | r judgement issued: | |
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TO: Mail Stop 8

Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

| | | 15 U.S.C. § 1116 you are hereby advised that a court action has been |
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| filed in the U.S. Distr | | rn District of Texas, Marshall Division on the following |
| ☐ Trademarks or ✓ | Patents. (the patent acti | ion involves 35 U.S.C. § 292.): |
| DOCKET NO. 2:14-cv-00720 | DATE FILED 6/25/2014 | U.S. DISTRICT COURT Eastern District of Texas, Marshall Division |
| PLAINTIFF | | DEFENDANT |
| | TECHNOLOGIES LLC an | nd AT&T INC. and AT&T MOBILITY LLC |
| DELAWARE DISPLAY (| GROUP LLC | |
| | | |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK |
| 1 U.S. No. 7,537,370 | 5/26/2009 | Innovative Display Technologies LLC |
| 2 U.S. No. 7,914,196 | 3/28/2011 | Delaware Display Group LLC |
| 3 U.S. No. 8,215,816 | 7/10/2012 | Innovative Display Technologies LLC |
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| | In the above—entitled case, the | e following patent(s)/ trademark(s) have been included: |
| DATE INCLUDED | INCLUDED BY | |
| | | nendment Answer Cross Bill Other Pleading |
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TO:

Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

| In Complia | nce with 35 U.S.C. § 290 and/or 15 | 5 U.S.C. § 1116 you are hereby advised that a court action has been |
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| filed in the U.S. D | | tern District of Texas (Marshall Division) on the following |
| ☐ Trademarks or | Patents. (the patent action | on involves 35 U.S.C. § 292.): |
| DOCKET NO. 2:14-cv-760 | DATE FILED 7/10/2014 | U.S. DISTRICT COURT for the Eastern District of Texas (Marshall Division) |
| PLAINTIFF | | DEFENDANT |
| Brite Smart Corp. | | Google Inc. |
| | | |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK |
| 1 7,249,104 | 7/24/2007 | Brite Smart Corp. |
| 2 7,953,667 | 5/31/2011 | Brite Smart Corp. |
| 3 8,326,763 | 12/4/2012 | Brite Smart Corp. |
| 4 8,671,057 | 3/11/2014 | Brite Smart Corp. |
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| | | following patent(s)/ trademark(s) have been included: |
| DATE INCLUDED | INCLUDED BY ☐ Ame | endment Answer Cross Bill Other Pleading |
| PATENT OR | DATE OF PATENT | HOLDER OF PATENT OR TRADEMARK |
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Director of the U.S. Patent and Trademark Office

REPORT ON THE FILING OR DETERMINATION OF AN

| P.O. Box 1450 Alexandria, VA 22313-1450 | | | ACTION REGARDING A PATENT OR TRADEMARK | | |
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| In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court District of Delaware on the following ☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.): | | | | | |
| DOCKET NO. DATE FILED U.S. DISTRICT COURT | | | | | |
| PLAINTIFF | 6/30/2014 | | District of Delaware DEFENDANT | | |
| Innovative Display Technologies LLC | | | General Motors Company | | |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | | HOLDER OF PATENT OR TRADEMARK | | |
| See Attached | | | | | |
| 2 6,755,547 | | | | | |
| 3 7,300,194 | | | | | |
| 4 7,384,177 | | | | | |
| 5 7,404,660 | 1 | | | | |
| | In the above—entitled case, the fo | ollowing | patent(s)/ trademark(s) have been included: | | |
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| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | | HOLDER OF PATENT OR TRADEMARK | | |
| 1 7,434,974 | | | | | |
| 2 8,215,816 | | | | | |
| 3 6,886,956 | | | | | |
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TO:

Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

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| filed in the U.S. Distr | rict Court | Dis | 1116 you are hereby advised that a co | ourt action has been on the following |
| ☐ Trademarks or ✓ | Patents. (the patent action | on involve | s 35 U.S.C. § 292.): | |
| DOCKET NO. | DATE FILED 6/30/2014 | U.S. DI | STRICT COURT District of Dela | aware |
| PLAINTIFF | | | DEFENDANT | |
| Innovative Display Techr | nologies LLC | | Ford Motor Company | |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | | HOLDER OF PATENT O | R TRADEMARK |
| 1 See Attached | | | | |
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| | In the above, entitled case the | o following | patent(s)/ trademark(s) have been inc | hided: |
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Case 1:14-cv-00849-UNA Document 3 Filed 07/01/14 Page 2 of 2 PageID #: 115

| Γ | PATENT OR | DATE OF PATENT | HOLDER OF PATENT OR TRADEMARK |
|---|------------------------------------|---------------------------|-------------------------------------|
| - | TRADEMARK NO. | OR TRADEMARK 6/29/2004 | Innovative Display Technologies LLC |
| 1 | US 6,755,547 B2 US 7,300,194 B2 | 11/27/2007 | Innovative Display Technologies LLC |
| 3 | US 7,384,177 B2 | 6/10/2008 | Innovative Display Technologies LLC |
| 4 | US 7,404,660 B2 | · 7/29/2008 | Innovative Display Technologies LLC |
| 5 | US 7,434,974 B2 | 10/14/2008 | Innovative Display Technologies LLC |
| 6 | US 8,215,816 B2 | 7/10/2012 | Innovative Display Technologies LLC |
| 7 | US 6,886,956 B2 | 5/3/2005 | Innovative Display Technologies LLC |

TO:

Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

| In Compliane filed in the U.S. Dist | ~ | 15 U.S.C. § 1116 you are hereby advised that a court action has been for the Eastern District of Texas on the following | |
|-------------------------------------|------------------------------------|---|--|
| ☐ Trademarks or 🔽 | Patents. (the patent action | | |
| DOCKET NO. 2:14-cv-00624-JRG | DATE FILED 5/13/2014 | U.S. DISTRICT COURT for the Eastern District of Texas | |
| PLAINTIFF | | DEFENDANT | |
| Innovative Display Tech | nologies LLC | Mazda Motor Corporation and Mazda Motor of America, Inc. | |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK | |
| 1 6,755,547 | 6/29/2004 | Innovative Display Technologies LLC | |
| 2 7,300,194 | 11/27/2007 | Innovative Display Technologies LLC | |
| 3 7,384,177 | 6/10/2008 | Innovative Display Technologies LLC | |
| 4 7,404,660 | 7/29/2008 | Innovative Display Technologies LLC | |
| 5 7,434,974 | 10/14/2008 | Innovative Display Technologies LLC (see continuation attached) | |
| DATE INCLUDED | | e following patent(s)/ trademark(s) have been included: | |
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Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

AO 120 CONTINUATION

| PATENT OR | DATE OF PATENT | HOLDER OF PATENT OR |
|---------------|----------------|--|
| TRADEMARK NO. | OR TRADEMARK | TRADEMARK |
| 6 8,215,816 | 7/10/2012 | Innovative Display Technologies LLC |

TO:

Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

| In Complianc filed in the U.S. Distr | e with 35 U.S.C. § 290 and/or 1 | | 1116 you are herel | | t action has been on the following |
|--------------------------------------|---------------------------------|--------------------------------|---------------------|------------------------|---------------------------------------|
| | Patents. (the patent action | | g.a | | on the following |
| DOCKET NO. 2:14-cv-00300 | DATE FILED 4/7/2014 | U.S. DI | STRICT COURT | ne Eastern District | of Texas |
| PLAINTIFF | | | DEFENDANT | | |
| Innovative Display Techi | nologies LLC | | Volkswagen A | AG et al. | |
| | | | | | |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | | HOLDE | ER OF PATENT OR | TRADEMARK |
| 1 6,755,547 | 6/29/2004 | Inno | vative Display T | echnologies LLC | |
| 2 7,300,194 | 11/27/2007 | Inno | vative Display T | echnologies LLC | |
| 3 7,384,177 | 6/10/2008 | Inno | vative Display T | echnologies LLC | |
| 4 7,404,660 | 7/29/2008 | Inno | vative Display T | echnologies LLC | |
| 5 7,434,974 | 10/14/2008 | Inno | vative Display Ted | chnologies LLC (see | e continuation attached) |
| | In the above—entitled case, the | e following | patent(s)/ trademan | k(s) have been include | led: |
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| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK |
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| 6 8,215,816 | 7/10/2012 | Innovative Display Technologies LLC |
| 7 6,886,956 | 5/3/2005 | Innovative Display Technologies LLC |

TO:

Mail Stop 8 Director of the U.S. Patent and Trademark Office

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| P.O. Box 1450 Alexandria, VA 22313-1450 | | ACTION REGARDING A PATENT OR TRADEMARK | |
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| ☐ Trademarks or | liance with 35 U.S.C. § 290 and/or District Court ✓ Patents. (the patent act | 15 U.S.C. § 1116 you are hereby advised that a court action has been for the Eastern District of Toylor | |
| DOCKET NO. | DATE FILED | | |
| 2:14-cv-00202 PLAINTIFF | 3/10/2014 | U.S. DISTRICT COURT | |
| | | for the Eastern District of Texas DEFENDANT | |
| Innovative Display Te | chnologies LLC | Nissan Motor Co., Ltd. and Nissan North America, Inc. | |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK | |
| 1 6,755,547 | 6/29/2004 | | |
| 2 7,300,194 | 11/27/2007 | Innovative Display Technologies LLC | |
| 3 7,384,177 | 6/10/2008 | Innovative Display Technologies LLC | |
| 7,404,660 | 7/29/2008 | Innovative Display Technologies LLC | |
| 7,434,974 | 10/14/2008 | Innovative Display Technologies LLC Innovative Display Technologies LLC (see continuation attached) | |
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| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK | |
| 6 7,537,370 | 5/26/2009 | Innovative Display Technologies LLC | |
| 7 8,215,816 | 7/10/2012 | Innovative Display Technologies LLC | |

TO:

Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

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| In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court on the following | | | | | |
| ☐ Trademarks or ✓ | Patents. (the patent acti | ion involves | 35 U.S.C. § 292.): | | |
| DOCKET NO. 2:14-cv-00201 | DATE FILED 3/10/2014 | U.S. DIS | TRICT COURT for the Eastern District of | Texas | |
| PLAINTIFF | 5.10,20 | | DEFENDANT | | |
| Innovative Display Techr | nologies LLC | | Hyundai Motor Group et al. | | |
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| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | | HOLDER OF PATENT OR TRA | DEMARK | |
| 1 6,755,547 | 6/29/2004 | Innov | vative Display Technologies LLC | | |
| 2 7,300,194 | 11/27/2007 | Innov | vative Display Technologies LLC | | |
| 3 7,384,177 | 6/10/2008 | Innov | vative Display Technologies LLC | | |
| 4 7,404,660 | 7/29/2008 | Innov | vative Display Technologies LLC | | |
| 5 7,434,974 | 10/14/2008 | Innov | rative Display Technologies LLC (see co | ntinuation attached) | |
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| | | ie following | patent(s)/ trademark(s) have been included: | | |
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| TRADEMARK NO. | OR TRADEMARK | TRADEMARK |
| 6 8,215,816 | 7/10/2012 | Innovative Display Technologies LLC |

TO:

Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

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| filed in the U.S. Dist | trict Court fo | 5 U.S.C. § 1116 you are hereby advised that a court action has been or the Eastern District of Texas on the following |
| ☐ Trademarks or | Patents. (the patent actio | on involves 35 U.S.C. § 292.): |
| DOCKET NO. 2:14-cv-00200 | DATE FILED 3/10/2014 | U.S. DISTRICT COURT for the Eastern District of Texas |
| PLAINTIFF | · | DEFENDANT |
| Innovative Display Tech | nologies LLC | Toyota Motor Corporation et al. |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK |
| 1 6,755,547 | 6/29/2004 | Innovative Display Technologies LLC |
| 2 7,300,194 | 11/27/2007 | Innovative Display Technologies LLC |
| 3 7,384,177 | 6/10/2008 | Innovative Display Technologies LLC |
| 4 7,404,660 | 7/29/2008 | Innovative Display Technologies LLC |
| 5 7,434,974 | 10/14/2008 | Innovative Display Technologies LLC (see continuation attached) |
| DATE INCLUDED | In the above—entitled case, the included BY | following patent(s)/ trademark(s) have been included: |
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| DECISION/JUDGEMENT | entitied ease, the following the | constant has been rendered of judgement issued. |
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| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK |
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| 6 8,215,816 | 7/10/2012 | Innovative Display Technologies LLC |
| 7 6,508,563 | 1/21/2003 | Innovative Display Technologies LLC |
| 8 6,886,956 | 5/3/2005 | Innovative Display Technologies LLC |

TO:

Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

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| ☐ Trademarks or | Patents. (the patent action | |
| OOCKET NO. 2:14-cv-00106 | DATE FILED 2/21/2014 | U.S. DISTRICT COURT for the Eastern District of Texas |
| PLAINTIFF | | DEFENDANT |
| Innovative Display Techn | ologies LLC | BMW of North America, LLC BMW Manufacturing Co., LLC |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK |
| 1 6,755,547 | 6/29/2004 | Innovative Display Technologies LLC |
| 2 7,300,194 | 11/27/2007 | Innovative Display Technologies LLC |
| 3 7,384,177 | 6/10/2008 | Innovative Display Technologies LLC |
| 4 7,404,660 | 7/29/2008 | Innovative Display Technologies LLC |
| 5 7,434,974 | 10/14/2008 | Innovative Display Technologies LLC (see continuation attached) |
| DATE INCLUDED | INCLUDED BY | |
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| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK |
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| 8,215,816 | 7/10/2012 | Innovative Display Technologies LLC |
| 6,508,563 | 1/21/2003 | Innovative Display Technologies LLC |
| 6,886,956 | 5/3/2005 | Innovative Display Technologies LLC |
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TO:

Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

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| filed in the U.S. Dist | | Dis | 1116 you are hereby advised that a court actrict of Delaware | on the following | | |
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| DOCKET NO. | OCKET NO. DATE FILED U.S. DISTRICT COURT District of Delaware | | | | | |
| PLAINTIFF | <u> </u> | | DEFENDANT | | | |
| Delaware Display Group Technologies LLC | LLC and Innovative Di | isplay | Amazon.com, Inc. | | | |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | | HOLDER OF PATENT OR TR | ADEMARK | | |
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| | | the following | patent(s)/ trademark(s) have been included: | | | |
| DATE INCLUDED | INCLUDED BY | Amendment | ☐ Answer ☐ Cross Bill | ☐ Other Pleading | | |
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Case 1:13-cv-02106-UNA Document 3 Filed 12/31/13 Page 2 of 2 PageID #: 155

| | PATENT OR DATE OF PATENT TRADEMARK NO. OR TRADEMARK | | HOLDER OF PATENT OR TRADEMARK |
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| 1 | US 6,755,547 B2 | 6/29/2004 | Innovative Display Technologies LLC |
| 2 | US 7,300,194 B2 | 11/27/2007 | Innovative Display Technologies LLC |
| 3 | US 7,384,177 B2 | 6/10/2008 | Innovative Display Technologies LLC |
| 4 | US 7,404,660 B2 | 7/29/2008 | Innovative Display Technologies LLC |
| 5 | US 7,434,974 B2 | 10/14/2008 | Innovative Display Technologies LLC |
| 6 | US 7,537,370 B2 | 5/26/2009 | Innovative Display Technologies LLC |
| 7 | US 7,914,196 B2 | 3/29/2011 | Delaware Display Group LLC |
| 8 | US 8,215,816 B2 | 7/10/2012 | Innovative Display Technologies LLC |

TO:

Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

| Alexa | INADEMAK | | | | |
|--|---------------------------------|--------------|---------------------|----------------------|--|
| In Compliand filed in the U.S. Dis | ce with 35 U.S.C. § 290 and/or | | 1116 you are hereb | | ion has been on the following |
| | Patents. (the patent act | | | | |
| DOCKET NO. | DATE FILED 12/31/2013 | U.S. DI | STRICT COURT | District of Delaware | |
| PLAINTIFF | | | DEFENDANT | | |
| Delaware Display Group Technologies LLC | o LLC and Innovative Disp | olay | HTC Corporat | ion and HTC Americ | a, Inc. |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | | HOLDE | R OF PATENT OR TRA | DEMARK |
| 1 See Attached | | | | | |
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| DATE INCLUDED | In the above—entitled case, th | e following | patent(s)/ trademar | | Other Pleading |
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Case 1:13-cv-02107-UNA Document 3 Filed 12/31/13 Page 2 of 2 PageID #: 154

| | PATENT OR | DATE OF PATENT | HOLDER OF PATENT OR TRADEMARK |
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| | TRADEMARK NO | OR TRADEMARK | HOLDER OF TATELYT OR HOLDEN THE |
| 1 | US 6,755,547 B2 | 6/29/2004 | Innovative Display Technologies LLC |
| 2 | US 7,300,194 B2 | 11/27/2007 | Innovative Display Technologies LLC |
| 3 | US 7,384,177 B2 | 6/10/2008 | Innovative Display Technologies LLC |
| 4 | US 7,404,660 B2 | 7/29/2008 | Innovative Display Technologies LLC |
| 5 | US 7,434,974 B2 | 10/14/2008 | Innovative Display Technologies LLC |
| 6 | US 7,537,370 B2 | 5/26/2009 | Innovative Display Technologies LLC |
| 7 | US 7,914,196 B2 | 3/29/2011 | Delaware Display Group LLC |
| 8 | US 8,215,816 B2 | 7/10/2012 | Innovative Display Technologies LLC |

TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450

P.O. Box 1450 Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

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| In Compliance filed in the U.S. Distr | e with 35 U.S.C. § 290 and/or 1: | | 1116 you are hereby advi trict of Delaware | ised that a court act | on the following |
| ☐ Trademarks or | Patents. (the patent action | on involve | s 35 U.S.C. § 292.): | | |
| DOCKET NO. | DATE FILED 12/31/2013 | U.S. DI | STRICT COURT | rict of Delaware | |
| PLAINTIFF | 12/31/2013 | | DEFENDANT | not or Belaware | |
| Delaware Display Group Technologies LLC | LLC and Innovative Displa | ay | LG Electronics, Inc Display Co., Ltd., a | | |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | | HOLDER OF | PATENT OR TRA | DEMARK |
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| DATE INCLUDED | In the above—entitled case, the INCLUDED BY | following | g patent(s)/ trademark(s) ha | ave been included: | |
| DATE INCLUDED | | ndment | ☐ Answer ☐ | Cross Bill [| Other Pleading |
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Case 1:13-cv-02109-UNA Document 3 Filed 12/31/13 Page 2 of 2 PageID #: 155

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| | TRADEMARK NO. | OR TRADEMARK | HODDER OF THE EVE OR THE EDDINGE |
| 1 | US 6,755,547 B2 | 6/29/2004 | Innovative Display Technologies LLC |
| 2 | US 7,300,194 B2 | 11/27/2007 | Innovative Display Technologies LLC |
| 3 | US 7,384,177 B2 | 6/10/2008 | Innovative Display Technologies LLC |
| 4 | US 7,404,660 B2 | 7/29/2008 | Innovative Display Technologies LLC |
| 5 | US 7,434,974 B2 | 10/14/2008 | Innovative Display Technologies LLC |
| 6 | US 7,537,370 B2 | 5/26/2009 | Innovative Display Technologies LLC |
| 7 | US 7,914,196 B2 | 3/29/2011 | Delaware Display Group LLC |
| 8 | US 8,215,816 B2 | 7/10/2012 | Innovative Display Technologies LLC |

TO:

Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

| In Complia | | 15 U.S.C. § 1116 you are hereby advised that a court action has been District of Delaware on the following |
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| ☐ Trademarks or | ☑ Patents. (☐ the patent act | ion involves 35 U.S.C. § 292.): |
| DOCKET NO. | DATE FILED 12/31/2013 | U.S. DISTRICT COURT District of Delaware |
| PLAINTIFF | | DEFENDANT |
| Delaware Display Grou Technologies LLC | up LLC and Innovative Disp | Pantech Corp. Ltd, and Pantech Wireless, Inc. |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK |
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| DATE INCLUDED | INCLUDED BY | e following patent(s)/ trademark(s) have been included: endment |
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| In the ab | ove—entitled case, the following | decision has been rendered or judgement issued: |
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Case 1:13-cv-02110-UNA Document 3 Filed 12/31/13 Page 2 of 2 PageID #: 155

| | PATENT OR | DATE OF PATENT | HOLDER OF PATENT OR TRADEMARK |
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| | TRADEMARK NO. | OR TRADEMARK | |
| 1 | US 6,755,547 B2 | 6/29/2004 | Innovative Display Technologies LLC |
| 2 | US 7,300,194 B2 | 11/27/2007 | Innovative Display Technologies LLC |
| 3 | US 7,384,177 B2 | 6/10/2008 | Innovative Display Technologies LLC |
| 4 | US 7,404,660 B2 | 7/29/2008 | Innovative Display Technologies LLC |
| 5 | US 7,434,974 B2 | 10/14/2008 | Innovative Display Technologies LLC |
| 6 | US 7,537,370 B2 | 5/26/2009 | Innovative Display Technologies LLC |
| 7 | US 7,914,196 B2 | 3/29/2011 | Delaware Display Group LLC |
| 8 | US 8,215,816 B2 | 7/10/2012 | Innovative Display Technologies LLC |

TO:

Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

| In Compliane filed in the U.S. Dist | | 15 U.S.C. § 1116 you are hereby advised that a court action has been District of Delaware on the following |
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| ☐ Trademarks or | Patents. (the patent act | tion involves 35 U.S.C. § 292.): |
| DOCKET NO. DATE FILED U.S. D | | U.S. DISTRICT COURT District of Delaware |
| PLAINTIFF | | DEFENDANT |
| Delaware Display Group Technologies LLC | LLC and Innovative Disp | Sony Corporation, Sony Corporation of America, Sony Electronics Inc., and Sony Mobile Communications (USA) Inc. |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK |
| 1 See Attached | | |
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| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK |
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Case 1:13-cv-02111-UNA Document 3 Filed 12/31/13 Page 2 of 2 PageID #: 156

| | PATENT OR | DATE OF PATENT | HOLDER OF PATENT OR TRADEMARK |
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| | TRADEMARK NO. | OR TRADEMARK | HOLDER OF TATENT OR TRADEWARK |
| 1 | US 6,755,547 B2 | 6/29/2004 | Innovative Display Technologies LLC |
| 2 | US 7,300,194 B2 | 11/27/2007 | Innovative Display Technologies LLC |
| 3 | US 7,384,177 B2 | 6/10/2008 | Innovative Display Technologies LLC |
| 4 | US 7,404,660 B2 | 7/29/2008 | Innovative Display Technologies LLC |
| 5 | US 7,434,974 B2 | 10/14/2008 | Innovative Display Technologies LLC |
| 6 | US 7,537,370 B2 | 5/26/2009 | Innovative Display Technologies LLC |
| 7 | US 7,914,196 B2 | 3/29/2011 | Delaware Display Group LLC |
| 8 | US 8,215,816 B2 | 7/10/2012 | Innovative Display Technologies LLC |

TO:

Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

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| filed in the U.S. Dist | trict Court | Dist | 1116 you are hereby advised that a court action has been trict of Delaware on the following |
| Trademarks or | Patents. (the patent action | | |
| DOCKET NO. | DATE FILED 12/31/2013 | U.S. DIS | STRICT COURT District of Delaware |
| PLAINTIFF | <u> </u> | | DEFENDANT |
| Delaware Display Group Technologies LLC | o LLC and Innovative Displa | у | Vizio, Inc. |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | | HOLDER OF PATENT OR TRADEMARK |
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| DATE INCLUDED | In the above—entitled case, the factorial in the above entitled case, t | | patent(s)/ trademark(s) have been included: Answer Cross Bill Other Pleading |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | | HOLDER OF PATENT OR TRADEMARK |
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Case 1:13-cv-02112-UNA Document 3 Filed 12/31/13 Page 2 of 2 PageID #: 155

| | PATENT OR | DATE OF PATENT | HOLDER OF PATENT OR TRADEMARK |
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| | TRADEMARK NO. | OR TRADEMARK | HOEDER OF TATELYT OR TRADEWARD |
| 1 | US 6,755,547 B2 | 6/29/2004 | Innovative Display Technologies LLC |
| 2 | US 7,300,194 B2 | 11/27/2007 | Innovative Display Technologies LLC |
| 3 | US 7,384,177 B2 | 6/10/2008 | Innovative Display Technologies LLC |
| 4 | US 7,404,660 B2 | 7/29/2008 | Innovative Display Technologies LLC |
| 5 | US 7,434,974 B2 | 10/14/2008 | Innovative Display Technologies LLC |
| 6 | US 7,537,370 B2 | 5/26/2009 | Innovative Display Technologies LLC |
| 7 | US 7,914,196 B2 | 3/29/2011 | Delaware Display Group LLC |
| 8 | US 8,215,816 B2 | 7/10/2012 | Innovative Display Technologies LLC |

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TO: Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450

Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

| In Compliance filed in the U.S. Distr | • | U.S.C. § 1116 you are hereby advised that a court an District of Texas, Marshall Division | ction has been on the following |
|---------------------------------------|-----------------------------------|---|---------------------------------|
| ☐ Trademarks or | Patents. (the patent actio | n involves 35 U.S.C. § 292.): | Andrews Assessment |
| DOCKET NO. 2:13-cv-00522 | DATE FILED 6/28/2013 | U.S. DISTRICT COURT Eastern District of Texas, Mars | shall Division |
| PLAINTIFF | | DEFENDANT | |
| INNOVATIVE DISPLAY | TECHNOLOGIES LLC | ACER INC., and ACER AMERICA | A CORPORATION |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TR | ADEMARK |
| 1 U.S. No. 6,755,547 | 6/29/2004 | Innovative Display Technologies LLC | |
| 2 U.S. No. 7,300,194 | 11/27/2007 | Innovative Display Technologies LLC | |
| 3 U.S. No. 7,384,177 | 6/10/2008 | Innovative Display Technologies LLC | |
| 4 U.S. No. 7,404,660 | 7/29/2008 | Innovative Display Technologies LLC | |
| 5 U.S. No. 7,434,974 | 10/14/2008 | Innovative Display Technologies LLC | |
| | | following patent(s)/ trademark(s) have been included | |
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TO:

Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

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| filed in the U.S. Distr | _ | tern District | of Texas, Marshall Division 35 U.S.C. § 292.): | on the following | |
| DOCKET NO. 2:13-cv-00523 | DATE FILED 6/28/2013 | U.S. DIS | TRICT COURT Eastern District of Te | exas, Marshall Division | |
| PLAINTIFF | 0/20/2010 | | DEFENDANT | | |
| INNOVATIVE DISPLAY | TECHNOLOGIES LLC | | DELL, INC. | | |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | | HOLDER OF PATE | ENT OR TRADEMARK | |
| 1 U.S. No. 6,755,547 | 6/29/2004 | Innov | vative Display Technologie | es LLC | |
| 2 U.S. No. 7,300,194 | 11/27/2007 | Inno | vative Display Technologic | es LLC | |
| 3 U.S. No. 7,384,177 | 6/10/2008 | Inno | vative Display Technologic | es LLC | |
| 4 U.S. No. 7,404,660 | 7/29/2008 | Inno | vative Display Technologi | es LLC | |
| 5 U.S. No. 7,434,974 | 10/14/2008 | Inno | vative Display Technologi | ies LLC | |
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| | | Amendment | Answer Cros | | |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | | HOLDER OF PATE | ENT OR TRADEMARK | |
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TO:

Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

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| In Compliance with 35 U.S.C. § 290 and/or 15 | | tern Distric | t of Texas, Marshall Division | urt action has been on the following |
| DOCKET NO. 2:13-cv-00524 | DATE FILED 6/28/2013 | U.S. DI | STRICT COURT Eastern District of Texas, I | Marshall Division |
| PLAINTIFF INNOVATIVE DISPLAY | | | DEFENDANT HEWLETT-PACKARD COMP | |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | | HOLDER OF PATENT OF | R TRADEMARK |
| I U.S. No. 6,755,547 | 6/29/2004 | Inno | ovative Display Technologies LL | С |
| 2 U.S. No. 7,300,194 | 11/27/2007 | Inno | ovative Display Technologies LL | С |
| 3 U.S. No. 7,384,177 | 6/10/2008 | Inno | ovative Display Technologies LL | С |
| 4 U.S. No. 7,404,660 | 7/29/2008 | Inno | ovative Display Technologies LL | С |
| 5 U.S. No. 7,434,974 | 10/14/2008 | Inno | ovative Display Technologies LL | .C |
| | In the above—entitled case | , the following | g patent(s)/ trademark(s) have been inc | luded: |
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TO:

Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

| filed in the U.S. Distr | | 5 U.S.C. § 1116 you are hereby advised that a court action has been on District of Texas, Marshall Division on the following on involves 35 U.S.C. § 292.): |
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| DOCKET NO. | DATE FILED 6/28/2013 | U.S. DISTRICT COURT Footory District of Toyon Marshall Division |
| 2:13-cv-00525 PLAINTIFF | 0/20/2013 | Eastern District of Texas, Marshall Division DEFENDANT |
| INNOVATIVE DISPLAY | TECHNOLOGIES LLC | HUAWEI INVESTMENT AND HOLDING CO., LTD., HUAWEI TECHNOLOGIES CO., LTD., and HUAWEI DEVICE USA INC. |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK |
| 1 U.S. No. 6,755,547 | 6/29/2004 | Innovative Display Technologies LLC |
| 2 U.S. No. 7,300,194 | 11/27/2007 | Innovative Display Technologies LLC |
| 3 U.S. No. 7,384,177 | 6/10/2008 | Innovative Display Technologies LLC |
| 4 U.S. No. 7,404,660 7/29/2008 | | Innovative Display Technologies LLC |
| 5 U.S. No. 7,434,974 | 10/14/2008 | Innovative Display Technologies LLC |
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Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

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| filed in the U.S. Dist | rict Court East | 15 U.S.C. § 1116 you are hereby advised that a court action has been ern District of Texas, Marshall Division on the following tion involves 35 U.S.C. § 292.): | |
| DOCKET NO. 2:13-cv-00526 | DATE FILED 6/28/2013 | U.S. DISTRICT COURT | |
| PLAINTIFF | 0/20/2013 | Eastern District of Texas, Marshall Division DEFENDANT | |
| INNOVATIVE DISPLAY | TECHNOLOGIES LLC | RESEARCH IN MOTION LIMITED, and RESEARCH MOTION CORPORATION | IN |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK | |
| I U.S. No. 6,755,547 | 6/29/2004 | Innovative Display Technologies LLC | |
| 2 U.S. No. 7,300,194 | 11/27/2007 | Innovative Display Technologies LLC | |
| 3 U.S. No. 7,384,177 | 6/10/2008 | Innovative Display Technologies LLC | |
| 4 U.S. No. 7,404,660 | 7/29/2008 | Innovative Display Technologies LLC | |
| 5 U.S. No. 7,434,974 | 10/14/2008 | Innovative Display Technologies LLC | |
| | | e following patent(s)/ trademark(s) have been included: | |
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| In the above | entitled case, the following | decision has been rendered or judgement issued: | |
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TO:

Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

| Alexand | Iria, VA 22313-1450 | TRADEMARK |
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| filed in the U.S. Distri | | U.S.C. § 1116 you are hereby advised that a court action has been District of Texas, Marshall Division on the following involves 35 U.S.C. § 292.): |
| DOCKET NO. 2:13-cv-00527 | DATE FILED 6/28/2013 | U.S. DISTRICT COURT Eastern District of Texas, Marshall Division |
| PLAINTIFF INNOVATIVE DISPLAY 1 | | ZTE CORPORATION, and ZTE (USA) INC. |
| PATENT OR TRADEMARK NO. | DATE OF PATENT OR TRADEMARK | HOLDER OF PATENT OR TRADEMARK |
| 1 U.S. No. 6,755,547 | 6/29/2004 | Innovative Display Technologies LLC |
| 2 U.S. No. 7,300,194 | 11/27/2007 | Innovative Display Technologies LLC |
| 3 U.S. No. 7,384,177 | 6/10/2008 | Innovative Display Technologies LLC |
| 4 U.S. No. 7,404,660 | 7/29/2008 | Innovative Display Technologies LLC |
| 5 U.S. No. 7,434,974 | 10/14/2008 | Innovative Display Technologies LLC |
| PATENT OR TRADEMARK NO. 1 2 3 4 5 | INCLUDED BY Amer DATE OF PATENT OR TRADEMARK | following patent(s)/ trademark(s) have been included: ndment |
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UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMME United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov UNITED STATES DEPARTMENT OF COMMERCE

APPLICATION NUMBER PATENT NUMBER GROUP ART UNIT FILE WRAPPER LOCATION 11/378,080 7434974 2885 9200



Correspondence Address/Fee Address Change

The following fields have been set to Customer Number 93969 on 03/23/2010

- Correspondence Address
- Power of Attorney Address

The address of record for Customer Number 93969 is:

93969

Donald L. Otto (Rambus) Renner, Otto, Boisselle & Sklar, LLP 1621 Euclid Avenue 19th Floor Cleveland, OH 44115



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS PO. Box 1450 Alexandria, Vignia 22313-1450 www.uspto.gov

APPLICATION NUMBER PATENT NUMBER GROUP ART UNIT FILE WRAPPER LOCATION 11/378,080 7434974 2885 9200

Correspondence Address/Fee Address Change

The following fields have been set to Customer Number 93969 on 03/09/2010

- Correspondence Address
- Power of Attorney Address

The address of record for Customer Number 93969 is:

93969 **Rambus International Ltd** c/o Rambus Inc. 4440 El Camino Real Los Altos, CA 94022

UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO.

: 7,434,974 B2

Page 1 of 1

DATED

APPLICATION NO. : 11/378080

INVENTOR(S)

: October 14, 2008 : Jeffery R. Parker

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 9,

Line 66, replace "7" with --11--.

Signed and Sealed this

Second Day of December, 2008

JON W. DUDAS
Director of the United States Patent and Trademark Office

| Practitioner's Docket No. | GLOLP0108USAE | PATENI |
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|---------------------------|---------------|--------|

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Patent Number: 7,434,974

lssued: October 14, 2008
Name of Patentee: Jeffery R. Parker

Title of Invention: LIGHT EMITTING PANEL ASSEMBLIES

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

ed., Rev. 2.

REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT FOR APPLICANT'S MISTAKE (37 C.F.R. § 1.323)

| 1. | It is | s n | oted that an error appears in this patent of a |
|-----|-------|------|---|
| | ı | | clerical |
| | - | X | typographical |
| | | | minor |
| the | ereof | f do | character, as more fully described below. It occurred in good faith. Correction bes not involve such changes in the patent as would constitute new matter or uire re-examination. A certificate of correction is requested. |
| 2. | Att | tact | ned hereto is PTO/SB/44 (also FORM PTO/1050) in a form suitable for printing. |
| 1 | VOTE. | : F | orm PTO/SB/44 (also Form PTO-1050), using the column and line number in the printed patent, should e used exclusively, regardless of the length or complexity of the subject matter. M.P.E.P. § 1485, 8th |

NOTE: The patent grant should be retained by the patentee. The PTO does not attach the certificate of correction to the patentee's copy of the patent. The patent grant will be returned to the patentee if submitted. M.P.E.P. § 1485, 8th ed., Rev. 2.

Request for Certificate of Correction of Patent for Applicant's Mistake (37 C.F.R. § 1.323) [14-2] —page 1 of 3)

3. The exact page and line number where the error occurs in the application file are:

NOTE: This information should be identified in this request, however, on Form PTO-1050, only the column and line number in the printed patent should be used. M.P.E.P. § 1485, 8th Edition, Rev. 2.

Reply Under 37 CFR 1.116 filed August 8, 2008, page 7, claim 25, line 1

Application claim 25 should have been made dependent on claim 26 instead of claim 4 since there is no antecedent basis in claim 4 for "the film".

Request for Certificate of Correction of Patent for Applicant's Mistake (37 C.F.R. § 1.323) [14-2]
—page 2 of 3)

| 4. Please send the Certificate to Name: RENNER, OTTO, BOISSELLE & SKLAR, LLP Address: 1621 Euclid Avenue, 19th Floor Cleveland, Ohio 44115-2191 5. Please pay the fee required by 37 C.F.R. § 1.20(a)-\$100.00 Attached is a □ check □ money order in the amount Authorization is hereby made to charge the amount to Deposit Account No. 18-0988 | O, as follows: nt of \$ of \$ additional fees, credit over payment |
|---|---|
| Address: 1621 Euclid Avenue, 19th Floor Cleveland, Ohio 44115-2191 5. Please pay the fee required by 37 C.F.R. § 1.20(a)-\$100.00 Attached is a check money order in the amount Authorization is hereby made to charge the amount | O, as follows: nt of \$ of \$ additional fees, credit over payment |
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| Charge any additional fees required by this paper of in the manner authorized above. | or credit any overpayment |
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| | |
| Reg. No.: 22,125 Donald L. ((type or print name RENNER, OT 1621 Euclide) | Otto |

NOTE: The certificate of correction for applicant's mistake may be signed by the attorney of record, unlike that for PTO mistake where the patentee or an owner of an interest in the invention must make the request.

23908

Request for Certificate of Correction of Patent for Applicant's Mistake (37 C.F.R. § 1.323) [14-2] —page 3 of 3)

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(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

| CERTIFICATE OF CONTROL |
|--|
| Page <u>1</u> of <u>1</u> |
| PATENT NO. : 7,434,974 B2 |
| APPLICATION NO.: 11/378,080 |
| ISSUE DATE : October 14, 2008 |
| INVENTOR(S) : Jeffery R. Parker |
| It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below: |
| Column 9, Line 66, replace "7" with11 |
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MAILING ADDRESS OF SENDER (Please do not use customer number below):

RENNER, OTTO, BOISSELLE & SKLAR, LLP 1621 Euclid Avenue, 19th Floor Cleveland, Ohio 44115-2191

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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| Electronic Patent Application Fee Transmittal | | | | | | | |
|---|---------------------------------|---------------------|----------|--------|-------------------------|--|--|
| Application Number: | 11378080 | | | | | | |
| Filing Date: | 17-Mar-2006 | | | | | | |
| Title of Invention: | LIGHT EMITTING PANEL ASSEMBLIES | | | | | | |
| First Named Inventor/Applicant Name: | Jef | fery R. Parker | | | | | |
| Filer: | Do | nald L. Otto/Jeanne | Murphy | | | | |
| Attorney Docket Number: | GL | OLP0108USAE | | | | | |
| Filed as Large Entity | • | | | | | | |
| Utility under 35 USC 111(a) Filing Fees | | | | | | | |
| Description | | Fee Code | Quantity | Amount | Sub-Total in USD(\$) | | |
| Basic Filing: | | | | | | | |
| Pages: | | | | | | | |
| Claims: | | | | | | | |
| Miscellaneous-Filing: | | | | | | | |
| Petition: | | | | | | | |
| Patent-Appeals-and-Interference: | | | | | | | |
| Post-Allowance-and-Post-Issuance: | | | | | | | |
| Certificate of correction | | 1811 | 1 | 100 | 100 | | |
| Extension-of-Time: | | | | | | | |

Page 65 of 212

| Description | Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
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| Miscellaneous: | | | | |
| | Tot | al in USD | (\$) | 100 |

| Electronic Acknowledgement Receipt | | | | | | |
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| EFS ID: | 4207138 | | | | | |
| Application Number: | 11378080 | | | | | |
| International Application Number: | | | | | | |
| Confirmation Number: | 8860 | | | | | |
| Title of Invention: | LIGHT EMITTING PANEL ASSEMBLIES | | | | | |
| First Named Inventor/Applicant Name: | Jeffery R. Parker | | | | | |
| Customer Number: | 23908 | | | | | |
| Filer: | Donald L. Otto/Jeanne Murphy | | | | | |
| Filer Authorized By: | Donald L. Otto | | | | | |
| Attorney Docket Number: | GLOLP0108USAE | | | | | |
| Receipt Date: | 30-OCT-2008 | | | | | |
| Filing Date: | 17-MAR-2006 | | | | | |
| Time Stamp: | 16:21:14 | | | | | |
| Application Type: | Utility under 35 USC 111(a) | | | | | |
| Payment information: | | | | | | |

Payment information:

| Submitted with Payment | yes |
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| Payment Type | Credit Card |
| Payment was successfully received in RAM | \$100 |
| RAM confirmation Number | 10577 |
| Deposit Account | |
| Authorized User | |

File Listing:

| Document | Dogument Description | File Name | File Size(Bytes)/ | Multi | Pages |
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| 1 | Request for Certificate of Correction | GLOLP0108USAEcertificateofco | 97480 | no | 4 |
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| r Request for Certificate of | request for Certificate of Correction | rrection.pdf | 40a9818c8265270fca40b263bc4e749b6d7 c0624 | | 7 |
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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | ISSUE DATE | PATENT NO. | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|------------|------------|---------------------|------------------|
| 11/378,080 | 10/14/2008 | 7434974 | GLOLP0108USAE | 8860 |

23908

7590

09/24/2008

RENNER OTTO BOISSELLE & SKLAR, LLP 1621 EUCLID AVENUE NINETEENTH FLOOR CLEVELAND, OH 44115

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment is 103 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Jeffery R. Parker, Richfield, OH;

IR103 (Rev. 11/05)

Page 69 of 212

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Stop ISSUL FEE

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| | | | 7 | canne | Muy | a has | (Signature) |
| | | | | September | 5. 2008 | ' <i>1</i> | (Date) |
| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTOR | | ATTORNE | Y DOCKET NO. | CONFIRMATION NO. |
| 11/378,080 | 03/17/2006 | | Jeffery R. Parker | | GLOL | P0108USAE | 8860 |
| TITLE OF INVENTION | : LIGHT EMITTING PA | ANEL ASSEMBLIES | | | | | |
| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSU | JE FEE T | OTAL FEE(S) DUE | DATE DUE |
| nonprovisional | NO | \$1440 | \$300 | \$0 | | \$1740 | 11/24/2008 |
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| 1. Change of correspond CFR 1.363). | ence address or indicatio | n of "Fee Address" (37 | 2. For printing on the p | | | | R, OTTO, BOISSELLI .AR, LLP |
| | ondence address (or Cha B/122) attached. | nge of Correspondence | (1) the names of up to or agents OR, alternation | o 3 registered pate | nt attorneys | | ŕ |
| Address form PTO/SI | B/122) attached. | | (2) the name of a singl | e firm (having as | a member a | | |
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| 5. Change in Entity Sta | • | | | | | | |
| a. Applicant claim | ns SMALL ENTITY stat | us. See 37 CFR 1.27. | b. Applicant is no lon | | | | |
| NOTE: The Issue Fee ar interest as shown by the | records of the United Sta | uired) will not be accepte ates Patent and Trademark | of from anyone other than to Office. | ne applicant; a reg | gistered attor | mey or agent, or t | the assignee or other party in |
| Authorized Signature | - Coulef. | KIND | | Date | Sept | ember 5, 2 | 2008 |
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| Alexandria, vinginia 22. | 313-1 4 30. | | on is required to obtain or 1.14. This collection is es y depending upon the individe Chief Information Offic COMPLETED FORMS Tops of the collection of incompletion of incom | | | | nd by the USPTO to process) ing gathering, preparing, and time you require to complete partment of Commerce, P.O. for Patents, P.O. Box 1450, ol number. |

| Electronic Patent Application Fee Transmittal | | | | | | | |
|---|---------------------------------|---------------------|----------|--------|-------------------------|--|--|
| Application Number: | 11378080 | | | | | | |
| Filing Date: | 17-Mar-2006 | | | | | | |
| Title of Invention: | LIGHT EMITTING PANEL ASSEMBLIES | | | | | | |
| First Named Inventor/Applicant Name: | Jef | fery R. Parker | | | | | |
| Filer: | Do | nald L. Otto/Jeanne | Murphy | | | | |
| Attorney Docket Number: | GL | OLP0108USAE | | | | | |
| Filed as Large Entity | | | | | | | |
| Utility under 35 USC 111(a) Filing Fees | | | | | | | |
| Description | | Fee Code | Quantity | Amount | Sub-Total in USD(\$) | | |
| Basic Filing: | | | | | | | |
| Pages: | | | | | | | |
| Claims: | | | | | | | |
| Miscellaneous-Filing: | | | | | | | |
| Petition: | | | | | | | |
| Patent-Appeals-and-Interference: | | | | | | | |
| Post-Allowance-and-Post-Issuance: | | | | | | | |
| Utility Appl issue fee | | 1501 | 1 | 1440 | 1440 | | |
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| Extension-of-Time: | | | | |
| Miscellaneous: | | | | |
| | Tot | al in USD | (\$) | 1740 |

| Electronic Ac | knowledgement Receipt |
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| EFS ID: | 3894496 |
| Application Number: | 11378080 |
| International Application Number: | |
| Confirmation Number: | 8860 |
| Title of Invention: | LIGHT EMITTING PANEL ASSEMBLIES |
| First Named Inventor/Applicant Name: | Jeffery R. Parker |
| Customer Number: | 23908 |
| Filer: | Donald L. Otto/Jeanne Murphy |
| Filer Authorized By: | Donald L. Otto |
| Attorney Docket Number: | GLOLP0108USAE |
| Receipt Date: | 05-SEP-2008 |
| Filing Date: | 17-MAR-2006 |
| Time Stamp: | 13:53:23 |
| Application Type: | Utility under 35 USC 111(a) |
| Payment information: | 1 |

Payment information:

| Submitted with Payment | yes | | | | | |
|--|-------------|--|--|--|--|--|
| Payment Type | Credit Card | | | | | |
| Payment was successfully received in RAM | \$1740 | | | | | |
| RAM confirmation Number | 9416 | | | | | |
| Deposit Account | | | | | | |
| Authorized User | | | | | | |

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| 1 | Issue Fee Payment (PTO-85B) | GLOLP0108USAEissuefee.pdf | 96768 | no | 1 |

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

23908

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08/22/2008

RENNER OTTO BOISSELLE & SKLAR, LLP 1621 EUCLID AVENUE NINETEENTH FLOOR CLEVELAND, OH 44115 EXAMINER

SEMBER, THOMAS M

ART UNIT PAPER NUMBER

2885

DATE MAILED: 08/22/2008

| APPLICATION NO. FILING DATE FIRST NAT | | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------------|------------|----------------------|---------------------|------------------|
| 11/378,080 | 03/17/2006 | Jeffery R. Parker | GLOLP0108USAE | 8860 |

TITLE OF INVENTION: LIGHT EMITTING PANEL ASSEMBLIES

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1440 | \$300 | \$0 | \$1740 | 11/24/2008 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

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I. Review the SMALL ENTITY status shown above.

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450 (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

or <u>Fax</u>

Note: A certificate of mailing can only be used for domestic mailings of the CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. 23908 7590 08/22/2008 Certificate of Mailing or Transmission RENNER OTTO BOISSELLE & SKLAR, LLP I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. **1621 EUCLID AVENUE** NINETEENTH FLOOR CLEVELAND, OH 44115 (Depositor's name (Signature (Date APPLICATION NO. FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. FILING DATE 11/378,080 03/17/2006 Jeffery R. Parker GLOLP0108USAE 8860 TITLE OF INVENTION: LIGHT EMITTING PANEL ASSEMBLIES APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional NO \$1440 \$300 \$0 \$1740 11/24/2008 **EXAMINER** ART UNIT CLASS-SUBCLASS SEMBER, THOMAS M 2885 362-612000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) the name of a single firm (having as a member a ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) 4a. The following fee(s) are submitted: lssue Fee A check is enclosed. ☐ Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number ______ (enclose an extra copy of this fo Advance Order - # of Copies _ (enclose an extra copy of this form). 5. Change in Entity Status (from status indicated above) a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ■ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. Authorized Signature Date Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. CONFIRMATION | | | | |
|--------------------------------|----------------|----------------------|----------------------------------|--------------|--|--|--|
| 11/378,080 | 03/17/2006 | Jeffery R. Parker | GLOLP0108USAE 8860 | | | | |
| 23908 75 | 90 08/22/2008 | | EXAM | INER | | | |
| RENNER OTTO | BOISSELLE & SK | LAR, LLP | SEMBER, T | HOMAS M | | | |
| 1621 EUCLID AV | | | ART UNIT | PAPER NUMBER | | | |
| NINETEENTH FL CLEVELAND, OF | = = | | 2885 | | | | |
| CLE VELAND, OF | 144113 | | DATE MAILED: 08/22/200 | 8 | | | |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 103 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 103 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

| | Application No. | Applicant(s) | | | | | | | |
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| Notice of Allowability | 11/378,080 | PARKER, JEFFERY R. | | | | | | | |
| Notice of Allowability | Examiner | Art Unit | | | | | | | |
| | Thomas M. Sember | as M. Sember 2885 | | | | | | | |
| The MAILING DATE of this communication appeal claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED in this app or other appropriate communication IGHTS. This application is subject to | olication. If not included will be mailed in due course. THIS | | | | | | | |
| 1. 🔀 This communication is responsive to the amendment filed | <u>on 08/08/08</u> . | | | | | | | | |
| 2. The allowed claim(s) is/are <u>1,4-6,8,9,11,13 and 15-30</u> . | | | | | | | | | |
| 3. Acknowledgment is made of a claim for foreign priority urestimated as a claim for foreign priority urestimated as a claim for foreign priority urestimated. a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents not priority documents are completed. * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be subman INFORMAL PATENT APPLICATION (PTO-152) which give 5. CORRECTED DRAWINGS (as "replacement sheets") must (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in tile. DEPOSIT OF and/or INFORMATION about the deposition attached Examiner's comment regarding REQUIREMENT. | e been received. been received in Application No cuments have been received in this re | national stage application from the complying with the requirements S AMENDMENT or NOTICE OF tion is deficient. 948) attached office action of the back) of the complying with the front (not the back) of the complying in the submitted. Note the | | | | | | | |
| Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material | 5. ☐ Notice of Informal Pages No./Mail Dat Paper N | (PTO-413), e | | | | | | | |
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U.S. Patent and Trademark Office PTOL-37 (Rev. 08-06)

Application/Control Number: 11/378,080 Page 2

Art Unit: 2885

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance: None of the prior art of record alone or in combination teaches or fairly suggest applicant's claimed invention for the reasons stated in applicant's amendment/response filed on 08/08/08.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas M. Sember whose telephone number is 571-272-2381. The examiner can normally be reached on M-F 9 a.m.- 5.30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong Suk (James) Lee can be reached on 571-272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 11/378,080 Page 3

Art Unit: 2885

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas M Sember/
Primary Examiner, Art Unit 2885

Issue Classification

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| Application/Control No. | Applicant(s)/Patent Under Reexamination |
|-------------------------|---|
| 11378080 | PARKER, JEFFERY R. |
| Examiner | Art Unit |
| Thomas M Sember | 2885 |

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| | Claims renumbered in the same order as presented by applicant | | | | | | applicant | □ CPA □ T.D. □ R.1.47 | | | | | | | |
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| (Assistant Examiner) | (Date) | 24 | | |
| /Thomas M Sember/ Primary Examiner.Art Unit 2885 | 08/20/08 | O.G. Print Claim(s) | O.G. Print Figure | |
| (Primary Examiner) | (Date) | 1 | 9 | |

Search Notes

| Application/Control No. | Applicant(s)/Patent Under Reexamination |
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| 11378080 | PARKER, JEFFERY R. |
| Examiner | Art Unit |
| Thomas M Sember | 2885 |

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| Class | Subclass | Date | Examiner |

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| Updated search | 08/20/08 | /TS/ |

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| | Did broadest claim search on PGPUB | | | | | |

U.S. Patent and Trademark Office Part of Paper No.: 20080818



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BIB DATA SHEET

CONFIRMATION NO. 8860

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| ** CONTINUING DATA *********************************** | | | | | | | | | | |
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| RENNER OTTO BOISSELLE & SKLAR, LLP 1621 EUCLID AVENUE NINETEENTH FLOOR CLEVELAND, OH 44115 UNITED STATES | | | | | | | | | | |
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Doc code: RCEX
Doc description: Request for Continued Examination (RCE)

Approved for use

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| Application Number | 11/378,080 | Filing Date | 2006-03-17 | Docket Number (if applicable) | GLOLP0108USAE | Art Unit | 2885 | |
| First Named Inventor | Jeffery R. Parker | | | Examiner Name | Thomas M. Sember | • | | |
| This is a Request for Continued Examination (RCE) under 37 CFR 1.114 of the above-identified application. Request for Continued Examination (RCE) practice under 37 CFR 1.114 does not apply to any utility or plant application filed prior to June 8, 1995, or to any design application. The Instruction Sheet for this form is located at WWW.USPTO.GOV | | | | | | | | |
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| Signature of Registered U.S. Patent Practitioner | | | | | |
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| Signature | /Donald L. Otto/ | Date (YYYY-MM-DD) | 2008-08-08 | | |
| Name | Donald L. Otto | Registration Number | 22125 | | |

This collection of information is required by 37 CFR 1.114. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450.

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The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these record s.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

CERTIFICATE OF MAILING OR ELECTRONIC TRANSMISSION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket GLOLP0108USAE

In re PATENT application of

Jeffery R. Parker

Serial No. 11/378,080

Confirmation No. 8860

Filed March 17, 2006

For: LIGHT EMITTING PANEL ASSEMBLIES

Art Unit 2885 Thomas M. Sember, Examiner

REPLY TO FINAL OFFICE ACTION OF MAY 8, 2008

Mail Stop AF Commissioner for Patents PO Box 1450 Alexandria, Virginia 22313-1450

Sir:

In reply to the Final Office Action of May 8, 2008, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 9 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (currently amended): A light emitting panel assembly comprising at least a light emitting panel member having a light entrance surface and a light emitting surface, at least one LED light source positioned near or against the light entrance surface, and 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, and the tray or housing includes end walls and side walls that act as end edge reflectors and side edge reflectors for the panel member to reflect light that would otherwise exit the panel member through an end edge and/or side edge back into the panel member and toward the pattern of light extracting deformities for causing additional light to be emitted from the light emitting surface of the panel member, wherein the tray or housing provides structural support to the panel member and has posts, tabs, or other structural features that provide a mount for mounting of the assembly into a larger assembly or device.

2 and 3 (canceled)

4 (currently amended): The assembly of claim 2 A light emitting panel assembly comprising at least a light emitting panel member having a light entrance surface and a light emitting surface, at least one LED light source positioned near or against the light entrance surface, and 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, and the tray or housing includes end walls and side walls that act as end edge reflectors and side edge reflectors for the panel member to reflect light that would otherwise exit the panel member through an end edge and/or side edge back into the panel member and toward the pattern of light extracting deformities for causing additional light to be emitted from the light emitting surface of the panel member, wherein the tray or housing has posts, tabs or other structural features that provide a mount or structural support for at least one other part or component, and the tray or housing provides structural support to the panel member.

5 (original): The assembly of claim 4 wherein the other part or component is a liquid crystal display.

6 (original): The assembly of claim 4 wherein the other part or component is a printed circuit.

7 (canceled)

8 (previously presented): The assembly of claim 1 wherein the tray or housing includes a bottom wall that acts as a back reflector for the panel member.

9 (previously presented): The assembly of claim 1 wherein the tray or housing provides a support for supporting and/or positioning a film near the panel member.

10 (canceled)

11 (previously presented): The assembly of claim 9 wherein the film is at least one of a diffuser and a brightness enhancing film.

12 (canceled)

13 (original): The assembly of claim 1 further comprising a film positioned near the light emitting surface of the panel member for changing the output ray angle distribution of the emitted light to fit a particular application.

14 (canceled)

15 (original): The assembly of claim 1 wherein the light entrance surface is faceted to alter the light output distribution of the LED as the light enters the panel member.

16 (currently amended): The assembly-of claim 1 further-comprising A light emitting panel assembly comprising at least a light emitting panel member having a light entrance surface and a light emitting surface, at least one LED light source positioned near or against the light entrance surface, and 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, and the tray or housing includes end walls and side walls that act as end edge reflectors and side edge reflectors for the panel member to reflect light that would otherwise exit the panel member through an end edge and/or side edge back into the panel member and toward the pattern of light extracting deformities for causing additional light to be emitted from the light emitting surface of the panel member, and an additional component overlaying the panel member, the panel member having at least one of a tab, hole, cavity, or protrusion that positions at least one of the tray or housing the additional component relative to the panel member.

17 (currently amended): The assembly of claim 16 wherein the tray <u>or housing</u> includes at least one of a recess or cavity for positioning the panel member entirely within the recess or cavity.

18 (currently amended): The assembly of claim-16 A light emitting panel assembly comprising at least a light emitting panel member having a light entrance surface and a light emitting surface, at least one LED light source positioned near or against the light entrance surface, and 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, and the tray or housing includes end walls and side walls that act as end edge reflectors and side edge reflectors for the panel member to reflect light that would otherwise exit the panel member through an end edge and/or side edge back into the panel member and toward the pattern of light extracting deformities for causing additional light to be emitted from the light emitting surface of the panel member, and an additional component overlying the panel member, the panel member having at least one of a tab, hole, cavity or protrusion that positions the additional component relative to the panel member, wherein the 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.

19 (previously presented): The assembly of claim 18 wherein the protrusion is molded into the panel member and extends outward therefrom.

20 (previously presented): The assembly of claim 19 wherein the protrusion comprises a post extending outward from the panel member.

21 (previously presented): The assembly of claim 16 wherein the additional component is a display panel.

22 (previously presented): The assembly of claim 16 wherein the additional component is a film or substrate.

23 (currently amended): The assembly of claim 46 18 wherein the light source is positioned relative to the panel member by the at least one of a tab, hole, cavity, or protrusion.

24 (previously presented): The assembly of claim 23 wherein the light source has a tab and the panel member has a recess to receive the tab of the light source.

25 (new): The assembly of claim 4 wherein the film is at least one of a diffuser and a brightness enhancing film.

26 (new): The assembly of claim 4 further comprising a film positioned near the light emitting surface of the panel member for changing the output ray angle distribution of the emitted light to fit a particular application.

27 (new): The assembly of claim 4 wherein the light entrance surface is faceted to alter the light output distribution of the LED as the light enters the panel member.

28 (new): The assembly of claim 18 wherein the tray includes at least one of a recess or cavity for positioning the panel member entirely within the recess or cavity.

29 (new): The assembly of claim 18 wherein the additional component is a display panel.

30 (new): The assembly of claim 19 wherein the additional component is a film or substrate.

REMARKS/ARGUMENTS

Claims 1, 4-6, 8, 9, 11, 13 and 15-30 are pending in the application, claims 1, 4, 16 and 18 being independent. Claims 1, 4, 16, 17 and 18 have been amended. Claims 25-30 are newly added. Claims 2, 3, 7, 10, 12 and 14 have been canceled.

Since the Examiner made the previous Office Action final, this reply is being filed along with a Request for Continued Examination (RCE). Accordingly, further and favorable consideration of all of the pending claims is respectfully requested in view of the foregoing amendments and following remarks.

Claims 1, 4, 6, 8, 9, 11, 16-21, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakuma et al (US Patent 5,184,888).

The Examiner refers to engaging projections 42 of Sakuma (column 5, lines 29-31, Figs. 7, 8) as posts or tabs, and white reflective paper 45 (column 5, lines 45-49, Fig. 7) as a reflective tray. While paper 45 is reflective, it does not provide structural support in the sense of a tray or housing as recited in claims 1 and 4 when the light conducting plate 39 of Sakuma is held in place by a decorative panel 33 which is made out of a synthetic resin (column 4, lines 67, 68, Fig. 7).

Moreover, engaging projections 42 of Sakuma are attached to the light conducting plate 39, not to the reflective paper 45. Accordingly, engaging projections 42 do not meet the limitations of the tray or housing having posts, tabs, or other structural features as further recited in claims 1 and 4.

Furthermore, the plate-like projecting portion 40 of the light conducting plate 39 of Sakuma fits snugly into the opening 35 in the decorative panel 33 (column 5, lines 25-27, Fig. 7), and thus there is not air gap between the light emitting panel member and an additional component as recited in claim 18.

The Examiner also refers to the engaging pawl pieces 38 of Sakuma (column 5, lines 12-15, Fig. 8) as tabs or posts. However, engaging pawl pieces 38 are attached to the decorative panel 33 and not to the light conducting plate 39. Thus they do not meet the limitations of the panel member having a tab, hole, cavity or protrusion that positions the tray or housing relative to the panel member as recited in claim 16 or that positions an additional component overlying the panel member relative to the panel member and holds the additional component away from the panel member to create an air gap between the panel member and the additional component as recited in claim 18.

Moreover, the decorative panel 33 of Sakuma is not a reflective tray as recited in claims 1 and 4 so the engaging pawl pieces do not meet the limitations of the posts, tabs or other structural features that provide a mount as further recited in claims 1 and 4.

The light conducting plate 39 of Sakuma includes a "plate-like projecting portion 40 for snugly fitting in the opening 35 in the decorative plate 33" (column 5, lines 25-27). However, since projection portion 40 projects from the light conducting panel 39, it does not meet the limitations of a structural feature as recited in claims 1 and 4. Moreover, since the projecting portion 40 of Sakuma fits snugly within the decorative panel, there is no air gap between the panel

member and an additional component as recited in claim 18. Accordingly, claims 1, 4, 16 and 18 are clearly allowable over Sakuma.

Claim 6 depends on claim 4, claims 8, 9 and 11 depend on claim 1, claims 17 and 21 depend on claim 16, and claims 19, 20, 23 and 24 depend on claim 18 and are submitted as allowable for at least the same reasons. Moreover, it is not seen wherein Sakuma discloses a protrusion that is molded into the panel member and extends outward therefrom, or wherein the protrusion comprises a post extending outward from the panel member as further recited in claims 19 and 20. Accordingly, claims 19 and 20 are submitted as allowable in their own right in addition to being dependent on claim 18.

Claims 1, 4, 8, 9, 11, 13 and 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murase et al (US 5,207,493). The Examiner identifies the margin reflection layers 30 of Murase (Fig. 2) as a "tab". However, this so-called tab of Murase does not provide a mount for mounting a light emitting panel assembly into a larger assembly or device as recited in claim 1 or provide a mount or structural support for at least one other part or component as recited in claim 4. Nor is the so-called tab of Murase a tab on the panel member that positions the tray or housing relative to the panel member as recited in claim 16 or that positions an additional component overlying the panel member relative to the panel member and holds the additional component away from the panel member to create an air gap between the panel member and the additional support as recited in claim 18. Accordingly, claims 1, 4, 16 and 18 are clearly allowable over Murase.

Claims 8, 9, 11 and 13 depend from claim 1, claims 17, 21 and 22 depend from claim 16, and claims 19, 20, 23 and 24 depend from claim 18 and are submitted as allowable for substantially the same reasons. Moreover, claims 19 and 20 further patentably distinguish over Murase by reciting that the protrusion of claim 18 is molded into the panel member and extends outwardly therefrom, and that the protrusion comprises a post extending outward from the panel member.

Claims 1, 4-6, 8, 9, 11, 13, 16-21, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tada (US Patent 5,050,046) in view of Murase et al (US Patent 5,207,493).

The Examiner identifies the leads 5a and 5h of Tada (column 2, lines 37-44) as tabs or posts and reflecting frame 12 of Tada (column 2, line 68 - column 3, line 1, Figs. 1, 2) as the tray. However, the leads 5a and 5h of Tada are connected to the printed substrate 8 (column 2, lines 52-54, Fig. 1). As clearly shown in Fig. 2, the leads 5a and 5h are not from the tray or housing and do not provide a mount for mounting of the assembly into a larger assembly or device as recited in claim 1 or provide a mount or structural support for at least one other part or component as recited in claim 4. Nor are the leads 5a and 5h of Tada from the light emitting panel member for positioning the tray or housing relative to the panel member as recited in claim 16 or for positioning an additional component overlying the panel member relative to the panel member and holding the additional component away from the panel member to create an air gap between the panel member and the additional component as recited in claim 18.

Accordingly, claims 1, 4, 16 and 18 are submitted as clearly allowable over Tada in view of Murase et al which was merely relied on for the teaching of a light panel having light extracting deformities.

Claims 8, 9, 11 and 13 depend on claim 1, claims 5 and 6 depend on claim 4, claims 17, 21 and 22 depend on claim 16 and claims 19, 20, 23 and 24 depend on claim 18 and are submitted as allowable for substantially the same reasons. Moreover, claims 5 and 6 further patentably distinguish over the cited references by reciting that the other part or component of claim 4 is a liquid crystal display and printed circuit, respectively. Also claims 19 and 20 further patentably distinguish over the cited references by reciting that the protrusion is molded into the panel member and extends outwardly therefrom, and comprises a post extending outward from the panel member.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sakuma et al '888 or Murase et al '493 or Tada '046 and further in view of Li et al (US Patent 5,434,754). According to the Examiner, it would have been obvious to make the light panel entrance surface of any one of Sakuma, Murase or Tada with facets as taught by Li et al in order to efficiently transmit and alter light entering the light panels of any one of the primary references. However, the reflective facets 28 of Li et al are on the rear surface 32 of the emitter section 24 and redirect the light outward through the front face 30 of the emitter sections as a light beam (column 2, lines 50-58). They are not facets on the light entrance surface of a light emitting panel member to alter the light output distribution of an LED positioned near or against the light entrance surface as the light enters the

panel member as recited in claim 15. Accordingly, claim 15 is submitted as allowable in its own right in addition to being dependent on claim 1.

New claims 25-27 depend on claim 4 and new claims 28-30 depend on claim 18 and are submitted as allowable for substantially the same reasons. Moreover, claim 27 further patentably distinguishes over the cited references by reciting that the light entrance surface is faceted to alter the light output distribution of the LED as the light enters the panel member, similar to claim 15.

For the foregoing reasons, this application is now believed to be in condition for final allowance of all of the pending claims 1, 4-6, 8, 9, 11, 13 and 15-30, and early action to that end is respectfully requested.

In the event an extension of time is necessary, this should be considered a petition for such an extension. If required, fees are enclosed for the extension of time and/or for the presentation of new and/or amended claims. In the event any additional fees are due in connection with the filing of this reply, the Commissioner is authorized to charge those fees to our Deposit Account No. 18-0988 under Docket GLOLP0108USAE.

Respectfully submitted,

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| Electronic Patent Application Fee Transmittal | | | | | | | | |
|--|-------------------------------------|-------------|----------|--------|-------------------------|--|--|--|
| Application Number: | 11378080 | | | | | | | |
| Filing Date: | 17 | -Mar-2006 | | | | | | |
| Title of Invention: | Light emitting panel assemblies | | | | | | | |
| First Named Inventor/Applicant Name: Jeffery R. Parker | | | | | | | | |
| Filer: | Filer: Donald L. Otto/Jeanne Murphy | | | | | | | |
| Attorney Docket Number: | GL | OLP0108USAE | | | | | | |
| Filed as Large Entity | | | | | | | | |
| Utility Filing Fees | | | | | | | | |
| Description | | Fee Code | Quantity | Amount | Sub-Total in USD(\$) | | | |
| Basic Filing: | | | | | | | | |
| Pages: | | | | | | | | |
| Claims: | | | | | | | | |
| Claims in excess of 20 | | 1202 | 4 | 50 | 200 | | | |
| Independent claims in excess of 3 | | 1201 | 1 | 210 | 210 | | | |
| Miscellaneous-Filing: | | | | | | | | |
| Petition: | | | | | | | | |
| Patent-Appeals-and-Interference: | | | | | | | | |
| Post-Allowance-and-Post-Issuance: | | | | | | | | |

| Description | Fee Code | Quantity | Amount | Sub-Total in USD(\$) | | | | |
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| Extension-of-Time: | | | | | | | | |
| Miscellaneous: | | | | | | | | |
| Request for continued examination | 1801 1 810 | | | 810 | | | | |
| | Total in USD (\$) | | | | | | | |

| Electronic Acknowledgement Receipt | | | | | | |
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| EFS ID: | 3753827 | | | | | |
| Application Number: | 11378080 | | | | | |
| International Application Number: | | | | | | |
| Confirmation Number: | 8860 | | | | | |
| Title of Invention: | Light emitting panel assemblies | | | | | |
| First Named Inventor/Applicant Name: | Jeffery R. Parker | | | | | |
| Customer Number: | 23908 | | | | | |
| Filer: | Donald L. Otto/Jeanne Murphy | | | | | |
| Filer Authorized By: | Donald L. Otto | | | | | |
| Attorney Docket Number: | GLOLP0108USAE | | | | | |
| Receipt Date: | 08-AUG-2008 | | | | | |
| Filing Date: | 17-MAR-2006 | | | | | |
| Time Stamp: | 16:33:25 | | | | | |
| Application Type: | Utility under 35 USC 111(a) | | | | | |
| Payment information: | | | | | | |

| Submitted with Payment | yes |
|--|-------------|
| Payment Type | Credit Card |
| Payment was successfully received in RAM | \$1220 |
| RAM confirmation Number | 1745 |
| Deposit Account | |
| Authorized User | |

File Listing:

| Document | Document Description | File Name | File Size(Bytes) | Multi | Pages |
|----------|----------------------|-----------|------------------|------------|------------|
| Number | Document Description | File Name | /Message Digest | Part /.zip | (if appl.) |

| 1 | Request for Continued Examination | sb0030e_fill.pdf | 709524 | no | 3 | | | | |
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| Information | 1: | | | | | | | | |
| 2 | | GLOLP0108USAEreply.pdf | 460602 | yes | 14 | | | | |
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| | Multipart Description/PDF files in .zip description | | | | | | | | |
| | Document Des | Start | nd | | | | | | |
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| | Claims | 2 | 8 | | | | | | |
| | Applicant Arguments/Remarks | 9 | 9 14 | | | | | | |
| Warnings: | | | | | | | | | |
| Information | 1: | | | | | | | | |
| 3 | Fee Worksheet (PTO-06) | fee-info.pdf | 8431 | no | 2 | | | | |
| 3 | r ee worksneet (r 10-00) | b0956c88200ede52da4b2860b2c35b5 12818e037 | 110 | 2 | | | | | |
| Warnings: | | | | | | | | | |
| Information | 1: | | | | | | | | |
| | | Total Files Size (in bytes): | 11 | 78557 | | | | | |
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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

| PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875 | | | | | Δ | Application or Docket Number 11/378,080 | | | ing Date 17/2006 | To be Mailed | |
|---|---|---|------------|---|------------------|---|-----------------------|------------------------|---------------------|-----------------------|------------------------|
| APPLICATION AS FILED – PART I OTHER THAN (Column 1) (Column 2) SMALL ENTITY OR SMALL ENTITY | | | | | | | | | | | |
| | FOR | T | JMBER FIL | <u> </u> | MBER EXTRA | | RATE (\$) | FEE (\$) | | RATE (\$) | FEE (\$) |
| | BASIC FEE (37 CFR 1.16(a), (b), | or (c)) | N/A | | N/A | | N/A | | 1 | N/A | |
| | SEARCH FEE (37 CFR 1.16(k), (i), | | N/A | | N/A | | N/A | | 1 | N/A | |
| | EXAMINATION FE (37 CFR 1.16(o), (p), | ΞE | N/A | | N/A | | N/A | | | N/A | |
| | TAL CLAIMS CFR 1.16(i)) | | min | us 20 = * | | | x \$ = | | OR | x \$ = | |
| IND | EPENDENT CLAIN | IS | mi | inus 3 = * | | | x \$ = | | 1 | x \$ = | |
| (37 CFR 1.16(h)) If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). | | | | | | | | | | | |
| | MULTIPLE DEPEN | IDENT CLAIM PRI | ESENT (3 | 7 CFR 1.16(j)) | | | | | | | |
| * If t | he difference in col | umn 1 is less than | zero, ente | r "0" in column 2. | | | TOTAL | | | TOTAL | |
| | APP | (Column 1) | AMEND | (Column 2) | (Column 3) | | SMALL ENTITY | | | | ER THAN ALL ENTITY |
| AMENDMENT | 08/08/2008 | CLAIMS REMAINING AFTER AMENDMENT | | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | | RATE (\$) | additional Fee (\$) | | RATE (\$) | ADDITIONAL FEE (\$) |
|)ME | Total (37 CFR 1.16(i)) | * 24 | Minus | ** 20 | = 4 | | x \$ = | | OR | X \$50= | 200 |
| Ϊ | Independent (37 CFR 1.16(h)) | * 6 | Minus | ***3 | = 3 | | x \$ = | | OR | X \$210= | 630 |
| ΑMI | Application Size Fee (37 CFR 1.16(s)) | | | | | | | | | | |
| | FIRST PRESEN | NTATION OF MULTIP | LE DEPEN | DENT CLAIM (37 CF | R 1.16(j)) | | | | OR | | |
| | | | | | | | TOTAL ADD'L FEE | | OR | TOTAL ADD'L FEE | 830 |
| | | (Column 1) | | (Column 2) | (Column 3) | | | | | | |
| L | | CLAIMS REMAINING AFTER AMENDMENT | | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | | RATE (\$) | ADDITIONAL FEE (\$) | | RATE (\$) | ADDITIONAL FEE (\$) |
| Ш | Total (37 CFR 1.16(i)) | * | Minus | ** | = | | x \$ = | | OR | x \$ = | |
| AMENDMENT | Independent (37 CFR 1.16(h)) | * | Minus | *** | = | | x \$ = | | OR | x \$ = | |
| | Application Size Fee (37 CFR 1.16(s)) | | | | | | | | | | |
| AM | FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j)) | | | | | | OR | | | | |
| | | | | | | • ' | TOTAL ADD'L FEE | | OR | TOTAL ADD'L FEE | |
| ** If *** I | * If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1. | | | | | | | | | | |

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | | |
|--------------------------|-------------|----------------------|---------------------|------------------|--|--|
| 11/378,080 | 03/17/2006 | Jeffery R. Parker | GLOLP0108USAE | 8860 | | |
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| 1621 EUCLID | AVENUE | , | SEMBER, THOMAS M | | | |
| NINETEENTH CLEVELAND, | | | ART UNIT | PAPER NUMBER | | |
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| | | | 05/08/2008 | PAPER | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | Application No. | Applicant(s) | | |
|---|--|---|--|--------------------|--|
| | | 11/378,080 | PARKER, JEFFE | PARKER, JEFFERY R. | |
| Office Acti | on Summary | Examiner | Art Unit | | |
| | | Thomas M. Sember | 2885 | | |
| The MAILING D | ATE of this communication a | opears on the cover sheet w | ith the correspondence ac | idress | |
| WHICHEVER IS LONG - Extensions of time may be avafter SIX (6) MONTHS from the If NO period for reply is specitive Failure to reply within the set | CUTORY PERIOD FOR REP GER, FROM THE MAILING allable under the provisions of 37 CFR 10 the mailing date of this communication. field above, the maximum statutory perior extended period for reply will, by statute later than three months after the mail int. See 37 CFR 1.704(b). | DATE OF THIS COMMUNI. .136(a). In no event, however, may a did will apply and will expire SIX (6) MON te, cause the application to become Al | CATION. reply be timely filed NTHS from the mailing date of this c BANDONED (35 U.S.C. § 133). | • | |
| Status | | | | | |
| 1) Responsive to co | ommunication(s) filed on 16 | April 2007. | | | |
| 2a)⊠ This action is FII | ` ' | is action is non-final. | | | |
| <i>'</i> — · · · | ation is in condition for allow ance with the practice under | · | · • | e merits is | |
| Disposition of Claims | | | , , , , , , , , , , , , , , , , , , | | |
| · <u> </u> | . <u>11,13 and 15-24</u> is/are pend | ling in the application | | | |
| | claim(s) is/are withdr | • | | | |
| 5)☐ Claim(s) i | | | | | |
| ·= · · · |) <u>, 11, 13 and 15-24</u> is/are re | jected. | | | |
| · · · · · | s/are objected to. | • | | | |
| 8) Claim(s) | are subject to restriction and | or election requirement. | | | |
| Application Papers | | | | | |
| 9)☐ The specification | is objected to by the Examir | ner. | | | |
| 10)☐ The drawing(s) fi | led on is/are: a)∏ ad | cepted or b) objected to | by the Examiner. | | |
| Applicant may not | request that any objection to th | e drawing(s) be held in abeyar | nce. See 37 CFR 1.85(a). | | |
| Replacement drav | ving sheet(s) including the corre | ction is required if the drawing | (s) is objected to. See 37 Cl | FR 1.121(d). | |
| 11)☐ The oath or decla | ration is objected to by the E | Examiner. Note the attached | d Office Action or form P | ΓΟ-152. | |
| Priority under 35 U.S.C. | § 119 | | | | |
| a)∏ All b)∏ Som | is made of a claim for foreigne * c) None of: | | § 119(a)-(d) or (f). | | |
| | opies of the priority docume | | Application No. | | |
| | opies of the priority docume the certified copies of the pri | | | Stago | |
| <u> </u> | n from the International Bure | • | received in this National | Stage | |
| | detailed Office action for a lis | | received. | | |
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| Attachment(s) | | | | | |
| 1) Notice of References Cited | | | Summary (PTO-413) | | |
| 2) Notice of Draftsperson's P3) Information Disclosure Sta | atent Drawing Review (PTO-948) tement(s) (PTO/SB/08) | | s)/Mail Date nformal Patent Application | | |
| Paper No(s)/Mail Date 6) Other: | | | | | |

DETAILED ACTION

Allowable Subject Matter

1. The indicated allowability of claims is withdrawn in view of the newly discovered reference(s) to Sakuma et al '888, Tada '046 and Li et al '754. Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-4, 6, 8-9, 11, 16-21 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakuma et al '888. Sakuma et al '888 (particularly figure 7) discloses the claimed invention except for the teaching that the light source is an LED. Sakuma et al '888 discloses a light source 46, reflective tray (45 and 56), light panel (39), tabs or post 42 and 38, deformities (44 and 137) and circuit board 47. It would have been obvious to one skilled in the art at the time the invention was made to substitute an LED for the light source of Sakuma et al '888 in order to provide an efficient long last light source. Regarding claims 9-10 as broadly claimed the tray provides a support is capable of providing support for a film near the panel member.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-4, 8-9, 11, 13 and 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murase et al '493. Murase et al '493 discloses the claimed invention except for the teaching that the light source is an LED. Murase et al '493 discloses a light source 35, reflective tray (30-32), reflection film 29, light panel (21), tabs 30 and deformities 23. It would have been obvious to one skilled in the art at the time the invention was made to substitute an LED for the light source of Murase et al '483 in order to provide an efficient long last light source. Regarding claims 9-10 as broadly claimed the tray provides a support is capable of providing support for a film near the panel member.

Claim Rejections - 35 USC § 103

- 6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 7. Claims 1-6, 8-9, 11, 13, 16-21 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tada '046 in view of Murase et al '493. Tada '046 discloses the claimed invention except for the teaching that the light source is an LED and the

light panel having light extracting deformities. Sakuma et al '888 discloses a light source 10, reflective tray (12), light panel (11), tabs or post 5a and 5h, deformities (44 and 137) and circuit board 47. It would have been obvious to one skilled in the art at the time the invention was made to substitute an LED for the light source of Tada '046 in order to provide an efficient long last light source. Regarding claims 9-10 as broadly claimed the tray provides a support is capable of providing support for a film near the panel member. Murase et al '493 teaches a light panel having light extracting deformities. It would have been obvious to one skilled in the art at the time the invention was make the light panel of Tada '046 with light extracting deformities in order to efficiently transmit light from the display.

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over (Sakuma et al '888 or Murase et al '493 or Tada '046) as applied above in view of Li et al '754. (Sakuma et al '888 or Murase et al '493 or Tada '046) discloses the claimed invention except for the teaching that the light entrance surface is faceted. Li et al '754 taechesa light panel having a light entrance surface which is faceted 28. It would have been obvious to one skilled in the art at the time the invention was made to make the light panel's entrance surface of (Sakuma et al '888 or Murase et al '493 or Tada '046)

with facets as taught by Li et al '754 in order to efficiently transmit and alter light entering the light panels of (Sakuma et al '888 or Murase et al '493 or Tada '046).

Response to Arguments

10. Applicant's arguments with respect to claims 1-6, 8-9, 11, 13 and 15-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

1. Applicant's amendment on 11/28/07 necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas M. Sember whose telephone number is 571-272-2381. The examiner can normally be reached on M-F 9 a.m.- 5.30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong Suk (James) Lee can be reached on 571-272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas M Sember/ Primary Examiner, Art Unit 2885

Application/Control No. Applicant(s)/Patent Under Reexamination 11/378,080 PARKER, JEFFERY R. Notice of References Cited Examiner Art Unit Page 1 of 1 Thomas M. Sember 2885 **U.S. PATENT DOCUMENTS** Document Number Country Code-Number-Kind Code Date Classification Name MM-YYYY * 07-1995 Li et al. 362/511 US-5,434,754 Α * В US-5,050,046 09-1991 Tada, Masahiko 362/26 * 02-1993 С US-5,184,888 Sakuma et al. 362/136 US-D US-Ε US-F US-G US-Н US-US-J US-Κ US-L US-Μ FOREIGN PATENT DOCUMENTS

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NON-PATENT DOCUMENTS

| * | | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) |
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office PTO-892 (Rev. 01-2001)

Notice of References Cited

Part of Paper No. 20080501

| | Application/Control No. | Applicant(s)/Patent Under Reexamination |
|-----------------|-------------------------|---|
| Index of Claims | 11378080 | PARKER, JEFFERY R. |
| | Examiner | Art Unit |
| | Thomas M Sember | 2885 |

| | | | | | I | THOMAS WITE | | | | 2000 | | | | | _ | | |
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| ☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47 | | | | | | | | | _ | | | | | | | | |
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Search Notes



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11378080

Applicant(s)/Patent Under Reexamination
PARKER, JEFFERY R.

Examiner

Art Unit

Thomas M Sember

2885

SEARCHED

| Class | Subclass | Date | Examiner |
|-------|----------|------|----------|
| | | | |

SEARCH NOTES

| Search Notes | Date | Examiner |
|----------------|----------|----------|
| Updated search | 05/01/08 | /TS/ |

INTERFERENCE SEARCH

| Class | Subclass | Date | Examiner |
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U.S. Patent and Trademark Office Part of Paper No.: 20080501

EAST Search History

| Ref # | Hits | Search Query | DBs | Default Operator | Plurals | Time Stamp |
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| S23 | 4 | film.clm. and deformities.clm. and parker.in. and overlay.clm. | US- PGPUB; USPAT | OR | OFF | 2008/02/18 16:44 |
| S24 | 18 | film.clm. and deformities.clm. and parker.in. and overlying. clm. | US- PGPUB; USPAT | OR | OFF | 2008/02/18 16:44 |
| S25 | 37 | (sheet.clm. or film.clm.) and deformities.clm. and (parker.in. or miller.in. or hough.in. or mccollum.in. or ezell.in.) and panel.clm. | US- PGPUB; USPAT | OR | OFF | 2008/02/18 17:47 |
| S26 | 5 | (sheet.clm. or film.clm.) and deformities.clm. and (coghlan. in.) and panel. clm. | US- PGPUB; USPAT | OR | OFF | 2008/02/18 17:51 |
| S27 | 1 | "6592238".pn. | US- PGPUB; USPAT | OR | OFF | 2008/02/18 19:18 |
| S28 | 1 | "7049757".pn. | US- PGPUB; USPAT | OR | OFF | 2008/02/18 19:19 |

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CERTIFICATE OF MAILING OR ELECTRONIC TRANSMISSION

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| posta | | al Service on the date shown below with sufficient ed to: Mail Stop, Commissioner for Patents, |
| _X | _ being transmitted via the USPTO Electro | onic Filing System |
| Date: | April 16, 2008 | Jeanne Murphy |

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket GLOLP0108USAE

In re PATENT application of

Jeffery R. Parker

Serial No. 11/378,080

Confirmation No. 8860

Filed March 17, 2006

For: LIGHT EMITTING PANEL ASSEMBLIES Ok to enter

Art Unit 2885

/TS/

Thomas M. Sember, Examiner

REPLY TO FINAL OFFICE ACTION OF MARCH 6, 2008

Mail Stop AF Commissioner for Patents PO Box 1450 Alexandria, Virginia 22313-1450



Sir:

In reply to the final Office Action of March 6, 2008, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 6 of this paper.

CERTIFICATE OF MAILING OR ELECTRONIC TRANSMISSION

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is

_____ being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop ___, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

X being transmitted via the USPTO Electronic Filing System.

Date: April 16, 2008

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket GLOLP0108USAE

In re PATENT application of

Jeffery R. Parker

Serial No. 11/378,080

Confirmation No. 8860

Filed March 17, 2006

For: LIGHT EMITTING PANEL ASSEMBLIES

Art Unit 2885

Thomas M. Sember, Examiner

REPLY TO FINAL OFFICE ACTION OF MARCH 6, 2008

Mail Stop AF Commissioner for Patents PO Box 1450 Alexandria, Virginia 22313-1450

Sir:

In reply to the final Office Action of March 6, 2008, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 6 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 (previously presented): A light emitting panel assembly comprising at least a light emitting panel member having a light entrance surface and a light emitting surface, at least one LED light source positioned near or against the light entrance surface, and 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, and the tray or housing includes end walls and side walls that act as end edge reflectors and side edge reflectors for the panel member to reflect light that would otherwise exit the panel member through an end edge and/or side edge back into the panel member and toward the pattern of light extracting deformities for causing additional light to be emitted from the light emitting surface of the panel member.

2 (original): The assembly of claim 1 wherein the tray or housing has posts, tabs or other structural features.

3 (previously presented): The assembly of claim 2 wherein the posts or other structural features provide a mount for mounting of the assembly into a larger assembly or device.

4 (previously presented): The assembly of claim 2 wherein the posts or other structural features provide a mount or structural support for at least one other part or component.

5 (original): The assembly of claim 4 wherein the other part or component is a liquid crystal display.

6 (original): The assembly of claim 4 wherein the other part or component is a printed circuit.

7 (cancelled)

8 (previously presented): The assembly of claim 1 wherein the tray or housing includes a bottom wall that acts as a back reflector for the panel member.

9 (previously presented): The assembly of claim 1 wherein the tray or housing provides a support for supporting and/or positioning a film near the panel member.

10 (cancelled)

11 (previously presented): The assembly of claim 9 wherein the film is at least one of a diffuser and a brightness enhancing film.

12 (cancelled)

13 (original): The assembly of claim 1 further comprising a film positioned near the light emitting surface of the panel member for changing the output ray angle distribution of the emitted light to fit a particular application.

14 (cancelled)

15 (original): The assembly of claim 1 wherein the light entrance surface is faceted to alter the light output distribution of the LED as the light enters the panel member.

16 (currently amended): A backlight assembly comprising a panel having a light emitting area for illuminating a display panel, the panel having at least one of a tab, hole, cavity, or protrusion, and a tray for holding the panel, The assembly of claim 1 further comprising an additional component overlaying the panel member, wherein the panel member having at least one of a tab, hole, cavity, or protrusion that positions at least one of the tray or the additional component relative to the panel member.

17 (currently amended): The assembly of claim 16 wherein the tray includes at least one of a recess or cavity for positioning the panel <u>member</u> entirely within the recess or cavity.

18 (currently amended): The assembly of claim 16 wherein the at least one of a tab, hole, cavity, or protrusion holds the additional component away from the panel <u>member</u> to create an air gap between the panel <u>member</u> and the additional component.

19 (currently amended): The assembly of claim 18 wherein the protrusion is molded into the panel <u>member</u> and extends outward therefrom.

20 (currently amended): The assembly of claim 19 wherein the protrusion comprises a post extending outward from the panel <u>member</u>.

21 (previously presented): The assembly of claim 16 wherein the additional component is a display panel.

22 (previously presented): The assembly of claim 16 wherein the additional component is a film or substrate.

23 (currently amended): The assembly of claim 16 further comprising a wherein the light source is positioned relative to the panel member by the at least one of a tab, hole, cavity, or protrusion.

24 (currently amended): The assembly of claim 23 wherein the light source has a tab and the panel <u>member</u> has a recess to receive the tab of the light source.

REMARKS/ARGUMENTS

Claims 1-6, 8, 9, 11, 13 and 15-24 are pending in the application, claim 1 being independent. Claims 7, 10, 12 and 14 have been cancelled. Claims 16-20, 23 and 24 have been amended.

The allowance of claims 1-6, 8, 9, 11, 13 and 15 is noted with appreciation. Claims 16-24 have been amended to depend from allowed claim 1 and are also now presumed allowable.

Since this reply obviously places the application in condition for allowance and does not raise any new issues that would require further consideration or search, entry of this reply and allowance of all of the pending claims 1-6, 8, 9, 11, 13 and 15-24 is respectfully requested.

In the event an extension of time is necessary, this should be considered a petition for such an extension. If required, fees are enclosed for the extension of time and/or for the presentation of new and/or amended claims. In the event any additional fees are due in connection with the filing of this reply, the Commissioner is authorized to charge those fees to our Deposit Account No. 18-0988 (Attorney Docket GLOLP0108USAE).

Respectfully submitted,

RENNER, OTTO, BOISSELLE & SKLAR, LLP

Donald L. Otto

Registration No. 22,125

1621 Euclid Avenue 19th Floor

Cleveland, Ohio 44115-2191 Telephone: 216-621-1113 Facsimile: 216-621-6165

E-mail: dotto@rennerotto.com

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| Electronic Acknowledgement Receipt | | | | |
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| EFS ID: | 3163331 | | | |
| Application Number: | 11378080 | | | |
| International Application Number: | | | | |
| Confirmation Number: | 8860 | | | |
| Title of Invention: | Light emitting panel assemblies | | | |
| First Named Inventor/Applicant Name: | Jeffery R. Parker | | | |
| Customer Number: | 23908 | | | |
| Filer: | Donald L. Otto/Jeanne Murphy | | | |
| Filer Authorized By: | Donald L. Otto | | | |
| Attorney Docket Number: | GLOLP0108USAE | | | |
| Receipt Date: | 16-APR-2008 | | | |
| Filing Date: | 17-MAR-2006 | | | |
| Time Stamp: | 16:53:19 | | | |
| Application Type: | Utility under 35 USC 111(a) | | | |

Payment information:

| Submitted with Payment | no |
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File Listing:

| Document Number | Document Description | File Name | File Size(Bytes) /Message Digest | Multi Part /.zip | Pages (if appl.) |
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| | Amendment After Final | 1 | 1 |
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Total Files Size (in bytes): 165938

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

| PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875 | | | | | | | Application or | Docket Number 8,080 | Fil | ing Date 17/2006 | To be Mailed |
|---|---|---|---------------------------------------|---|---|------|-----------------------|------------------------|-----|-----------------------|------------------------|
| APPLICATION AS FILED – PART I (Column 1) (Column 2) | | | | | | | SMALL | ENTITY \square | OR | | HER THAN |
| | FOR | N | JMBER FIL | .ED NUI | MBER EXTRA | | RATE (\$) | FEE (\$) | | RATE (\$) | FEE (\$) |
| | BASIC FEE (37 CFR 1.16(a), (b), | or (c)) | N/A | | N/A | | N/A | | 1 | N/A | |
| | SEARCH FEE (37 CFR 1.16(k), (i), (i) | or (m)) | N/A | | N/A | | N/A | | | N/A | |
| | EXAMINATION FE (37 CFR 1.16(o), (p), | | N/A | | N/A | | N/A | | | N/A | |
| | ΓAL CLAIMS CFR 1.16(i)) | | mir | us 20 = * | | | x \$ = | | OR | x \$ = | |
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| | MULTIPLE DEPEN | IDENT CLAIM PR | ESENT (3 | 7 CFR 1.16(j)) | | | | | | | |
| * If t | the difference in colu | umn 1 is less than | zero, ente | r "0" in column 2. | | | TOTAL | | | TOTAL | |
| APPLICATION AS AMENDED – PART II (Column 1) (Column 2) (Column 3) | | | | | | SMAL | L ENTITY | OR | | ER THAN ALL ENTITY | |
| AMENDMENT | 04/16/2008 | CLAIMS REMAINING AFTER AMENDMENT | | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | | RATE (\$) | ADDITIONAL FEE (\$) | | RATE (\$) | ADDITIONAL FEE (\$) |
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| ** If *** I | * If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1. | | | | | | | | | | |

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 11/378,080 | 1/378,080 03/17/2006 Jeffery R. Parker | | GLOLP0108USAE | 8860 |
| | 7590 03/06/200 O BOISSELLE & SKI | EXAM | IINER | |
| 1621 EUCLID | AVENUE | SEMBER, THOMAS M | | |
| NINETEENTH CLEVELAND, | | | ART UNIT | PAPER NUMBER |
| | | 2885 | | |
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| | | | 03/06/2008 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | |
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| | 11/378,080 | PARKER, JEFFERY R. | | | |
| Office Action Summary | Examiner | Art Unit | | | |
| | Thomas M. Sember | 2885 | | | |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b) | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be time will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). | | | |
| Status | | | | | |
| Responsive to communication(s) filed on <u>28 Not</u> This action is FINAL . 2b) ☐ This Since this application is in condition for allowant closed in accordance with the practice under E | action is non-final. ace except for formal matters, pro | | | | |
| Disposition of Claims | | | | | |
| 4) ☐ Claim(s) 1-6,8,9,11,13 and 15-24 is/are pendin 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) 1-6,8,9,11,13 and 15 is/are allowed. 6) ☐ Claim(s) 16-24 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or Application Papers 9) ☐ The specification is objected to by the Examiner 10) ☐ The drawing(s) filed on is/are: a) ☐ accention and policion may not request that any objection to the objection may not request that any objection to the objection is described. | vn from consideration. relection requirement. r. r. epted or b) □ objected to by the E | | | | |
| Replacement drawing sheet(s) including the correcti | | • | | | |
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| Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other: | ate | | | |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Kitazawa et al '431. Kitazawa et al '431 discloses a panel 12 having a light emitting area for illuminating a display panel, the panel having at least one of a tab, hole, cavity, or protrusion (12a or 12b), and a tray (18 and 20) for holding the panel 12, an additional component (11 and 13) overlaying the panel 12, wherein the at least one of a tab, hole, cavity, or protrusion (12a or 12b cavity 12a and 12b form side protrusions) positions at least one of the tray (18 and 20) or the additional component (11 and 13) relative to the panel 12. And the LED connectors form tabs to fit in panel recess.

Allowable Subject Matter

1. Claims 1-6, 8-9, 11, 13 and 15 are allowed for the reasons stated in applicant's amendment and response filed on 11/28/07.

Conclusion

2. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas M. Sember whose telephone number is 571-272-2381. The examiner can normally be reached on M-F 9 a.m.- 5.30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong Suk (James) Lee can be reached on 571-272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thomas M Sember/ Primary Examiner, Art Unit 2885

| Application Number | Application/Control No. | Applicant(s)/Pate Reexamination | ent under |
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| | 11/378,080 | PARKER, JEFF | ERY R. |
| | Examiner | Art Unit | |
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U.S. Patent and Trademark Office Part of Paper No. 20080226

Index of Claims

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11/378,080 Examiner

PARKER, JEFFERY R.

Applicant(s)/Patent under

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Reexamination

2885

Thomas M. Sember

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| 11/378,080 | PARKER, JEFF | ERY R. |
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CERTIFICATE OF MAILING OR ELECTRONIC TRANSMISSION

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is

_____ being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Mail Stop ___, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

X being transmitted via the USPTO Electronic Filing System.

Date: November 28, 2007

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket GLOLP0108USAE

In re PATENT application of

Jeffery R. Parker

Serial No. 11/378,080

Confirmation No. 8860

Filed March 17, 2006

For: LIGHT EMITTING PANEL ASSEMBLIES

Art Unit 2885

Thomas M. Sember, Examiner

REPLY TO OFFICE ACTION OF AUGUST 28, 2007

Commissioner for Patents PO Box 1450 Alexandria, Virginia 22313-1450

Sir:

In reply to the Office Action of August 28, 2007, please amend the aboveidentified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks/Arguments begin on page 5 of this paper.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1. (currently amended): A light emitting panel assembly comprising at least a light emitting panel member having a light entrance surface and a light emitting surface, at least one LED light source positioned near or against the light entrance surface, and 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, and the tray or housing acts as an includes end walls and side walls that act as end edge reflector and/or side edge reflector reflectors and side edge reflectors for the panel member to reflect light that would otherwise exit the panel member through an end edge and/or side edge back into the panel member and toward the pattern of light extracting deformities for causing additional light to be emitted from the light emitting surface of the panel member.
- 2. (original): The assembly of claim 1 wherein the tray or housing has posts, tabs or other structural features.
- 3. (currently amended): The assembly of claim 2 wherein the posts or other structural features are used to facilitate provide a mount for mounting of the assembly into a larger assembly or device.
- 4. (currently amended): The assembly of claim 2 wherein the posts or other structural features are used for mounting or providing provide a mount or structural support for at least one other part or component.
- 5. (original): The assembly of claim 4 wherein the other part or component is a liquid crystal display.

6. (original): The assembly of claim 4 wherein the other part or component is a printed circuit.

7. (cancelled)

- 8. (currently amended): The assembly of claim 1 wherein the tray or housing also includes a bottom wall that acts as a back reflector for the panel member.
- 9. (currently amended): The assembly of claim 1 wherein the tray or housing provides <u>a</u> support for <u>supporting</u> and/or <u>positions</u> <u>positioning</u> a film near the panel member.

10. (cancelled)

11. (currently amended): The assembly of claim 9 wherein the film is <u>at least one</u> of a diffuser <u>and a brightness enhancing film</u>.

12. (cancelled)

13. (original): The assembly of claim 1 further comprising a film positioned near the light emitting surface of the panel member for changing the output ray angle distribution of the emitted light to fit a particular application.

14. (cancelled)

15. (original): The assembly of claim 1 wherein the light entrance surface is faceted to alter the light output distribution of the LED as the light enters the panel member.

- 16. (new): A backlight assembly comprising a panel having a light emitting area for illuminating a display panel, the panel having at least one of a tab, hole, cavity, or protrusion, and a tray for holding the panel, an additional component overlaying the panel, wherein the at least one of a tab, hole, cavity, or protrusion positions at least one of the tray or the additional component relative to the panel.
- 17. (new): The assembly of claim 16 wherein the tray includes at least one of a recess or cavity for positioning the panel entirely within the recess or cavity.
- 18. (new): The assembly of claim 16 wherein the at least one of a tab, hole, cavity, or protrusion holds the additional component away from the panel to create an air gap between the panel and the additional component.
- 19. (new): The assembly of claim 18 wherein the protrusion is molded into the panel and extends outward therefrom.
- 20. (new): The assembly of claim 19 wherein the protrusion comprises a post extending outward from the panel.
- 21. (new): The assembly of claim 16 wherein the additional component is a display panel.
- 22. (new): The assembly of claim 16 wherein the additional component is a film or substrate.
- 23. (new): The assembly of claim 16 further comprising a light source positioned relative to the panel by the at least one of a tab, hole, cavity, or protrusion.
- 24. (new): The assembly of claim 23 wherein the light source has a tab and the panel has a recess to receive the tab of the light source.

REMARKS/ARGUMENTS

Claims 1-6, 8, 9, 11, 13 and 15-24 are pending in the application, claims 1 and 16 being independent. Claims 7, 10, 12 and 14 have been cancelled. Claims 1, 3, 4, 8, 9 and 11 have been amended. Claims 16-24 have been added.

Claims 1-6, 8, 9, 11, 13 and 15 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-97 of US Patent 5,613,751 and claims 1-34 of US Patent 7,160,015. According to the Examiner, although the conflicting claims are not identical, they are not patentably distinct from each other because applicant merely uses slightly different claim language to claim the same invention.

Applicant respectfully disagrees with this rejection. Nevertheless, a terminal disclaimer in compliance with 37 CFR 1.321(c) is filed herewith to overcome the nonstatutory double patenting rejection based on US Patents 5,613,751 and 7,160,015.

Claims 1-6, 8, 9, 11, 13 and 15 are also provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8, 10-17, 19-25 and 28-29 of copending Application No. 11/244,473; claims 1-41 of copending Application No. 11/454,822 and claims 1-30 and 32 of copending Application No. 11/245,408. According to the Examiner, although the conflicting claims are not identical, they are not patentably distinct from each other because applicant merely uses slightly different claim language to claim the same invention.

Application No. 11/244,473 is abandoned. Accordingly, withdrawal of the provisional nonstatutory obviousness-type double patenting rejection based on Application No. 11/244,473 is respectfully requested.

Moreover, applicant respectfully disagrees with the provisional nonstatutory obviousness-type double patenting rejection based on copending Application Nos. 11/454,822 and 11/245,408. Nevertheless, a provisional terminal disclaimer in compliance with 37 CFR 1.321(d) is filed herewith to overcome this provisional nonstatutory double patenting rejection based on copending Application Nos. 11/454,822 and 11/245,408.

Claims 1-4 and 6 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Schoniger et al (US Patent 5,027,258) in view of Kashima et al (US Patent 5,262,928) or Borchardt (US Patent 5,381,309).

Regarding claim 1, the Examiner contends Schoniger et al (particularly Fig. 5) discloses at least a light emitting panel member 10 having a light entrance surface and a light emitting surface, at least one LED light source 15 positioned near or against the light entrance surface, and a tray or housing 20 having a cavity or recess in which the panel member is received, wherein the panel member 10 and the tray or housing acts as an end edge reflector 16 and/or side edge reflector for the panel member to reflect light that would otherwise exit the panel member through an end edge and/or side edge back into the panel member and toward the pattern of light extracting deformities for causing additional light to be emitted from the light emitting surface of the panel member. However, it is respectfully submitted that the reflecting layer 16 of Schoniger is provided on the external surfaces of the light guide batten 12 at one end of the light guide panel 10 to redirect the light from the LED 15 that is received in a blind hole 14 in the batten 12 into the end of the light guide panel 10 that is set in the groove 11 in the batten. The so-called tray or housing 20 of Schoniger does not include end walls and

side walls that act as end edge reflectors and side edge reflectors for a panel member entirely received in a cavity or recess in the tray or housing to reflect light that would otherwise exit the panel member through an end edge and/or side edge of the panel member back into the panel member as recited in claim 1 as amended. Accordingly, claim 1 is submitted as clearly allowable over these references.

The Examiner's attention is invited to an Office Action in a related US Application Serial No. 11/244,544 and any replies filed therein. The Examiner in that application, Thomas Sember, is also the Examiner in this application.

Claims 1-4 and 6 depend from claim 1 and are submitted as allowable for substantially the same reasons.

Claims 1-6, 8, 9, 11, 13 and 15 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ciupke (US Patent 5,485,354) or Tai et al (US Patent 5,390,276) in view of Schoniger et al (US Patent 5,136,483). According to the Examiner, the light source 21 of Ciupke et al and light source fixture 66 of Tai et al comprise a tray or housing having a cavity or recess in which the panel member is received, and acts as an end edge reflector and/or side edge reflector for the panel member. Applicant disagrees. Moreover, the light source 21 of Ciupke et al and light source fixture 66 of Tai et al do not have a cavity or recess in which the panel member is entirely received or end walls and side walls that act as end edge reflectors and side edge reflectors for the panel member as recited in claim 1 as amended. Accordingly, claim 1 is submitted as allowable over these references.

Claims 2-6, 8, 9, 11, 13 and 15 depend from claim 1 and are submitted as allowable for substantially the same reasons. Moreover, claims 8-11 and 15 further

patentably distinguish over the cited references, claim 8 by reciting that the tray or housing includes a bottom wall that acts as a back reflector for the panel member; claims 9-11 by reciting that the tray or housing provides a support for supporting and/or positioning a film such as a diffuser or a brightness enhancing film near the panel member; and claim 15 by reciting that the light entrance surface is faceted to alter the light output distribution of the LED as the light enters the panel member.

Claim 16 is directed to a backlight assembly including, *inter alia*, a tray for holding a light emitting panel having at least one of a tab, hole, cavity, or protrusion, and an additional component overlying the panel, wherein at least one of the tab, hole, cavity, or protrusion positions at least one of the tray or the additional component relative to the panel. It is not seen wherein any of the cited references discloses or suggests such a backlight assembly. Accordingly, claim 16 is submitted as allowable over the cited references.

Claims 17-24 depend from claim 16 and further patentably distinguish over the cited references, claim 17 by reciting that the tray includes at least one of a recess or cavity for positioning the panel entirely within the recess or cavity; claims 18-20 by reciting that the at least one tab, hole, cavity, or protrusion holds the additional component away from the panel to create an air gap between the panel and the additional component; claims 21 and 22 by reciting that the additional component is a display panel or film or substrate; claim 23 by reciting a light source positioned relative to the panel by at least one of the tab, hole, cavity, or protrusion; and claim 24 by reciting that the light source has a tab and the panel has a recess for receiving the tab of the light source.

For the foregoing reasons, this application is now believed to be in condition for final allowance of all of the pending claims 1-6, 8, 9, 11, 13 and 15-24, and early action to that end is earnestly solicited.

In the event an extension of time is necessary, this should be considered a petition for such an extension. If required, fees are enclosed for the extension of time and/or for the presentation of new and/or amended claims. In the event any additional fees are due in connection with the filing of this reply, the Commissioner is authorized to charge those fees to our Deposit Account No. 18-0988 (Attorney Docket GLOLP0108USAE).

Respectfully submitted,

RENNER, OTTO, BOISSELLE & SKLAR, LLP

Ву

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| Electronic Patent Application Fee Transmittal | | | | | | | | |
|---|---------------------------------|-------------|----------|--------|-------------------------|--|--|--|
| Application Number: | | 378080 | | | | | | |
| Filing Date: | 17-Mar-2006 | | | | | | | |
| Title of Invention: | Light emitting panel assemblies | | | | | | | |
| First Named Inventor/Applicant Name: | Jeffery R. Parker | | | | | | | |
| Filer: | Donald L. Otto/Jeanne Murphy | | | | | | | |
| Attorney Docket Number: | Gl | OLP0108USAE | | | | | | |
| Filed as Large Entity | | | | | | | | |
| Utility Filing Fees | | | | | | | | |
| Description | | Fee Code | Quantity | Amount | Sub-Total in USD(\$) | | | |
| Basic Filing: | | | | | | | | |
| Pages: | | | | | | | | |
| Claims: | | | | | | | | |
| Miscellaneous-Filing: | | | | | | | | |
| Petition: | | | | | | | | |
| Patent-Appeals-and-Interference: | | | | | | | | |
| Post-Allowance-and-Post-Issuance: | | | | | | | | |
| Statutory disclaimer | | 1814 | 2 | 130 | 260 | | | |
| Extension-of-Time: | | | | | | | | |

Page 148 of 212

| Description | Fee Code | Quantity | Amount | Sub-Total in USD(\$) |
|----------------|----------|-----------|--------|-------------------------|
| Miscellaneous: | | | | |
| | Tota | al in US[| (\$) | 260 |

| Electronic Acknowledgement Receipt | | | | | |
|--------------------------------------|---------------------------------|--|--|--|--|
| EFS ID: | 2517577 | | | | |
| Application Number: | 11378080 | | | | |
| International Application Number: | | | | | |
| Confirmation Number: | 8860 | | | | |
| Title of Invention: | Light emitting panel assemblies | | | | |
| First Named Inventor/Applicant Name: | Jeffery R. Parker | | | | |
| Customer Number: | 23908 | | | | |
| Filer: | Donald L. Otto/Jeanne Murphy | | | | |
| Filer Authorized By: | Donald L. Otto | | | | |
| Attorney Docket Number: | GLOLP0108USAE | | | | |
| Receipt Date: | 28-NOV-2007 | | | | |
| Filing Date: | 17-MAR-2006 | | | | |
| Time Stamp: | 12:04:27 | | | | |
| Application Type: | Utility under 35 USC 111(a) | | | | |
| Payment information: | | | | | |

| Submitted with Payment | yes |
|--|-------------|
| Payment Type | Credit Card |
| Payment was successfully received in RAM | \$260 |
| RAM confirmation Number | 6561 |
| Deposit Account | |
| Authorized User | |

File Listing:

| 1 | Terminal Disclaimer Filed | GLOLP0108USAEtdapplicati | 73911 | no | 1 | | | |
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| Information: | | | | | | | | |
| 2 | Terminal Disclaimer Filed | GLOLP0108USAEtdpatents. | 67804 | no | 1 | | | |
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| 3 | | GLOLP0108USAEreply.pdf | 312954 | Vec | 9 | | | |
| 3 | | GLOLF 0 10803AETepty.put | 06270440de68f3eb816c45ed2d037710 252e68af | yes | <u>9</u> | | | |
| Multipart Description/PDF files in .zip description | | | | | | | | |
| | Document De | Document Description | | | | | | |
| | Amendment - After No | Amendment - After Non-Final Rejection | | | | | | |
| | Claims | 3 | 2 | 4 | | | | |
| | Applicant Arguments/Remarks | : Made in an Amendment | 5 | 9 | | | | |
| Warnings: | | | | | | | | |
| Information: | | | | _ | | | | |
| 4 | Fee Worksheet (PTO-06) | fee-info.pdf | 8139 | no | 2 | | | |
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| Warnings: | | | | | | | | |
| Information: | | | | | | | | |
| | | Total Files Size (in bytes) | 46 | 2808 | | | | |

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. Docket Number (Optional) TERMINAL DISCLAIMER TO OBVIATE A PROVISIONAL DOUBLE PATENTING REJECTION OVER A PENDING "REFERENCE" APPLICATION GLOLP0108USAE In re Application of: Jeffery R. Parker Application No.: 11/378,080 Filed: March 17, 2006 For: LIGHT EMITTING PANEL ASSEMBLIES The owner*, Solid State Opto Limited, of 100 percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of any patent granted on pending reference Application Number(s) 11/454,822, filed 6/16/06 and 11/245,408, filed 10/6/05, as such term is defined in 35 U.S.C. 154 and 173, and as the term of any patent granted on said reference applications may be shortened by any terminal disclaimer filed prior to the grant of any patent on the pending reference applications. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and any patent granted on the reference applications are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns. In making the above disclaimer, the owner does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. 154 and 173 of any patent granted on said reference applications, "as the term of any patent granted on said reference applications may be shortened by any terminal disclaimer filed prior to the grant of any patent on the pending **reference** applications", in the event that: any such patent: granted on the pending **reference** applications: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321, has all claims canceled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term as shortened by any terminal disclaimer filed prior to its grant. Check either box 1 or 2 below, if appropriate. 1. For submissions on behalf of a business/organization (e.g., corporation, partnership, university, government agency, etc.), the undersigned is empowered to act on behalf of the business/organization. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon. 2. ✓ The undersigned is an attorney or agent of record. Reg. No. 22,125 11/28/07 Date Donald L. Otto Typed or printed name 216-621-1113 Telephone Number ✓ Terminal disclaimer fee under 37 CFR 1.20(d) is included. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.321. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).

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TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING

Docket Number (Optional)

GLOLP0108USAE REJECTION OVER A "PRIOR" PATENT In re Application of: Jeffery R. Parker Application No.: 11/378,080 Filed: March 17, 2006 For: LIGHT EMITTING PANEL ASSEMBLIES The owner*, Solid State Opto Limited, of $\underline{100}$ percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of prior patent Nos. 5,613,751 and 7,160,015 as the term of said prior patents is defined in 35 U.S.C. 154 and 173, and as the term of said prior patents is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the prior patents are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns. In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. 154 and 173 of the prior patents, "as the term of said prior patents is presently shortened by any terminal disclaimer", in the event that said prior patents later: expire for failure to pay a maintenance fee; are held unenforceable; are found invalid by a court of competent jurisdiction; are statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321; have all claims canceled by a reexamination certificate; are reissued; or are in any manner terminated prior to the expiration of their full statutory term as presently shortened by any terminal disclaimer. Check either box 1 or 2 below, if appropriate. For submissions on behalf of a business/organization (e.g., corporation, partnership, university, government agency, etc.), the undersigned is empowered to act on behalf of the business/organization. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon. The undersigned is an attorney or agent of record. Reg. No. 22,125 Signature Date Donald L. Otto Typed or printed name 216-621-1113 Telephone Number Terminal disclaimer fee under 37 CFR 1.20(d) included. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. *Statement_under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).

This collection of information is required by 37 CFR 1.321. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS

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| PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875 | | | | | Δ | Application or Docket Number 11/378,080 | | Filing Date 03/17/2006 | | To be Mailed | |
|--|---|---|--|---|------------------|---|-----------------------|------------------------|-----------------------|-----------------------|------------------------|
| APPLICATION AS FILED – PART I (Column 1) (Column 2) | | | | | | | SMALL | FNTITY | OR | | HER THAN ALL ENTITY |
| | FOR | - T | JMBER FIL | | JMBER EXTRA | | RATE (\$) | FEE (\$) | | RATE (\$) | FEE (\$) |
| | BASIC FEE (37 CFR 1.16(a), (b), | or (c)) | N/A | | N/A | | N/A | | 1 | N/A | |
| | SEARCH FEE (37 CFR 1.16(k), (i), | | N/A | | N/A | | N/A | | | N/A | |
| | EXAMINATION FE (37 CFR 1.16(o), (p), | ΞE | N/A | | N/A | | N/A | | | N/A | |
| | TAL CLAIMS CFR 1.16(i)) | | min | us 20 = * | | 1 | x \$ = | | OR | x \$ = | |
| IND | EPENDENT CLAIM | IS | mi | nus 3 = * | | 1 | x \$ = | | 1 | x \$ = | |
| (37 CFR 1.16(h)) APPLICATION SIZE FEE (37 CFR 1.16(s)) If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s). | | | on size fee due) for each on thereof. See | | | | | | | | |
| <u> </u> | MULTIPLE DEPEN | | | | | | TOTAL | | | TOT:: | |
| 1111 | the difference in col | | , | | | | TOTAL | | | TOTAL | |
| | АРР | (Column 1) | AMENL | (Column 2) | (Column 3) | | SMAL | L ENTITY | OR | | ER THAN ALL ENTITY |
| AMENDMENT | 11/28/2007 | CLAIMS REMAINING AFTER AMENDMENT | | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | | RATE (\$) | ADDITIONAL FEE (\$) | | RATE (\$) | ADDITIONAL FEE (\$) |
|)ME | Total (37 CFR 1.16(i)) | * 20 | Minus | ** 20 | = 0 | | x \$ = | | OR | X \$50= | 0 |
| | Independent (37 CFR 1.16(h)) | * 2 | Minus | ***3 | = 0 | | x \$ = | | OR | X \$210= | 0 |
| AM | Application S | ize Fee (37 CFR 1 | .16(s)) | | | | | | | | |
| | FIRST PRESE | NTATION OF MULTIP | LE DEPEN | DENT CLAIM (37 CF | FR 1.16(j)) | | | | OR | | |
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| | | (Column 1) | | (Column 2) | (Column 3) | | | | | | |
| L | | CLAIMS REMAINING AFTER AMENDMENT | | HIGHEST NUMBER PREVIOUSLY PAID FOR | PRESENT EXTRA | | RATE (\$) | ADDITIONAL FEE (\$) | | RATE (\$) | ADDITIONAL FEE (\$) |
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| AMENDMENT | Independent (37 CFR 1.16(h)) | * | Minus | *** | = | | x \$ = | | OR | x \$ = | |
| TEN | Application S | ize Fee (37 CFR 1 | .16(s)) | | | | | | | | |
| Ą | FIRST PRESE | NTATION OF MULTIP | LE DEPEN | DENT CLAIM (37 CF | FR 1.16(j)) | | | | OR | | |
| * If | | | | | | TOTAL ADD'L FEE | | OR | TOTAL ADD'L FEE | | |
| ** If | * If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1. | | | | | | | | | | |

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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|-------------------------|-----------------|--|---------------------|------------------|--|
| 11/378,080 | 03/17/2006 | 03/17/2006 Jeffery R. Parker GLOLP0108USAE | | | |
| 23908 DENNIED OTT | 7590 08/28/2007 | ס זו ס | EXAM | INER | |
| 1621 EUCLID | | K, LLF | SEMBER, T | HOMAS M | |
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| | | | MAIL DATE | DELIVERY MODE | |
| | | | 08/28/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| <u> </u> | | |
|--|---|--|
| • | Application No. | Applicant(s) |
| Office Action Summers | 11/378,080 | PARKER, JEFFERY R. |
| Office Action Summary | Examiner | Art Unit |
| | Thomas M. Sember | 2885 |
| The MAILING DATE of this communication app Period for Reply | ears on the cover sheet with the c | orrespondence address |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 16(a). In no event, however, may a reply be tim iill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |
| Status | • . | |
| 1)⊠ Responsive to communication(s) filed on 05/13 | 2/06 | |
| | action is non-final. | |
| 3) Since this application is in condition for allowan | | escoution as to the morits is |
| closed in accordance with the practice under E | • | |
| dioded in accordance with the practice under Z | x parte Quayle, 1955 C.D. 11, 45 | 33 O.G. 213. |
| Disposition of Claims | | |
| 4) Claim(s) 1-15 is/are pending in the application. | • | |
| 4a) Of the above claim(s)is/are withdraw | n from consideration. | |
| 5) Claim(s) is/are allowed. | | |
| 6)⊠ Claim(s) <u>1-15</u> is/are rejected. | | |
| 7) Claim(s) is/are objected to. | | |
| 8) Claim(s) are subject to restriction and/or | election requirement. | |
| Application Papers | · | · |
| 9) The specification is objected to by the Examiner | • | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ acce | | Examiner. |
| Applicant may not request that any objection to the o | | |
| Replacement drawing sheet(s) including the correcti | | • • |
| 11) ☐ The oath or declaration is objected to by the Ex | aminer. Note the attached Office | Action or form PTO-152. |
| Priority under 35 U.S.C. § 119 | | |
| 12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of: | priority under 35 U.S.C. § 119(a) | -(d) or (f). |
| Certified copies of the priority documents | have been received. | |
| Certified copies of the priority documents | have been received in Application | on No |
| 3. Copies of the certified copies of the prior | | ed in this National Stage |
| application from the International Bureau | . , , , | |
| * See the attached detailed Office action for a list of | of the certified copies not receive | d. |
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| Attachment(s) | | |
| 1) X Notice of References Cited (PTO-892) | 4) Interview Summary | (PTO-413) |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Da | ite |
| 3) ☑ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>05/1₿/06</u> . | 5) Notice of Informal P 6) Other: | ателт Аррисатіоп |
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U.S. Patent and Trademark Office PTOL-326 (Rev. 08-06)

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DETAILED ACTION

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Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

- 2. Claims 1-15 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-97 of U.S. Patent No. 5,613,751 and claims 1-34 of U.S. Patent No. 7,160,015. Although the conflicting claims are not identical, they are not patentably distinct from each other because applicant merely uses slightly different claim language to claim the same invention.
- 3. Claims 1-15 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-8, 10-17, 19-25 and 28-29 of copending Application No. 11/244,473; claims 1-41 of copending application 11/454,822 and claims 1-30 and 32 of copending application 11/245,408. Although the conflicting claims are not identical, they are not patentably distinct from

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each other because applicant merely uses slightly different claim language to claim the same invention.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoniger et al '258 in view of (Kashima et al '928 or Borchardt '309).

Regarding claim 1, Schoniger et al (particularly figure 5) discloses at least a light emitting panel member 10 having a light entrance surface and a light emitting surface, at least one LED light source 15 positioned near or against the light entrance surface, and a tray or housing 20 having a cavity or recess in which the panel member is received, wherein the panel member 10 and the tray or housing acts as an end edge reflector 16 and/or side edge reflector for the panel member to reflect light that would otherwise exit the panel member through an end edge and/or side edge back into the panel member and toward the pattern of light extracting deformities for causing additional light to be emitted from the light emitting surface of the panel member.

Regarding claim 2, the tray or housing has posts, tabs or other structural features 23.

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Regarding claim 3, the posts or other structural features 23 are used to facilitate mounting of the assembly into a larger assembly or device 27. Regarding claim 4, the post or other structural features 23 are used for mounting or providing structural support for at least one 26 other part or component. Regarding claim 6, the other part or component is a printed circuit 26.

Regarding claim 7, as broadly claimed the circuit board is at least somewhat flexible since it is thin.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over (Ciupke et al' 354 or Tai et al '276) in view of Schoniger et al '483. (Ciupke et al' 354 or Tai et al '276) discloses the claimed invention except for the teaching of using an LED as the at least one light source. (Ciupke et al' 354 or Tai et al '276) discloses at least a light emitting panel member having a light entrance surface and a light emitting surface, at least one light source positioned near or against the light entrance surface, and a tray or housing (21, 66) having a cavity or recess in which the panel member is received, wherein the panel member and the tray or housing acts as an end edge reflector and/or

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side edge reflector for the panel member to reflect light that would otherwise exit the panel member through an end edge and/or side edge back into the panel member and toward the pattern of light extracting deformities for causing additional light to be emitted from the light emitting surface of the panel member.

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5. Schoniger et al '483 teaches a light panel which is illuminated by red, green and blue LEDs in order to create efficient white light (see column 2, lines 49-65). It would have been obvious to one skilled in the art at the time the invention was made to substitute LEDs of Schoniger et al '483 for the light sources of (Tai et al '276 or Ciupke et al) in order to provide a more efficient, longer lasting and power saving white light source.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas M. Sember whose telephone number is 571-272-2381. The examiner can normally be reached on M-F 9 a.m.- 5.30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jong Suk (James) Lee can be reached on 571-272-7044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or \$\frac{1}{2}1-272-1000.

Thomas M Sember Primary Examiner Art Unit 2885

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| LIST OF PATENTS AND PUBLICATIONS | GLOLP0108USAE | 11/378,080 | | |
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| 110 | DOCUMENTS |
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| | |

| Examiner Initial | Document Number | Date (MM/YYYY) | Name | Class | Sub- class | Filing Date if Appropriate |
|---------------------|-----------------|-------------------|--------------------|----------|---------------|-------------------------------|
| 9 V | 2,480,178 | 8/1949 | Zinberg | | | |
| 1 | 3,043,947 | 7/1962 | Albinger, Jr. | | | |
| | 3,328,570 | 6/1967 | Balchunas | | | |
| | 3,241,256 | 3/1966 | Viret et al | | | > |
| | 3,721,815 | 3/1973 | Wall | | | - |
| | 3,752,974 | 8/1973 | Baker et al | | | |
| | 3,760,179 | 9/1973 | Addington, Jr. | - | | |
| | 3,781,537 | 12/1973 | Ramsey | | | |
| | 3,892,959 · | 7/1975 | Pulles | | | |
| | 3,958,113 | 5/1976 | Termohlen | | | - |
| | 4,043,636 | 8/1977 | Eberhardt et al | | | - |
| | 4,128,332 | 12/1978 | Rowe | | | |
| | 4,257,084 | 3/1981 | Reynolds | - | | 2 |
| | 4,277,817 | 7/1981 | Hehr | 1 | | |
| | 4,323,951 | 4/1982 | Pasco | | | |
| | 4,373,282 | 2/1983 | Wragg | | | > |
| | 4,446,508 | 5/1984 | Kinzie | | | |
| · | 4,519,017 | 5/1985 | Daniel | | | |
| | 4,573,766 | 3/1986 | Bournay, Jr. et al | | | |
| | 4,630,895 | 12/1986 | Abdala, Jr., et al | | | |
| | 4,648,690 | 3/1987 | Ohe | | | - |
| | 4,677,531 | 6/1987 | Szeles | | | |
| | 4,714,983 | 12/1987 | Lang | | | |
| | 4,729,067 | 3/1988 | Ohe | | | |
| Y | 4,729,068 | 3/1988 | Ohe | | | |

| Examiner Initial | Document Number | Date (MM/YYYY) | Name | Class | Sub- class | Filing Date if Appropriate |
|------------------|--------------------|-------------------|-------------------|---------|---------------|-------------------------------|
| 1/1 | 4,729,185 | 3/1988 | Baba | - | | > |
| 7 | 4,751,615 | 6/1988 | Abrams | | | |
| | 4,761,047 | 8/1988 | Mori | | | |
| | 4,763,984 | 8/1988 | Awai et al | | | 7 |
| | 4,765,701 | 8/1988 | Cheslak | | | |
| | 4,791,540 | 12/1988 | Dreyer, Jr. et al | | | |
| | 4,802,066 | 1/1989 | Mori | | | |
| | 4,811,507 | 3/1989 | Blanchet | | | |
| | 4,825,341 | 4/1989 | Awai | | | |
| | 4,890,201 | 12/1989 | Joft | | | |
| | 4,909,604 | 3/1990 | Kobayashi et al | | | |
| | 4,914,553 | 4/1990 | Hamada et al | | <u> </u> | |
| | 4,929,062 | 5/1990 | Guzik et al | | | |
| | 4,974,122 | 11/1990 | Shaw | 1 | | |
| | 4,975,808 | 12/1990 | Bond et al | 4 | | |
| | 4,978,952 | 12/1990 | Irwin | | - | |
| | 4,985,809 | 1/1991 | Matsui et al | | | |
| | 5,005,108 | 4/1991 | Pristash et al | 1 | | |
| · | 5,027,258 | 6/1991 | Schoniger et al | · . | | |
| | 5,055,978 | 10/1991 | Rogoff | | | |
| | 5,070,431 | 12/1991 | Kitazawa et al | | | |
| | 5,093,765 | 3/1992 | Kashima et al | | | |
| | 5,134,549 | 7/1992 | Yokoyama | | | |
| | 5,136,483 | 8/1992 | Schoniger et al | | | |
| | 5,136,480 | 8/1992 | Pristash et al | | | |
| | 5,190,370 | 3/1993 | Miller et al | | | |
| | 5,207,493 | 5/1993 | Murase et al | | | |
| | 5,243,506 | 9/1993 | Whitehead | | | - |
| | 5,262,928 | 11/1993 | Kashima et al | | | |
| | 5,283,673 | 2/1994 | Murase et al | | | |
| | / 5,339,179 | 8/1994 | Rudisill et al | <u></u> | | |
| | 5,349,503 | 9/1994 | Blonder et al | | | |

| Examiner Initial | Document Number | Date (MM/YYYY) | Name | Class | Sub- class | Filing Date if Appropriate |
|---------------------|-----------------|-------------------|-----------------|---------|---------------|-------------------------------|
| My | 5,375,043 | 12/1994 | Tokunaga | <u></u> | | |
| | 5,377,084 | 12/1994 | Kojima et al | | | |
| | 5,390,085 | 2/1995 | Mari-Roca et al | | | |
| | 5,390,436 | 2/1995 | Ashall | | | • |
| | 5,394,308 | 2/1995 | Watanabe et al | 0 | | ſ |
| | 5,467,208 | 11/1995 | Kokawa et al | | | |
| | 5,467,417 | 11/1995 | Nakamura et al | | | |
| | 5,477,423 | 12/1995 | Fredriksz et al | | | |
| | 5,479,275 | 12/1995 | Abileah | | | - |
| | 5,485,291 | 1/1996 | Qiao et al | | | |
| | 5,600,455 | 2/1997 | Ishikawa et al | | | |
| | 5,719,649 | 2/1998 | Shono et al | | | |
| | 5,947,578 | 9/1999 | Ayres | - | | |
| V | 5,999,685 | 12/1999 | Goto et al | سے | | |

FOREIGN PATENT DOCUMENTS

| Examiner Initial | Document Number | Date (MM/YYYY) | Country | Class | Sub- | Translation | |
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OTHER ART

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EXAMINER:

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation is not in conformance and not considered. Include copy of this form with next communication to applicant.

Information Disclosure Statement PTO-1449 (Modified)

The identification of any reference is not intended to be, and should not be understood as being, an admission that such publication, in fact, constitutes "prior art" within the meaning of applicable law since, for example, a given reference may have a later effective date than first seems apparent or the reference may have an effective date which can be antedated. The "prior art" status of any reference is a matter to be resolved during prosecution. Z:\SEC177\GLOL\P108USAE\IDS-1449.wpd (IDS1449.FRM) (2/97)

Application/Control No. Applicant(s)/Patent Under Reexamination 11/378,080 PARKER, JEFFERY R. Notice of References Cited Examiner Art Unit Page 1 of 1 2885 Thomas M. Sember **U.S. PATENT DOCUMENTS Document Number** Date Name Classification Country Code-Number-Kind Code MM-YYYY US-5,390,276 Α 02-1995 Tai et al. 385/146 US-5,485,354 01-1996 Ciupke et al. 362/619 В С US-D US-

FOREIGN PATENT DOCUMENTS

| * | | Document Number Country Code-Number-Kind Code | Date MM-YYYY | Country | Name | Classification |
|---|---|--|-----------------|---------|------|----------------|
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NON-PATENT DOCUMENTS

| * | | Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages) |
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office PTO-892 (Rev. 01-2001)

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| Search Notes | | | | | | | | | | | |
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11/378,080

Examiner

Thomas M. Sember

Applicant(s)/Patent under Reexamination

PARKER, JEFFERY R.
Art Unit

2885

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| SEARCH NOTES (INCLUDING SEARCH STRATEGY) | | | | |
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COMMISSIONER FOR PATENTS UNITED STATES PATENT AND TRADEMARK OFFICE P.D. BOX 1450 ALEXANDRIA, VA 22313-1450 www.uspto.gov

RENNER OTTO BOISSELLE & SKLAR, LLP 1621 EUCLID AVENUE NINETEENTH FLOOR CLEVELAND, OH 44115

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AUG 1 4 2006

OFFICE OF PETITIONS

In re Application of

Parker

: DECISION ON PETITION

Application No. 11/378,080

Filed: March 17, 2006

Atty. Dkt. No.: GLOLP0108USAE

This decision is in response to the request for corrected filing receipt filed April 21, 2006. This matter is being properly treated as a petition under 37 CFR 1.10(c).

Petitioner alleges that the application was deposited in Express Mail Service on March 17, 2006. In support, the petition is accompanied by a copy of Express Mail receipt No. EV839640355US (the same Express Mail number found on the original application papers located in the official file) showing a "date in" of March 17, 2006.

The Office considers the date the paper or fee is shown to have been deposited as "Express Mail" to be the "date-in" on the Express Mail label, MPEP 513. The evidence is convincing that the application was deposited as "Express Mail" with the U.S. Postal Service on March 17, 2006.

In view thereof, the petition is GRANTED.

This application file is being forwarded to the Office of Initial Patent Examination (OIPE) for correction of the filing date to March 17, 2006 and for issuance of a corrected filing receipt.

Telephone inquiries regarding this decision should be directed to the undersigned at (571) 272-3205.

Brown

Petitions Attorney Office of Petitions Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Application Act of 1995. no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Application Number 11/378,080

Filing Date TRANSMITTAL March 17, 2006 First Named Inventor **FORM** Jeffery R. Parker Art Unit 2875 **Examiner Name** (to be used for all correspondence after initial filing) Attorney Docket Number GLOLP0108USAE Total Number of Pages in This Submission **ENCLOSURES** (Check all that apply) After Allowance Communication to TC Fee Transmittal Form Drawing(s) Appeal Communication to Board Licensing-related Papers of Appeals and Interferences Fee Attached Appeal Communication to TC Petition (Appeal Notice, Brief, Reply Brief) Amendment/Reply Petition to Convert to a Proprietary Information After Final Provisional Application Power of Attorney, Revocation Status Letter Change of Correspondence Address Affidavits/declaration(s) Other Enclosure(s) (please Identify Terminal Disclaimer Extension of Time Request below): Request for Refund **Express Abandonment Request** CD, Number of CD(s) Information Disclosure Statement Landscape Table on CD Certified Copy of Priority Remarks Document(s) Reply to Missing Parts/ Incomplete Application Reply to Missing Parts under 37 CFR 1.52 or 1.53 SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT Firm Name Renner, Otto, Boisselle & Sklar, LLP Signature Printed name Donald L. Otto Date Reg. No. 22,125 May 25, 2006 CERTIFICATE OF TRANSMISSION/MAILING I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below: Signature

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date

May 25, 2006

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Typed or printed name

Donald L. Otto



In re patent application of

Applicant:

Jeffery R. Parker 11/378.080

Serial No.:

March 17, 2006

Filed: For:

LIGHT EMITTING PANEL ASSEMBLIES

Art Unit:

2875

Examiner:

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

1. Pursuant to 37 C.F.R. 1.97 and 1.98, and in compliance with 37 C.F.R. 1.56, the Office's attention is directed to the patents, pending applications, publications and other information listed on the attached PTO-1449. A copy of each listed document is enclosed, except for (a) those previously cited or submitted to the Office in the following application(s) upon which this application relies for an earlier filing date under 35 U.S.C. 120, and (b) any U.S. patent or U.S. patent application publication if the present application was filed after June 30, 2003 or entered the national stage under 35 USC § 371 after June 30, 2003:

| Serial No.: | 10/784,527 | 09/256,275 | 08/778,089 | 08/495,176 |
|--------------|------------|------------|------------|------------|
| Filing Date: | 2/23/04 | 2/23/99 | 01/02/97 | 6/27/95 |
| Patent No.: | | 6,712,481 | 6,079,838 | 5,613,751 |

Regarding any document, publication or other information for which a date is not given on the attached PTO-1449, Applicant(s) believe(s) the same may qualify as "prior" art to this application and should be treated accordingly, although Applicant(s) reserve(s) the right to contest the prior art status of any document, publication or information, should issue arise.

- 2. Regarding each listed document that is not in the English language, an English-language translation accompanies this Statement as indicated on the attached PTO-1449 or a concise explanation of the relevance of the document is set forth in the following document(s):
 - (a) ____ A copy of each English language version of a search report (or EPO Search Report) indicating the degree of relevance found by the foreign office of each document being submitted from the search report, is being submitted herewith or has previously been submitted.
 - (b) ____ Attached is a "Concise Explanation of Relevance of Non-English Language Documents".
- 3. Pursuant to 37 C.F.R. 1.97(b) this Statement is being filed (one must be checked):
 - (a) ___ Within 3 months of the filing date or date of entry into the National Stage.
 - (b) X Before the mailing date of a first Office Action on the merits. If this Statement is not filed before the mailing date of a first Office Action on the merits, the required certification is given below or, in the absence thereof, the Office is authorized to charge the required fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 18-0988 for consideration of this Statement.

| | (c) | Before the mailing date of a first Office Action on the merits after a first or second submission after final rejection under 37 C.F.R. 1.129(a). |
|----------------|---------------|--|
| | (d) | After the period set forth in 37 C.F.R. 1.97(b) but before the mailing date of either a final action or a notice of allowance. |
| | (1 | The required certification is given below, or |
| | (2 | Enclosed is credit card payment (PTO Form-2038) covering the fee set forth in 37 C.F.R. 1.17(p) for consideration of this Statement, or |
| | (3 | Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 18-0988 |
| | (e) | After the mailing date of either a final action or a notice of allowance, but before payment of the issue fee. Petition hereby is made for consideration of this Statement and the required certification is indicated below. |
| | (1 | Enclosed is a check covering the fee set forth in 37 C.F.R. 1.17(p), or |
| | (2 | Charge the fee set forth in 37 C.F.R. 1.17(p) to Deposit Account No. 18-0988. |
| 4. | Certifica | ion (if applicable) |
| | (a) | The undersigned hereby certifies that each item of information contained in this Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than 3 months prior to the filing of this Statement. |
| | (b) | The undersigned hereby certifies that no item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the undersigned's knowledge after making reasonable inquiry, no item of information contained in this statement was known to any individual designated in 37 C.F.R. 1.56(c) more than 3 months prior to the filing of this Statement. |
| 5. Deposit | | nmissioner is hereby authorized to charge any additional fees or credit any overpayment to o. 18-0988. |
| | | Respectfully submitted, |
| | | RENN ER, OT TO, BOISSELLE & SKLAR, LLP |
| | | By Donald L. Otto, Reg. No. 22,125 |
| | id, Ohio 🧸 | e, 19th Floor |
| | | CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8 |
| deposite | d on the b | this correspondence (along with any paper referenced as being attached or enclosed) is being elow date with the United States Postal Service with sufficient postage as first class mail in an eld to Mail Stop Amendment, Commissioner for Patents, R.O. Box 1450, Alexandria, VA 22313- |
| Date: <u>N</u> | 1ay 25, 20 | Donald L. Otto |
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| Form PTO-1449 (Modified) | Atty Docket No. | Serial No. | |
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| LIST OF PATENTS AND PUBLICATIONS | GLOLP0108USAE | 11/378,080 | |
| FOR APPLICANT'S INFORMATION DISCLOSURE STATEMENT | Applicant: Jeffery R. Parker | | |
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U.S. PATENT DOCUMENTS

| Examiner Initial | Document Number | Date (MM/YYYY) | Name | Class | Sub- class | Filing Date if Appropriate |
|---------------------|-----------------|-------------------|--------------------|-------|---------------|-------------------------------|
| | 2,480,178 | 8/1949 | Zinberg | | | |
| | 3,043,947 | 7/1962 | Albinger, Jr. | | | |
| | 3,328,570 | 6/1967 | Balchunas | | | |
| | 3,241,256 | 3/1966 | Viret et al | | | |
| | 3,721,815 | 3/1973 | Wall | | | |
| | 3,752,974 | 8/1973 | Baker et al | | | |
| | 3,760,179 | 9/1973 | Addington, Jr. | | | |
| | 3,781,537 | 12/1973 | Ramsey | | | |
| | 3,892,959 | 7/1975 | Pulles | | | |
| | 3,958,113 | 5/1976 | Termohlen | | | |
| | 4,043,636 | 8/1977 | Eberhardt et al | | | |
| | 4,128,332 | 12/1978 | Rowe | | | |
| | 4,257,084 | 3/1981 | Reynolds | | | |
| | 4,277,817 | 7/1981 | Hehr | | | |
| | 4,323,951 | 4/1982 | Pasco | | | |
| | 4,373,282 | 2/1983 | Wragg | | | |
| | 4,446,508 | 5/1984 | Kinzie | | | |
| | 4,519,017 | 5/1985 | Daniel | | | |
| | 4,573,766 | 3/1986 | Bournay, Jr. et al | | | |
| | 4,630,895 | 12/1986 | Abdala, Jr., et al | | | |
| | 4,648,690 | 3/1987 | Ohe | | | |
| | 4,677,531 | 6/1987 | Szeles | | | |
| | 4,714,983 | 12/1987 | Lang | | | |
| | 4,729,067 | 3/1988 | Ohe | | | |
| | 4,729,068 | 3/1988 | Ohe | | | |

| Examiner Initial | Document Number | Date (MM/YYYY) | Name | Class | Sub- class | Filing Date if Appropriate |
|---------------------|-----------------|-------------------|-------------------|-------|---------------|-------------------------------|
| | 4,729,185 | 3/1988 | Baba | | | |
| | 4,751,615 | 6/1988 | Abrams | | | |
| | 4,761,047 | 8/1988 | Mori | | | |
| | 4,763,984 | 8/1988 | Awai et al | | | |
| | 4,765,701 | 8/1988 | Cheslak | | | |
| | 4,791,540 | 12/1988 | Dreyer, Jr. et al | | | |
| | 4,802,066 | 1/1989 | Mori | | | |
| | 4,811,507 | 3/1989 | Blanchet | | | |
| | 4,825,341 | 4/1989 | Awai | | | |
| | 4,890,201 | 12/1989 | Joft | | | |
| | 4,909,604 | 3/1990 | Kobayashi et al | · | | |
| | 4,914,553 | 4/1990 | Hamada et al | | | |
| | 4,929,062 | 5/1990 | Guzik et al | | | |
| | 4,974,122 | 11/1990 | Shaw | | | |
| - | 4,975,808 | 12/1990 | Bond et al | | | |
| | 4,978,952 | 12/1990 | Irwin | | | |
| | 4,985,809 | 1/1991 | Matsui et al | | | |
| | 5,005,108 | 4/1991 | Pristash et al | | | |
| | 5,027,258 | 6/1991 | Schoniger et al | | | |
| | 5,055,978 | 10/1991 | Rogoff | | | |
| | 5,070,431 | 12/1991 | Kitazawa et al | | | |
| | 5,093,765 | 3/1992 | Kashima et al | | | |
| | 5,134,549 | 7/1992 | Yokoyama | | | |
| , , . | 5,136,483 | 8/1992 | Schoniger et al | | | |
| | 5,136,480 | 8/1992 | Pristash et al | | | |
| | 5,190,370 | 3/1993 | Miller et al | | | |
| | 5,207,493 | 5/1993 | Murase et al | | | |
| | 5,243,506 | 9/1993 | Whitehead | | | |
| | 5,262,928 | 11/1993 | Kashima et al | | | |
| | 5,283,673 | 2/1994 | Murase et al | | | |
| | 5,339,179 | 8/1994 | Rudisill et al | | | |
| | 5,349,503 | 9/1994 | Blonder et al | | | |

| Examiner Initial | Document Number | Date (MM/YYYY) | Name | Class | Sub- class | Filing Date if Appropriate |
|---------------------|-----------------|-------------------|-----------------|-------|---------------|-------------------------------|
| | 5,375,043 | 12/1994 | Tokunaga | | | |
| | 5,377,084 | 12/1994 | Kojima et al | | | |
| | 5,390,085 | 2/1995 | Mari-Roca et al | | | |
| | 5,390,436 | 2/1995 | Ashall | | | |
| | 5,394,308 | 2/1995 | Watanabe et al | | | |
| | 5,467,208 | 11/1995 | Kokawa et al | | | |
| | 5,467,417 | 11/1995 | Nakamura et al | | | |
| | 5,477,423 | 12/1995 | Fredriksz et al | | | |
| | 5,479,275 | 12/1995 | Abileah | | | |
| | 5,485,291 | 1/1996 | Qiao et al | | | |
| | 5,600,455 | 2/1997 | Ishikawa et al | | | |
| | 5,719,649 | 2/1998 | Shono et al | | | |
| | 5,947,578 | 9/1999 | Ayres | | | |
| | 5,999,685 | 12/1999 | Goto et al | | | |

FOREIGN PATENT DOCUMENTS

| Examiner | Document Number | Date | Country | Class | Sub- class | Transla | tion |
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OTHER ART

| Examiner Initial | Author, Title, Date, Pertinent Pages, etc. |
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EXAMINER:

Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Information Disclosure Statement PTO-1449 (Modified)

The identification of any reference is not intended to be, and should not be understood as being, an admission that such publication, in fact, constitutes "prior art" within the meaning of applicable law since, for example, a given reference may have a later effective date than first seems apparent or the reference may have an effective date which can be antedated. The "prior art" status of any reference is a matter to be resolved during prosecution. Z:\SEC177\GLOL\P108USAE\IDS-1449.FRM) (2/97)

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CERTIFICATE OF MAILING (37 CFR 1.8a)

by certify that this paper (along with any paper referred to as being attached or enclosed) is being be posited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Date: April 18, 2006

Donald L. Otto

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket GLOLP0108USAE

In re PATENT application of

Jeffery R. Parker

Serial Nº 11/378,080

Filed March 17, 2006

For: LIGHT EMITTING PANEL ASSEMBLIES

Art Unit 2875/Confirmation № 8860

REQUEST FOR CORRECTION OF FILING DATE/FILING RECEIPT

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

The above-identified application was filed with the USPTO via Express Mail N $^\circ$ EV839640355US on March 17, 2006. A copy of the Express Mail receipt is enclosed. Also enclosed is a copy of the return postcard from the USPTO bearing Serial N $^\circ$ 11/378,080 and filing date "031706".

On the Filing Receipt mailed 04/10/2006 (copy enclosed) the filing date is given as 03/20/2006, which is incorrect.

Please correct this error and send a Corrected Filing Receipt to the undersigned.

Respectfully submitted,

RENNER, OTTO, BOISSELLE & SKLAR, LLP

By

Donald L. Otto, Reg. № 22,125

1621 Euclid Avenue - 19th Floor Cleveland, Ohio 44115-2191

Phone:

216-621-1113

Fax:

216-621-6165

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| 4 Sheets of Drawings | IDS/1449/Refs. | Resp. to Missing Parts |
| X Application Data Shee | t Priority Document(s) | Ltr. Off. Draftsman |
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| () Amendment/Response | Ren. Sec. 8 & 9 | Appeal Brief |
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UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.unpto.gov

| APPL NO. | FILING OR 371 (c) DATE | ART UNIT | FIL FEE REC'D | ATTY.DOCKET NO | DRAWINGS | TOT CLMS | IND CLMS |
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03/17/2006

RENNER OTTO BOISSELLE & SKLAR, LLP

CONFIRMATION NO. 8860

FILING RECEIPT

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Date Mailed: 04/10/2006

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please mail to the Commissioner for Patents P.O. Box 1450 Alexandria Va 22313-1450. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

23908

1621 EUCLID AVENUE

NINETEENTH FLOOR CLEVELAND, OH 44115

Jeffery R. Parker, Richfield, OH;

Assignment For Published Patent Application

Solid State Opto Limited, Road Town, VIRGIN ISLANDS, BRITISH

Power of Attorney:

Donald Otto-22125

Domestic Priority data as claimed by applicant

This application is a CON of 10/784,527 02/23/2004 which is a DIV of 09/256,275 02/23/1999 PAT 6,712,481 which is a CIP of 08/778,089 01/02/1997 PAT 6,079,838 which is a DIV of 08/495,176 06/27/1995 PAT 5,613,751

Foreign Applications

If Required, Foreign Filing License Granted: 04/07/2006

APR 12 2006

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The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is US11/378,080

Projected Publication Date: 07/20/2006

Non-Publication Request: No

Early Publication Request: No

Title

Light emitting panel assemblies

Preliminary Class

362

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Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

| Attorney Docket No. | GLOLP0108USAE | | | |
|------------------------|----------------------|--|--|--|
| First Inventor | Jeffery R. Parker | | | |
| Title | LIGHT EMITTING PANEL | | | |
| Express Mail Label No. | EV839640355US | | | |

Commissioner for Patents APPLICATION ELEMENTS ADDRESS TO: P.O. Box 1450 See MPEP chapter 600 concerning utility patent application contents. Alexandria VA 22313-1450 1. Fee Transmittal Form (e.g., PTO/SB/17) **ACCOMPANYING APPLICATION PARTS** (Submit an original and a duplicate for fee processing) Applicant claims small entity status. 9. Assignment Papers (cover sheet & document(s)) See 37 CFR 1.27. 3. Specification Total Pages Name of Assignee Both the claims and abstract must start on a new page (For information on the preferred arrangement, see MPEP 608.01(a)) Drawing(s) (35 U.S.C. 113) [Total Sheets __ Informal 5. Oath or Declaration [Total Sheets 10. 37 CFR 3.73(b) Statement Power of a. Newly executed (original or copy) (when there is an assignee) Attorney A copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed) 11. English Translation Document (if applicable) DELETION OF INVENTOR(S) 12. Information Disclosure Statement (PTO/SB/08 or PTO-1449) Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). Copies of citations attached 6. Application Data Sheet. See 37 CFR 1.76 13. Preliminary Amendment 7. CD-ROM or CD-R in duplicate, large table or 14. Return Receipt Postcard (MPEP 503) Computer Program (Appendix) (Should be specifically itemized) Landscape Table on CD 15. Certified Copy of Priority Document(s) Nucleotide and/or Amino Acid Sequence Submission (if foreign priority is claimed) (if applicable, items a. - c. are required) Computer Readable Form (CRF) 16. Nonpublication Request under 35 U.S.C. 122(b)(2)(B)(i).
Applicant must attach form PTO/SB/35 or equivalent. Specification Sequence Listing on: CD-ROM or CD-R (2 copies); or 17. Other: Credit Card Payment Paper Form PTO-2038 c. Statements verifying identity of above copies 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: of prior application No. 10/784, 527 Continuation-in-part (CIP) Continuation Divisional Examiner Thomas M. Sember Art Unit: 2875 Prior application information: 19. CORRESPONDENCE ADDRESS 23908 Correspondence address below The address associated with Customer Number: Name Address Zip Code City State 1)elephone Fax Country Signature March 17, 2006 Registration No. Name Donald L. Otto 22,125 (Print/Type) (Attorney/Agent)

This collection of information is required by 37 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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| FEE CALCULATION | | | | | | | |
| 1. BASIC FILING, SEA | RCH. AND | EXAMINATION | N FEES | | | | |
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| Application Type | Fee (\$) | Small Entity Fee (\$) | Fee (\$ | Small Entity Fee (\$) | Fee (\$) | Small Entity Fee (\$) | Fees Paid (\$) |
| Utility | 300 | 150 | 500 | 250 | 200 | 100 | \$1,000.00 |
| Design | 200 | 100 | 100 | 50 | 130 | 65 | |
| Plant | 200 | 100 | 300 | 150 | 160 | 80 | |
| Reissue | 300 | 150 | 500 | 250 | 600 | 300 | |
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Name (Print/Type) Donald L. Otto Date March 17, This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS

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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

| Attorney Docket No. | GLOLP0108USAE |
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| First Inventor | Jeffery R. Parker |
| Title | LIGHT EMITTING PANEL |
| Express Mail Label No. | EV839640355US |

Commissioner for Patents APPLICATION ELEMENTS ADDRESS TO: P.O. Box 1450 See MPEP chapter 600 concerning utility patent application contents. Alexandria VA 22313-1450 1. Fee Transmittal Form (e.g., PTO/SB/17) **ACCOMPANYING APPLICATION PARTS** (Submit an original and a duplicate for fee processing) Applicant claims small entity status. 9. Assignment Papers (cover sheet & document(s)) See 37 CFR 1.27. 3. Specification Total Pages Name of Assignee Both the claims and abstract must start on a new page (For information on the preferred arrangement, see MPEP 608.01(a)) Drawing(s) (35 U.S.C. 113) [Total Sheets __ Informal 5. Oath or Declaration [Total Sheets 10. 37 CFR 3.73(b) Statement Power of a. Newly executed (original or copy) (when there is an assignee) Attorney A copy from a prior application (37 CFR 1.63(d)) (for continuation/divisional with Box 18 completed) 11. English Translation Document (if applicable) DELETION OF INVENTOR(S) 12. Information Disclosure Statement (PTO/SB/08 or PTO-1449) Signed statement attached deleting inventor(s) name in the prior application, see 37 CFR 1.63(d)(2) and 1.33(b). Copies of citations attached 6. Application Data Sheet. See 37 CFR 1.76 13. Preliminary Amendment 7. CD-ROM or CD-R in duplicate, large table or 14. Return Receipt Postcard (MPEP 503) Computer Program (Appendix) (Should be specifically itemized) Landscape Table on CD 15. Certified Copy of Priority Document(s) Nucleotide and/or Amino Acid Sequence Submission (if foreign priority is claimed) (if applicable, items a. - c. are required) Computer Readable Form (CRF) 16. Nonpublication Request under 35 U.S.C. 122(b)(2)(B)(i).
Applicant must attach form PTO/SB/35 or equivalent. Specification Sequence Listing on: CD-ROM or CD-R (2 copies); or 17. Other: Credit Card Payment Paper Form PTO-2038 c. Statements verifying identity of above copies 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in the first sentence of the specification following the title, or in an Application Data Sheet under 37 CFR 1.76: of prior application No. 10/784, 527 Continuation-in-part (CIP) Continuation Divisional Examiner Thomas M. Sember Art Unit: 2875 Prior application information: 19. CORRESPONDENCE ADDRESS 23908 Correspondence address below The address associated with Customer Number: Name Address Zip Code City State 1)elephone Fax Country Signature March 17, 2006 Registration No. Name Donald L. Otto 22,125 (Print/Type) (Attorney/Agent)

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Small Entity

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3. APPLICATION SIZE FEE

2. EXCESS CLAIM FEES

Fee Description

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If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

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|-------------------|----------|--------|-----|---|------------------------|
| Signature | he | el XI | Men | Registration No. 22, 125 (Attorney/Agent) | Telephone 216-621-1113 |
| Name (Print/Type) | Donald L | . Otto | | | Date March 17, 2006 |

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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TITLE: LIGHT EMITTING PANEL ASSEMBLIES

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CROSS-REFERENCE TO RELATED APPLICATIONS

This application is a continuation of U.S. Patent Application No. 10/784,527, filed February 23, 2004, which is a division of U.S. Patent Application No. 09/256,275, filed February 23, 1999, now U.S. Patent No. 6,712,481, dated March 30, 2004, which is a continuation-in-part of U.S. Patent Application No. 08/778,089, filed January 2, 1997, now U.S. Patent No. 6,079,838, dated June 27, 2000, which is a division of U.S. Patent Application No. 08/495,176, filed June 27, 1995, now U.S. Patent No. 5,613,751, dated March 25, 1997.

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BACKGROUND OF THE INVENTION

This invention relates generally, as indicated, to light emitting panel assemblies each including a transparent panel member for efficiently conducting light, and controlling the light conducted by the panel member to be emitted from one or more light output areas along the length thereof.

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Light emitting panel assemblies are generally known. However, the present invention relates to several different light emitting panel assembly configurations which provide for better control of the light output from the panel assemblies and for more efficient utilization of light, which results in greater light output from the panel assemblies.

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SUMMARY OF THE INVENTION

In accordance with one aspect of the invention, the light emitting panel assemblies include a light emitting panel member having a light transition area in which at least one light source is suitably mounted for transmission of light to the light input surface of the panel member.

In accordance with another aspect of the invention, the light source is desirably embedded, potted or bonded to the light transition area to eliminate any air gaps, decrease surface reflections and/or eliminate any lens effect between the light source and light transition area, thereby reducing light loss and increasing the light output from the panel assembly.

In accordance with another aspect of the invention, the panel assemblies may include reflective or refractive surfaces for changing the path of a portion of the light, emitted from the light source, that would not normally enter the panel members at an acceptable angle that allows the light to remain in the panel members for a longer period of time and/or increase the efficiency of the panel members.

In accordance with another aspect of the invention, the light emitting panel members include a pattern of light extracting deformities or disruptions which provide a desired light output distribution from the panel members by changing the angle of refraction of a portion of the light from one or more light output areas of the panel members.

In accordance with still another aspect of the invention, the light source may include multiple colored light sources for supplying light to one or more light output areas, and for providing a colored or white light output distribution.

In accordance with yet another aspect of the invention, the panel assemblies include a transition area for mixing the multiple colored lights, prior to the light entering the panel members, in order to effect a desired colored or white light output distribution.

The various light emitting panel assemblies of the present invention are very efficient panel assemblies that may be used to produce increased uniformity and higher light output from the panel members with lower power requirements, and allow the panel members to be made thinner and/or longer, and/or of various shapes and sizes.

To the accomplishment of the foregoing and related ends, the invention then comprises the features hereinafter fully described and particularly pointed out in the claims, the following description and the annexed drawings setting forth in detail certain illustrative embodiments of the invention, these being indicative, however, of but several of the various ways in which the principles of the invention may be employed.

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BRIEF DESCRIPTION OF THE DRAWINGS

In the annexed drawings:

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- Figs. 1 through 3 are schematic perspective views of three different forms of light emitting panel assemblies in accordance with this invention;
- Fig. 4a is an enlarged plan view of a portion of a light output area of a panel assembly showing one form of pattern of light extracting deformities on the light output area;
- Figs. 4b, c and d are enlarged schematic perspective views of a portion of a light output area of a panel assembly showing other forms of light extracting deformities formed in or on the light output area;
- Fig. 5 is an enlarged transverse section through the light emitting panel assembly of Fig. 3 taken generally on the plane of the line 5-5 thereof;
- Fig. 6 is a schematic perspective view of another form of light emitting panel assembly in accordance with this invention;
- Fig. 7 is a schematic top plan view of another form of light emitting panel assembly in accordance with this invention;
- Fig. 8 is a schematic perspective view of another form of light emitting panel assembly in accordance with this invention;
- Fig. 9 is a schematic top plan view of another form of light emitting panel assembly in accordance with this invention;
- Fig. 10 is a schematic top plan view of still another form of light emitting panel assembly in accordance with this invention;
- Fig. 11 is a side elevation view of the light emitting panel assembly of Fig. 10;
- Fig. 11a is a fragmentary side elevation view showing a tapered or rounded end on the panel member in place of the prismatic surface shown in Figs. 10 and 11;
 - Fig. 12 is a schematic top plan view of another form of light emitting panel assembly in accordance with this invention;
 - Fig. 13 is a schematic side elevation view of the light emitting panel assembly of Fig. 12; and
 - Figs. 14 and 15 are schematic perspective views of still other forms of light emitting panel assemblies in accordance with this invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring now in detail to the drawings, and initially to Fig. 1, there is schematically shown one form of light emitting panel assembly 1 in accordance with this invention including a transparent light emitting panel 2 and one or more light sources 3 which emit light in a predetermined pattern in 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. 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.

In Fig. 1 the light transition area 4 is shown as an integral extension of one end of the light emitting panel 2 and as being generally rectangular in shape. However, the light transition area may be of other shapes suitable for embedding, potting, bonding or otherwise mounting the light source. Also, reflective or refractive surfaces may be provided to increase efficiency. Moreover, the light transition area 4 may be a separate piece suitably attached to the light input surface 13 of the panel member if desired. Also, the sides of the light transition area may be curved to more efficiently reflect or refract a portion of the light emitted from the light source through the light emitting panel at an acceptable angle.

Fig. 2 shows another form of light emitting panel assembly 5 in accordance with this invention including a panel light transition area 6 at one end of the light emitting panel 7 with sides 8, 9 around and behind the light source 3 shaped to more efficiently reflect and/or refract and focus the light emitted from the light source 3 that impinges on these surfaces back through the light transition area 6 at an acceptable angle for entering the light input surface 18 at one end of the light emitting panel 7. Also, a suitable reflective material or coating 10 may be provided on the portions of the sides of the light transition areas of the panel assemblies of Figs. 1 and 2 on which a portion of the light impinges for maximizing the amount of light or otherwise changing the light that is reflected back through the light transition areas and into the light emitting panels.

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The panel assemblies shown in Figs. 1 and 2 include a single light source 3, whereas Fig. 3 shows another light emitting panel assembly 11 in accordance with this invention including two light sources 3. Of course, it will be appreciated that the panel assemblies of the present invention may be provided with any number of light sources as desired, depending on the particular application.

The panel assembly 11 of Fig. 3 includes a light transition area 12 at one end of the light emitting panel 14 having reflective and/or refractive surfaces 15 around and behind each light source 3. These surfaces 15 may be appropriately shaped including for example curved, straight and/or faceted surfaces, and if desired, suitable reflective materials or coatings may be provided on portions of these surfaces to more efficiently reflect and/or refract and focus a portion of the light emitted for example from an incandescent light source which emits light in a 360° pattern through the light transition areas 12 into the light input surface 19 of the light emitting panel 14.

The light sources 3 may be mechanically held in any suitable manner in slots, cavities or openings 16 machined, molded or otherwise formed in the light transition areas of the panel assemblies. However, preferably the light sources 3 are embedded, potted or bonded in the light transition areas in order to eliminate any air gaps or air interface surfaces between the light sources and surrounding light transition areas, thereby reducing light loss and increasing the light output emitted by the light emitting panels. Such mounting of the light sources may be accomplished, for example, by bonding the light sources 3 in the slots, cavities or openings 16 in the light transition areas using a sufficient quantity of a suitable embedding, potting or bonding material 17. The slots, cavities or openings 16 may be on the top, bottom, sides or back of the light transition areas. Bonding can also be accomplished by a variety of methods that do not incorporate extra material, for example, thermal bonding, heat staking, ultrasonic or plastic welding or the like. Other methods of bonding include insert molding and casting around the light source(s).

A transparent light emitting material of any suitable type, for example acrylic or polycarbonate, may be used for the light emitting panels. Also, the panels may be substantially flat, or curved, may be a single layer or multi-layers, and may have different thicknesses and shapes. Moreover, the panels may be

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flexible, or rigid, and may be made out of a variety of compounds. Further, the panels may be hollow, filled with liquid, air, or be solid, and may have holes or ridges in the panels.

Each light source 3 may also be of any suitable type including, for example, any of the types disclosed in U.S. Patent Nos. 4,897,771 and 5,005,108, assigned to the same assignee as the present application, the entire disclosures of which are incorporated herein by reference. In particular, the light sources 3 may be an arc lamp, an incandescent bulb which also may be colored, filtered or painted, a lens end bulb, a line light, a halogen lamp, a light emitting diode (LED), a chip from an LED, a neon bulb, a fluorescent tube, a fiber optic light pipe transmitting from a remote source, a laser or laser diode, or any other suitable light source. Additionally, the light sources 3 may be a multiple colored LED, or a combination of multiple colored radiation sources in order to provide a desired colored or white light output distribution. For example, a plurality of colored lights such as LEDs of different colors (red, blue, green) or a single LED with multiple colored chips may be employed to create white light or any other colored light output distribution by varying the intensities of each individual colored light.

A pattern of light extracting deformities or disruptions may be provided on one or both sides of the panel members or on one or more selected areas on one or both sides of the panel members, as desired. Fig. 4a schematically shows one such light surface area 20 on which a pattern of light extracting deformities or disruptions 21 is provided. As used herein, the term deformities or disruptions are used interchangeably to mean any change in the shape or geometry of the panel surface and/or coating or surface treatment that causes a portion of the light to be emitted. The pattern of light extracting deformities 21 shown in Fig. 4a includes a variable pattern which breaks up the light rays such that the internal angle of reflection of a portion of the light rays will be great enough to cause the light rays either to be emitted out of the panel through the side or sides on which the light extracting deformities 21 are provided or reflected back through the panel and emitted out the other side.

These deformities or disruptions 21 can be produced in a variety of manners, for example, by providing a painted pattern, an etched pattern, a

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machined pattern, a printed pattern, a hot stamped pattern, or a molded pattern or the like on selected light output areas of the panel members. An ink or printed pattern may be applied for example by pad printing, silk screening, ink jet, heat transfer film process or the like. The deformities may also be printed on a sheet or film which is used to apply the deformities to the panel member. This sheet or film may become a permanent part of the light panel assembly for example by attaching or otherwise positioning the sheet or film against one or both sides of the panel member similar to the sheet or film 27 shown in Figs. 3 and 5 in order to produce a desired effect.

By varying the density, opaqueness or translucence, shape, depth, color, area, index of refraction, or type of deformities 21 on an area or areas of the panels, the light output of the panels can be controlled. The deformities or disruptions may be used to control the percent of light emitted from any area of the panels. For example, less and/or smaller size deformities 21 may be placed on panel areas where less light output is wanted. Conversely, a greater percentage of and/or larger deformities may be placed on areas of the panels where greater light output is desired.

Varying the percentages and/or size of deformities in different areas of the panel is necessary in order to provide a uniform light output distribution. For example, the amount of light traveling through the panels will ordinarily be greater in areas closer to the light source than in other areas further removed from the light source. A pattern of light extracting deformities 21 may be used to adjust for the light variances within the panel members, for example, by providing a denser concentration of light extracting deformities with increased distance from the light source 3 thereby resulting in a more uniform light output distribution from the light emitting panels.

The deformities 21 may also be used to control the output ray angle distribution of the emitted light to suit a particular application. For example, if the panel assemblies are used to provide a liquid crystal display backlight, the light output will be more efficient if the deformities 21 cause the light rays to emit from the panels at predetermined ray angles such that they will pass through the liquid crystal display with low loss.

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Additionally, the pattern of light extracting deformities may be used to adjust for light output variances attributed to light extractions of the panel members. The pattern of light extracting deformities 21 may be printed on the light output areas utilizing a wide spectrum of paints, inks, coatings, epoxies, or the like, ranging from glossy to opaque or both, and may employ half-tone separation techniques to vary the deformity 21 coverage. Moreover, the pattern of light extracting deformities 21 may be multiple layers or vary in index of refraction.

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 .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. Examples of methods to create these random patterns are printing a pattern of shapes using stochastic print pattern techniques, frequency modulated half tone patterns, or random dot half tones. Moreover, the deformities may be colored in order to effect color correction in the panel members. The color of the deformities may also vary throughout the panel members, for example to provide different colors for the same or different light output areas.

In addition to or in lieu of the patterns of light extracting deformities 21 shown in Fig. 4a, other light extracting deformities including prismatic surfaces, depressions or raised surfaces of various shapes using more complex shapes in a mold pattern may be molded, etched, stamped, thermoformed, hot stamped or the like into or on one or more areas of the panel member. Figs. 4b and 4c show panel areas 22 on which prismatic surfaces 23 or depressions 24 are formed in the panel areas, whereas Fig. 4d shows prismatic or other reflective or refractive

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surfaces 25 formed on the exterior of the panel area. The prismatic surfaces, depressions or raised surfaces will cause a portion of the light rays contacted thereby to be emitted from the panel member. Also, the angles of the prisms, depressions or other surfaces may be varied to direct the light in different directions to produce a desired light output distribution or effect. Moreover, the reflective or refractive surfaces may have shapes or a pattern with no specific angles to reduce moiré or other interference effects.

As best seen in the cross sectional view of Fig. 5, a back reflector (including trans reflectors) 26 may be attached or positioned against one side of the panel member 14 of Fig. 3 using a suitable adhesive 28 or other method in order to improve light output efficiency of the panel assembly 11 by reflecting the light emitted from that side back through the panel for emission through the opposite side. Additionally, a pattern of light extracting deformities 21, 23, 24 and/or 25 may be provided on one or both sides of the panel member in order to change the path of the light so that the internal critical angle is exceeded and a portion of the light is emitted from one or both sides of the panel. Moreover, 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.

The member 27 may be used to further improve the uniformity of the light output distribution. For example, the member 27 may be a colored film, a diffuser, or a label or display, a portion of which may be a transparent overlay that may be colored and/or have text or an image thereon.

If adhesive 28 is used to adhere the back reflector 26 and/or film 27 to the panel, the adhesive is preferably applied only along the side edges of the panel, and if desired the end edge opposite the light transition areas 12, but not over the entire surface area or areas of the panel because of the difficulty in consistently applying a uniform coating of adhesive to the panel. Also, the adhesive changes the internal critical angle of the light in a less controllable manner than the air gaps 30 (see Fig. 5) which are formed between the respective panel surfaces and the back reflector 26 and/or film 27 when only adhered along the peripheral edges. Additionally, longer panel members are achievable when air gaps 30 are used. If adhesive were to be used over the entire surface, the pattern of

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deformities could be adjusted to account for the additional attenuation in the light caused by the adhesive.

Referring further to Fig. 2, the panel assembly 5 shown therein also includes molded posts 31 at one or more corners of the panel 7 (four such posts being shown) which may be used to facilitate mounting of the panel assembly and providing structural support for other parts or components, for example, a display panel such as a liquid crystal display panel as desired.

Fig. 6 shows another form of light emitting panel assembly 32 in accordance with this invention including a panel member 33, one or more light sources 3, and one or more light output areas 34. In addition, the panel assembly 32 includes a tray 35 having a cavity or recess 36 in which the panel assembly 32 is received. The tray 35 may act as a back reflector as well as end edge and/or side edge reflectors for the panel 33 and side and/or back reflectors 37 for the light sources 3. Additionally, one or more secondary reflective or refractive surfaces 38 may be provided on the panel member 33 and/or tray 35 to reflect a portion of the light around one or more corners or curves in a non-rectangular shaped panel member 33. These secondary reflective/refractive surfaces 38 may be flat, angled, faceted or curved, and may be used to extract a portion of the light away from the panel member in a predetermined pattern. Fig. 6 also shows multiple light output areas 34 on the panel member that emit light from one or more light sources 3.

Fig. 7 is a schematic illustration of still another form of light emitting panel assembly 40 in accordance with this invention including a panel member 41 having one or more light output areas 42 and one or more light transition areas (mixing areas) 43 containing a plurality of light sources 3 at one or both ends of the panel. Each transition area mixes the light from one or more light sources having different colors and/or intensities. In this particular embodiment, each of the light sources 3 desirably employs three colored LEDs (red, blue, green) in each transition mixing area 43 so that the light from the three LEDs can be mixed to produce a desired light output color that will be emitted from the light output area 42. Alternatively, each light source may be a single LED having multiple colored chips bonded to the lead film. Also, two colored LEDs or a single LED having two colored chips may be used for a particular application. By varying the

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intensities of the individual respective LEDs, virtually any colored light output or white light distribution can be achieved.

Fig. 8 shows yet another form of light emitting panel assembly 45 in accordance with this invention including a light emitting panel member 46 and a light source 3 in a light transition area 48 integral with one end of the panel member. In this particular embodiment, the panel member 46 is three-dimensionally curved, for example, such that light rays may be emitted in a manner that facilitates aesthetic design of a lighted display.

Fig. 9 schematically shows another form of light emitting panel assembly 50 in accordance with this invention, including a panel member 51 having multiple light output areas 52, and mounting posts and/or mounting tabs 53. This particular panel assembly 50 may serve as a structural member to support other parts or components as by providing holes or cavities 54, 55 in the panel member 51 which allow for the insertion of modular components or other parts into the panel member. Moreover, a separate cavity or recess 56 may be provided in the panel member 51 for receipt of a correspondingly shaped light transition area 57 having one or more light sources 3 embedded, bonded, cast, insert molded, epoxied, or otherwise mounted or positioned therein and a curved reflective or refractive surface 58 on the transition area 57 and/or wall of the cavity or recess 56 to redirect a portion of the light in a predetermined manner. In this way the light transition area 57 and/or panel member may be in the form of a separate insert which facilitates the easy placement of the light source in a modular manner. A reflector 58 may be placed on the reflective or refractive surface of the cavity or recess 56 or insert 57. Where the reflector 58 is placed on the reflective or refractive surface of the cavity or recess 56, the cavity or recess may act as a mold permitting transparent material from which the transition area 57 is made to be cast around one or more light sources 3.

Figs. 10 and 11 schematically show another form of light emitting panel assembly 60 in accordance with this invention including a panel member 61 having one or more light output areas 62. In this particular embodiment, an off-axis light transition area 63 is provided that is thicker in cross section than the panel member to permit use of one or more light sources 3 embedded or otherwise mounted in the light transition area that are dimensionally thicker than

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the panel member. Also, a three-dimensional reflective surface 64 (Fig. 11) may be provided on the transition area 63. Moreover, a prism 65 (Fig. 11) or tapered, rounded, or otherwise shaped end 66 (Fig. 11a) may be provided at the end of the panel opposite the light sources 3 to perform the function of an end reflector. 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.

Figs. 12 and 13 schematically show still another form of light emitting panel assembly 70 in accordance with this invention which includes one or more light transition areas 71 at one or both ends of the panel member 72 each containing a single light source 73. The transition area or areas 71 shown in Figs. 12 and 13 collect light with multiple or three-dimensional surfaces and/or collect light in more than one plane. For example each transition area 71 shown in Figs. 12 and 13 has elliptical and parabolic shape surfaces 74 and 75 in different planes for directing the light rays 76 into the panel member at a desired angle.

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.

Fig. 14 schematically illustrates still another form of light emitting panel assembly 80 in accordance with this invention including a light emitting panel 81 and one or more light sources 3 positioned, embedded, potted, bonded or otherwise mounted in a light transition area 82 that is at an angle relative to the panel member 81 to permit more efficient use of space. An angled or curved reflective or refractive surface 83 is provided at the junction of the panel member 81 with the transition area 82 in order to reflect/refract light from the light source 3 into the body of the panel member 81 for emission of light from one or more light emitting areas 84 along the length of the panel member.

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Fig. 15 schematically illustrates still another form of light emitting panel assembly 90 in accordance with this invention including a light transition area 91 at one or both ends of a light emitting panel member 92 containing a slot 93 for sliding receipt of an LED or other suitable light source 3. Preferably the slot 93 extends into the transition area 91 from the back edge 94, whereby the light source 3 may be slid and/or snapped in place in the slot from the back, thus allowing the transition area to be made shorter and/or thinner. The light source 3 may be provided with wings, tabs or other surfaces 95 for engagement in correspondingly shaped recesses or grooves 96 or the like in the transition area 91 for locating and, if desired, securing the light source in place. Also, the light source 3 may be embedded, potted, bonded or otherwise secured within the slot 93 in the light transition area 91 of the panel member 92. Light from a secondary light source 97 may be projected through the panel member 92 for indication or some other effect.

The various light emitting panel assemblies disclosed herein may be used for a great many different applications including for example LCD back lighting or lighting in general, decorative and display lighting, automotive lighting, dental lighting, phototherapy or other medical lighting, membrane switch lighting, and sporting goods and apparel lighting or the like. Also the panel assemblies may be made such that the panel members and deformities are transparent without a back reflector. This allows the panel assemblies to be used for example to front light an LCD or other display such that the display is viewed through the transparent panel members.

Although the invention has been shown and described with respect to certain preferred embodiments, it is obvious that equivalent alterations and modifications will occur to others skilled in the art upon the reading and understanding of the specification. The present invention includes all such equivalent alterations and modifications, and is limited only by the scope of the claims.

WHAT IS CLAIMED IS:

1. A light emitting panel assembly comprising at least a light emitting panel member having a light entrance surface and a light emitting surface, at least one LED light source positioned near or against the light entrance surface, and a tray or housing having a cavity or recess in which the panel member is 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, and the tray or housing acts as an end edge reflector and/or side edge reflector for the panel member to reflect light that would otherwise exit the panel member through an end edge and/or side edge back into the panel member and toward the pattern of light extracting deformities for causing additional light to be emitted from the light emitting surface of the panel member.

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- 2. The assembly of claim 1 wherein the tray or housing has posts, tabs or other structural features.
- The assembly of claim 2 wherein the posts or other structural
 features are used to facilitate mounting of the assembly into a larger assembly or device.
 - 4. The assembly of claim 2 wherein the posts or other structural features are used for mounting or providing structural support for at least one other part or component.
 - 5. The assembly of claim 4 wherein the other part or component is a liquid crystal display.

- 6. The assembly of claim 4 wherein the other part or component is a printed circuit.
 - 7. The assembly of claim 6 wherein the printed circuit is flexible.

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- 8. The assembly of claim 1 wherein the tray or housing also acts as a back reflector for the panel member.
- 9. The assembly of claim 1 wherein the tray or housing provides10 support for and/or positions a film near the panel member.
 - 10. The assembly of claim 9 wherein the film is a back reflector.
 - 11. The assembly of claim 9 wherein the film is a diffuser.

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- 12. The assembly of claim 9 wherein the film is a brightness enhancing film.
- 13. The assembly of claim 1 further comprising a film positioned near20 the light emitting surface of the panel member for changing the output ray angle distribution of the emitted light to fit a particular application.
 - 14. The assembly of claim 13 wherein the film has prismatic or lenticular deformities on at least one side of the film.

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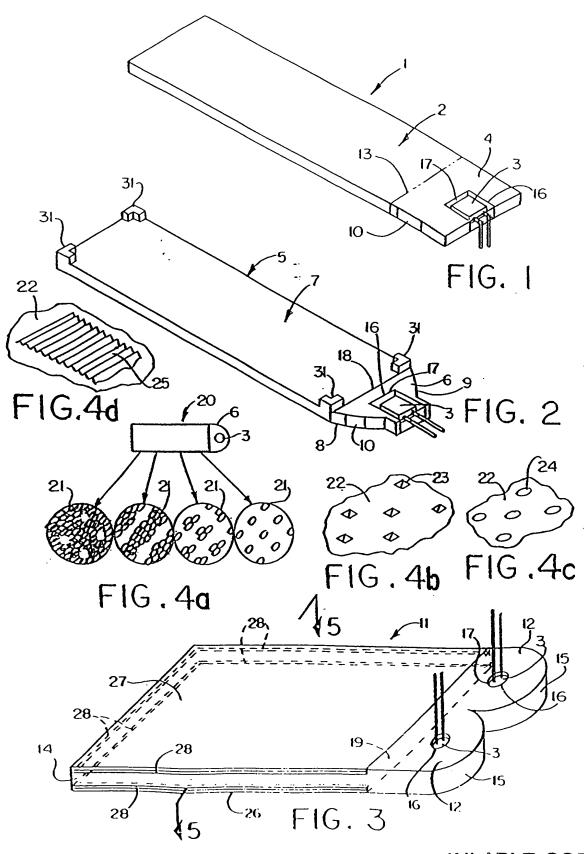
15. The assembly of claim 1 wherein the light entrance surface is faceted to alter the light output distribution of the LED as the light enters the panel member.

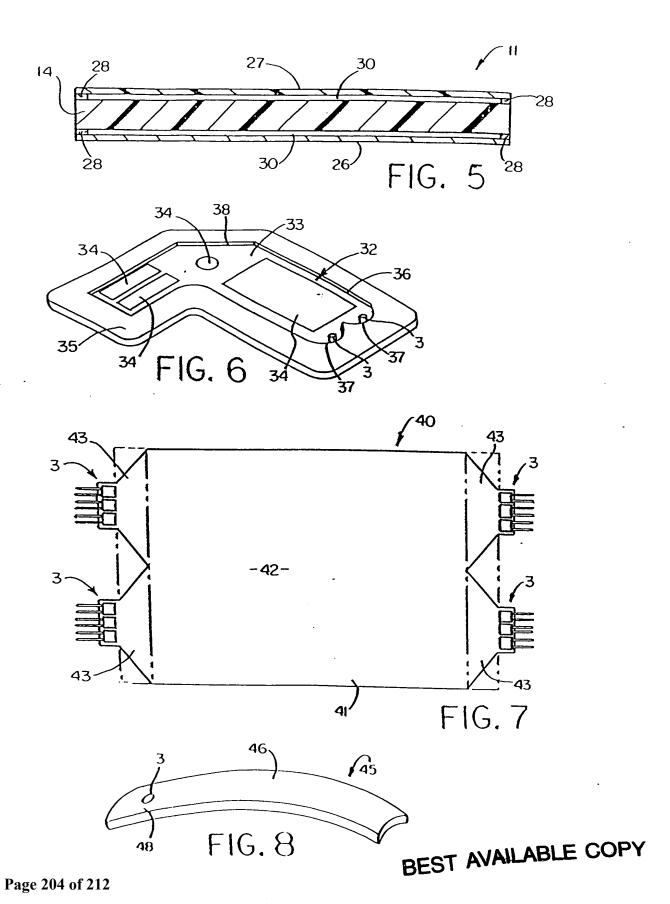
ABSTRACT

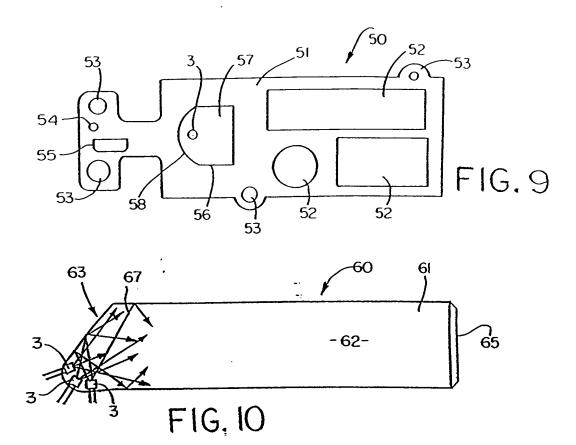
Light emitting panel assembly includes a light emitting panel member received in a cavity or recess in a tray or housing. The panel member has a pattern of light extracting deformities on or in at least one surface of the panel member to cause light received from at least one LED light source positioned near or against the light entrance surface of the panel member to be emitted from a light emitting surface of the panel member. The tray or housing acts as an end edge and/or side edge reflector for the panel member to reflect light that would otherwise exit the panel member through the end edge and/or side edge back into the panel member for causing additional light to be emitted from the panel member.

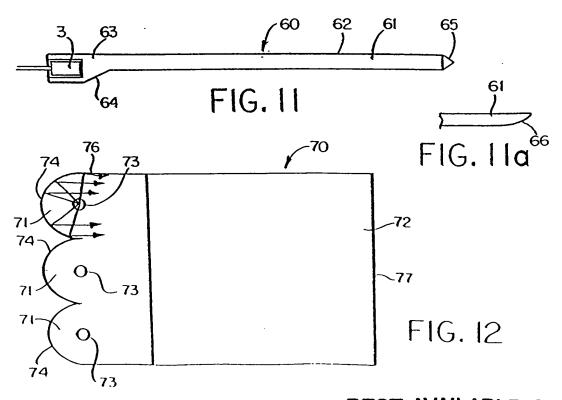
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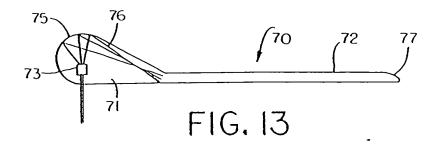


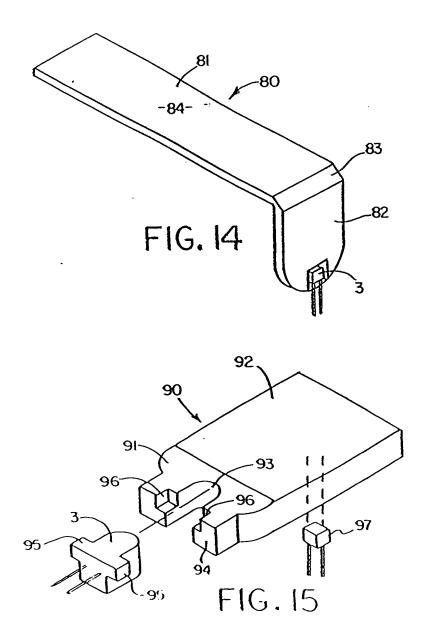






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COMBINED DECLARATION AND POWER OF ATTORNEY

(ORIGINAL, DESIGN, NATIONAL STAGE OF PCT)

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

Title: LIGHT EMITTING PANEL ASSEMBLIES

the specification of which

[X] is attached hereto, or

[] was filed as United States Application or PCT International Application (give Express Mail label number and deposit date if Application number not yet known):

Application No.:
(Express Mail Label No.)
Filing Date:
(Deposit Date)
Amended on (if applicable):

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the patentability as defined in Title 37, Code of Federal Regulations § 1.56(a).

CLAIM FOR BENEFIT OF EARLIER U.S./PCT APPLICATION(S) UNDER 35 U.S.C. 120 AND/OR 35 U.S.C. 365(c)

I hereby claim the benefit under 35 U.S.C. 120 and/or 35 U.S.C. 365(c) of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of 35 USC 112, I acknowledge the duty to disclose material information as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

| Application No. | Filing Date | Patent Number | |
|-----------------|-------------|---------------|--|
| 10/784,527 | 2/23/04 | | |
| 09/256,275 | 2/23/99 | 6,712,481 | |
| 08/778,089 | 1/02/97 | 6,079,838 | |
| 08/495,176 | 6/27/95 | 5,613,751 | |

CLAIM FOR BENEFIT OF EARLIER U.S. PROVISIONAL APPLICATION(S) UNDER 35 U.S.C. 119(e)

I hereby claim the benefit under 35 USC 119(e) of any United States provisional application(s) that is/are listed below

| Application No. | Filing Date |
|-----------------|-------------|
| | |

POWER OF ATTORNEY

As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (List name and registration number)

| Name | Registration No. | Name | Registration No. |
|----------------|------------------|------|------------------|
| Donald L. Otto | 22,125 | | |

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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

| Full Name of Sole | or First In | ventor: Jeffery R. Parker | | |
|-------------------------|--------------|----------------------------|--------------|--------|
| Inventor's signature: | 1 | 1 K Pal | Date: | 3/2/06 |
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| Post Office Address: | | retail Court Ohio 44286 | | |

| Full Name of Additional Joint Inventor (if any): | | | | |
|--|--------------|--|--|--|
| Inventor's signature: | Date: | | | |
| Residence: (City & State/Country): | Citizenship: | | | |
| Post Office Address: | | | | |

End of Declaration and Power of Attorney (D-US-1.FRM)

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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE FEE RECORD SHEET

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*U.8 Government Privato Office: 2002 -- 486-267/8803:

U.S. Patent and Tradement Office; U.S. DEPARTMENT OF CONTMERCE

Under the Processing Reduction Act of 1895, no persons on required to respond to a defending of balanceitan unless it displays a valid OMB combal number PATENT APPLICATION FEE DETERMINATION RECORD Application or Ductica Municipal Effective December 8, 2004 Subclitude for Form PTO-675 APPLICATION AS FILED - PART I OTHER THAM OR SMALL ENTITY SMALL ENTITY (Cohumn 1) (Column 2) NUMBER FILEO NUMBER EXTRA RATE (8) RATE (8) FEE (3) FEE (S) 300.00 150.00 NA BASIC FEE NIA NA NA (37 CFR 1.16(a), (b), a (c)) \$250 SSOOSEARCH FEE ŃΑ NVA N/A NVA (37 CFR 1 18(td. (M. or (m)) EXAMINATION FEE \$200 N/A MΔ NVA \$100 NVA (37 CFR 1.16(c). (6). cr (0)) XS50 TOTAL CLADAS XS 25 OR minus 20 = (37 OFR 1,16(1)) -INDEPENDENT CLAIMS KICO X200 0 minus 3 = (37 OFR 1. 16(N)) If the spacification and drawings exceed 100 sheets of paper, the application size fee due APPLICATION SIZE is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See (37 CFR 1.16(c)) 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s) +180= **♦360**□ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(II) TOTAL TOTAL "If the difference in column 1 is less than zero, enter "0" in column 2. APPLICATION AS AMENDED - PART II OTHER THAN OR (Column 3) SMALL ENTITY (Column 2) (Column 1) SMALL ENTITY HIGHEST CLAIMS PRESENT. RATE (\$) ADDI-RATE (\$) ADDI-REMAINING NUMBER 4 **EXTRA** TIONAL TIONAL **AFTER** PREVIOUSLY FEE (\$) FEE (\$) PAID FOR ENDMENT AMENDMENT Total Minus XS 25 X850 OR (37 CFR 1,18()) Independent (37 CFR 1.16(h)) Minus = X200 X100 OR Application Size Fee (37 CFR 1.16(s)) +180= +360= FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.160) OR TOTAL TOTAL OR ADD'L FEE ADD'L FEE (Column 2) (Column 3) (Column 1) HIGHEST CLAIMS PRESENT ADDI-RATE (S) ADDI-REMAINING NUMBER RATE (S) 00 **EXTRA** TIONAL TIONAL **PREVIOUSLY** AFTER FEE (\$) PAID FOR FEE (\$) AWENDMENT. Total Winus X\$ 25 = **XS50** == OR ENDM (37, CFR 1,160) Mims X100 X200 (37 CFR 1.16(b)) OR Application Size Fee (37 CFR 1.16(s)) **+360**= FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.160) +180= OR TOTAL TOTAL. OR ADD'L FEE ADD'L FEE • If the entry in column 1 is less than the entry in column 2, write "0" in column 3. "If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the Trighest Number Previously Paid For IN THIS SPACE is less than 3, enter 3°.

The Toghest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a banefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gallering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on this amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Palent and Tradement Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Application Data Sheet

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Application Information

Title Line One::

LIGHT EMITTING PANEL ASSEMBLIES

Class::

Subclass::

Technology Center::

Total Drawing Sheets::

4

Drawing Figure for Publication::

Figure 6 Yes

Formal Drawings?::

.

Application Type::

Utility

Docket Number::

GLOLP0108USAE

Representative Information

Representative Customer Nº::

23908

Domestic Priority Information

This application is a::

CON

Application One::

10/784,527

Filing Date::

2/23/04

Which is a:: DIV

Application Two:: 09/256,275
Filing Date: 2/23/99
U.S. Pat. No.:: 6,712,481

Which is a:: CIP

 Application Three::
 08/778,089

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 1/2/97

 U.S. Pat. No.::
 6,079,838

Which is a:: DIV

 Application Four:
 08/495,176

 Filing Date:
 6/27/95

 U.S. Pat. No.::
 5,613,751

Foreign Priority Information

Assignee Information

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