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3M INNOVATIVE PROPERTIES COMPANY PO BOX 33427 ST. PAUL, MN 55133-3427			TUMEBO, TSION M	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MARK R. WOLLNER, JACQUELYN A. WEDELL,
JUNKANG J. LIU, REBECCA A. SHIPMAN,
MICHAEL A. MEIS, GORDON D. HENSON,
DEAN J. STYCH, and NICHOLAS A. LEE

Appeal 2019-001362
Application 12/375,299
Technology Center 2800

Before LINDA M. GAUDETTE, AVELYN M. ROSS, and
DEBRA L. DENNETT, *Administrative Patent Judges*.

DENNETT, Administrative Patent Judge.

DECISION ON APPEAL¹

¹ In our Decision, we refer to the Specification (“Spec.”) of Application No. 12/375,299 filed Jan. 27, 2009; the Final Office Action dated Jan. 25, 2018 (“Final Act.”); the Appeal Brief filed June 20, 2018 (“Appeal Br.”); the Examiner’s Answer dated Oct. 4, 2018 (“Ans.”); and the Reply Brief filed Dec. 3, 2018 (“Reply Br.”).

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant² appeals from the Examiner's decision to reject claims 1–6, 8, 10, 11, 13–19, and 34–41 of Application 12/375,299, which constitute all the claims pending in this application. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

The subject matter of the invention relates to illumination devices for the interior or exterior lighting of vehicles and vehicle glazing. Spec. 1:4–5. Claim 1, reproduced below from the Claims Appendix of the Appeal Brief, represents the claimed subject matter:

1. An illumination device for the interior lighting of a vehicle, comprising:
 - a. at least one light source,
 - b. at least one light management device comprising a front light guide having at least one light input face through which light from the source can be supplied to the light guide, a light directing face, and a light output face opposite the light directing face, the light output face having a light extraction layer thereon, the light extraction layer having a light exit face that extracts supplied light from the light guide through the light output face,
 - c. a cover that is illuminated by the light source and is operatively adapted to form a portion of the interior surface of a vehicle, wherein the cover covers the light exit face and transmits light received from the light source, and
 - d. a brightness enhancement film disposed between the light exit face and the cover for redirecting and recycling

² We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as 3M Company and 3M Innovative Properties Company. Appeal Br. 2.

light to increase a brightness of light exiting the illumination device, wherein the illumination device is substantially optically transparent allowing ambient light to pass through.

Appeal Br. 7 (Claims App.).

REFERENCES

The Examiner relies on the following prior art in rejecting the claims on appeal:

Sa	US 2006/0044825 A1	Mar. 2, 2006
Yeo et al. (“Yeo”)	US 2006/0056166 A1	Mar. 16, 2006
Iwauchi et al. (“Iwauchi”)	US 2006/0146573 A1	July 6, 2006
Mueller et al. (“Mueller”)	US 2007/0035958 A1	Feb. 15, 2007
Chen et al. (“Chen”)	US 7,284,886 B2	Oct. 23, 2007

REJECTIONS

The Examiner maintains the following rejections of the claims under 35 U.S.C. § 103(a)³:

- A. Claims 1, 2, 4, 6, 8, 10, 11, 13, 16–18, 34, and 35 over Chen in view of Yeo.
- B. Claims 3, 19, and 36–41 over Chen in view of Yeo and further in view of Sa.
- C. Claim 5 over Chen in view of Yeo and further in view of Mueller.
- D. Claims 14 and 15 over Chen in view of Yeo and further in view of Iwauchi.

Final Act. 2–13.

³ Because this application was filed before the March 16, 2013, effective date of the America Invents Act, we refer to the pre-AIA version of the statute.

OPINION

We review the appealed rejections for error based upon the issues identified by Appellant and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential), (cited with approval in *In re Jung*, 637 F.3d 1356, 1365 (Fed. Cir. 2011)) (“[I]t has long been the Board’s practice to require an applicant to identify the alleged error in the examiner’s rejections.”). After considering the evidence presented in this Appeal and each of Appellant’s arguments, we are not persuaded that Appellant identifies reversible error in the rejections of claims 1–6, 8, 10, 11, 13–19, and 34–41.

The Examiner rejects all of the pending claims over at least the combination of Chen and Yeo. *See* Final Act. 2–13. Appellant argues that independent claims 1 and 17 are patentable over Chen and Yeo, and makes no additional substantive arguments for patentability of the dependent claims. *See* Appeal Br. 4–5. Thus, Appellant argues the claims as a group. Accordingly, we decide each ground of rejection on the basis of the arguments made in support of patentability of claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Regarding claim 1, the Examiner finds that Chen teaches the claim limitations except for (1) a light extraction layer on a light output face, the light extraction layer having a light exit face that extracts supplied light from the light guide through the light output face, and (2) a brightness enhancement film (“BEF”) disposed between the light exit face and the cover for redirecting and recycling light to increase a brightness of light exiting the illumination device, wherein the illumination device is

substantially optically transparent allowing ambient light to pass through.
Final Act. 2–3.

The Examiner finds that Yeo teaches the claim limitations that Chen does not teach. *Id.* at 3; Ans. 3–4. The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified Chen’s light output face to include a light extraction layer such as Yeo’s diffuser to increase optical efficiency and brightness by reducing the appearance of speckle from the rear surface of the light guide. Ans. 4. The Examiner determines that it would have been obvious to have further modified Chen’s illumination device to include a BEF (Yeo’s collimating film) disposed between the light exit face and cover to direct more light toward the interior side of Chen’s moonroof, preventing light from scattering and increasing optical efficiency and brightness of the illumination device. *Id.* The Examiner finds that Yeo’s light extraction layer and BEF are light transparent elements, and, therefore, would not affect transparency in Chen’s modified moonroof, and would allow ambient light to pass through.

Appellant argues that Yeo discloses prismatic BEF for increasing brightness, and “it is commonly known and therefore, one of ordinary skill in the art would have known, that BEF increases brightness by virtue of recycling light (see, e.g., paragraph [0131], where recycling of light requires the presence of a reflector as shown in FIG. 18.” Appeal Br. 4. Appellant contends that “it is also commonly known that absent a reflector, BEF would significantly reduce brightness.” *Id.* According to Appellant, it would not have been obvious to modify Chen’s moonroof with Yeo’s BEF. *Id.* at 4. If Yeo’s reflector was not included in the modification, Appellant argues that

the moonroof would have significantly reduced brightness. *Id.* at 4–5. On the other hand, if Yeo’s reflector was included in the modification, Appellant argues that the moonroof would have been rendered non-transparent, which is inconsistent with the requirement in claim 1 (and independent claims 17) that the illumination device is substantially optically transparent. *Id.* at 5.

In the Answer, the Examiner explains that the proposed modification includes Yeo’s BEF, but not Yeo’s reflector. Ans. 15. The Examiner finds that Chen’s moonroof includes a reflective surface for recycling light. *Id.* (citing Chen Fig. 3, col. 5, ll. 16–28).

Appellant contends that the Examiner fails to make a prima facie showing of obviousness because Yeo’s reflector is omitted from the combination. Reply Br. 2. Under such circumstances, according to Appellant, the modified illumination device does not provide light recycling and cannot result in “recycling light to increase a brightness,” as required by claim 1. *Id.*

We disagree.

Chen explains that “light introduced by means of the light source . . . into the moonroof . . . substantially undergoes a total reflection at the surface [] turned toward the exterior side of the motor vehicle.” Chen col. 4, ll. 44–48. Appellant fails to address (and rebut) the Examiner’s finding that Chen’s reflective surface recycles light. *See* Ans. 15; *see also* Reply Br. *generally*. Moreover, Appellant’s assertions regarding the common knowledge of one of ordinary skill in the art that the combined references would either have significantly reduced brightness (absent Yeo’s reflector) or would not be transparent (by including Yeo’s reflector) are unsupported

attorney argument. *Estee Lauder Inc. v. L’Oreal, S.A.*, 129 F.3d 588, 595 (Fed. Cir. 1997) (“Counsel’s argument cannot take the place of evidence lacking in the record.”).

On these bases, we are unpersuaded by Appellant’s arguments for reversible error. We sustain the rejection of claim 1. For the same reasons, we likewise sustain the rejections of claims 2, 4, 6, 8, 10, 11, 13, 16–18, 34, and 35.

CONCLUSION

We affirm the Examiner’s rejections. More specifically, we affirm the rejection of (1) claims 1, 2, 4, 6, 8, 10, 11, 13, 16–18, 34, and 35 over Chen in view of Yeo; (2) claims 3, 19, and 36–41 over Chen in view of Yeo and further in view of Sa; (3) claim 5 over Chen in view of Yeo and further in view of Mueller; and (4) claims 14 and 15 over Chen in view of Yeo and further in view of Iwauchi.

DECISION SUMMARY

Claims Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1, 2, 4, 6, 8, 10, 11, 13, 16–18, 34, 35	§ 103(a)	Chen, Yeo	1, 2, 4, 6, 8, 10, 11, 13, 16–18, 34, 35	
3, 19, 36–41	§ 103(a)	Chen, Yeo, Sa	3, 19, 36–41	
5	§ 103(a)	Chen, Yeo, Mueller	5	
14, 15	§ 103(a)	Chen, Yeo, Iwauchi	14, 15	
Overall Outcome			1–6, 8, 10, 11, 13–19, 34–41	

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TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED