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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DANIEL M. GALEL

Appeal 2019-000713
Application 14/052,389
Technology Center 2800

Before ROMULO H. DELMENDO, N. WHITNEY WILSON, and MERRELL C. CASHION, JR., *Administrative Patent Judges*.

WILSON, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellant[1] appeals under 35 U.S.C. § 134(a) from the Examiner's December 14, 2017 decision rejecting claims 1, 3–7, 9, 11, 12, 14, 16, 17, and 19–27 ("Non-Final Act."). We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We affirm-in-part.

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[1] We use the word "Appellant" to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies Microsoft Technology Licensing, LLC, as the real party in interest (Appeal Br. 3).

CLAIMED SUBJECT MATTER

Appellant's disclosure relates to a lens barrel assembly which includes one or more lens elements and a lens barrel configured to retain the lens elements (Abstract). The lens barrel includes a connection portion configured to provide a physical coupling to a camera module and an interface geometry having a complementary shape of an aperture of an external enclosure of a mobile computing device sufficient to align the lens barrel and the one or more lens elements in relation to the external housing (*id*.). Details are set forth in independent claims 1, 9, and 14, which are reproduced below from the Claims Appendix to the Appeal Brief:

1. An assembly comprising:

one or more lens elements; and

a lens barrel configured to retain the one or more lens elements, the lens barrel including:

a connection portion configured to provide a physical coupling to a camera module; and

an interface geometry comprising a protrusion extending out of an end surface of the lens barrel opposite the camera module and configured to extend into an aperture of an enclosure of a housing of a computing device, the protrusion having a complementary shape of the aperture of the enclosure effective to align and secure the lens barrel and the one or more lens elements in relation to the enclosure of the housing of the computing device.

9. A camera system comprising:

a camera module including a housing and one or more sensors configured to capture images; and

a lens barrel assembly attached to the housing of the camera module having an interface geometry comprising a

protrusion extending out of an end surface of the lens barrel opposite the camera module and configured to extend into an aperture of an enclosure of the housing, the protrusion effective to align and secure the lens barrel assembly and the camera module in relation to the enclosure of the housing.

14. An apparatus comprising:

a housing comprising an external enclosure having an aperture formed therein;

a camera system disposed within the external enclosure, the camera system including a camera module having one or more sensors configured to capture images and a lens barrel assembly having an interface geometry comprising a protrusion extending out of an end surface of the lens barrel assembly opposite the camera module and configured to extend into the aperture of the enclosure, the protrusion configured to align a field of view of the one or more sensors with the aperture and secure the lens barrel assembly to the aperture.

REJECTIONS

1. Claims 9, 11, 12, 14, 16, 17, 19, 20, 22, 23, 25, and 26 are rejected under 35 U.S.C. § 102(a)(1) as anticipated by Han.[2]

2. Claims 1, 3, 4, 9, 11, 12, 14, 16, 17, and 19–23 are rejected under 35 U.S.C. § 102(a)(1) as anticipated by Ouyang.[3]

3. Claims 1, 3–5, 21, 24, and 27 are rejected under 35 U.S.C. § 103 as unpatentable over Han in view of Webster.[4]

[2] Han, WO 2012/060542 A1, published May 10, 2012.
[3] Ouyang, US 2010/0157141 A1, published June 24, 2010.
[4] Webster, US 2007/0057150 A1, published March 15, 2007.

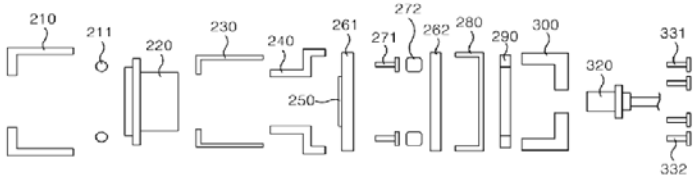
4. Claim 6 is rejected under 35 U.S.C. § 103 as unpatentable over Ouyang in view of Xu.[5]

5. Claim 7 is rejected under 35 U.S.C. § 103 as unpatentable over Han in view of Tecu.[6]

DISCUSSION

Rejection 1–Claims 9, 11, 12, 14, 16, 17, 19, 20, 22, 23, 25, and 26 as anticipated by Han. "A prior art reference anticipates a patent claim under 35 U.S.C. § 102(b) if it discloses every claim limitation." *In re Montgomery*, 677 F.3d 1375, 1379 (Fed. Cir. 2012) (citing *Verizon Servs. Corp. v. Cox Fibernet Va., Inc.*, 602 F.3d 1325, 1336–37 (Fed. Cir. 2010)). In this instance, with regard to claim 9, Appellant contends that Han does not disclose an "interface geometry comprising a protrusion extending out of an end surface of the lens barrel opposite the camera module and configured to extend into an aperture of an enclosure of the housing." (Appeal Br. 15). The Examiner finds that this limitation is met by Han's item 210 in combination with item 220, as shown in Han's FIG. 5:

[Fig. 5]



Han's FIG. 5 is a schematic exploded perspective view illustrating parts of a camera according to Han's invention.

[5] Xu, US 2010/0134678 A1, published June 3, 2010.
[6] Tecu, US 2012/0075520 A1, published March 29, 2012.

In particular, the Examiner finds that Han's lens unit 220 is a lens barrel because it is configured to retain one or more lens elements and front cover 210 "is configured as an enclosure of a housing for the entire digital camera system," not simply a cover for the lens unit 220 (Ans. 5, citing Han ¶¶ 108–110). However, Han explicitly describes cover 210 as "a front cover" (Han, ¶¶ 108, 110, 112). Thus, the evidence of record does not support the Examiner's finding that cover 210 is configured as an enclosure of a housing for the entire digital camera system." Moreover, as explained by Appellant (Appeal Br. 17), claim 9 requires that the protrusion extends "into an aperture of an enclosure of the housing." In Han, the protrusion relied upon by the Examiner (lens unit 220) protrudes into the lens cover 210, which is not reasonably understood to be an enclosure of a housing.

Accordingly, we determine that Appellant has shown reversible error in the Examiner's finding that claim 9 is anticipated by Han and reverse that rejection. Similarly, the anticipation rejections of claims 11, 12, 22, and 25, each of which depend from claim 9, are reversed for the same reasons.

Claim 14 also recites "a protrusion extending out of an end surface of the lens barrel assembly opposite the camera module and configured to extend into the aperture of the enclosure…" The anticipation rejection is deficient for essentially the same reasons as was the anticipation rejection of claim 9, namely that Han's system does not disclose an aperture of an enclosure. Accordingly, we reverse the anticipation rejection of claim 14, as well as dependent claims 16, 17, 19, 20, 23, and 26.

Rejection 2–Claims 1, 3, 4, 9, 11, 12, 14, 16, 17, and 19–23 as anticipated by Ouyang. With respect to claim 1, Appellant argues that this rejection should be reversed because Ouyang does not disclose "an interface geometry comprising a protrusion extending out of an end surface of the lens opposite the camera module and configured to extend into an aperture of an enclosure of a housing of a computing device" (Appeal Br. 22). The Examiner finds that Ouyang discloses:

> an interface geometry (item 40) comprising a protrusion (item 44) extending out of an end surface of the lens barrel opposite the camera module and configured to extend into an aperture (item 14) of an enclosure of a computing device, the protrusion having a complementary shape of the aperture of the enclosure, effective to align and secure the lens barrel and the one or more lens elements in relation to the enclosure of the housing of the computing device (para. 18)…

(Non-Final Act. 6–7). The Examiner refers to the structure shown in Ouyang's FIG. 2:

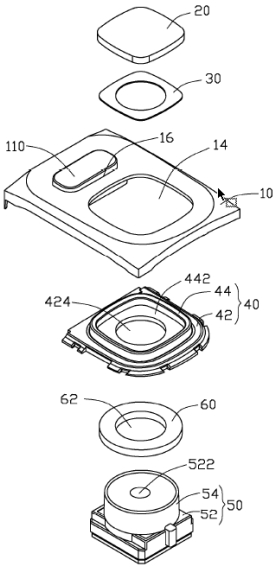


FIG. 2

Ouyang's FIG. 2 shows FIG. 2 is an exploded view of an electronic device as disclosed therein.

The element of Ouyang's device which corresponds to the claimed lens barrel is lens barrel 54. Thus, according to Appellant, protrusion 44 cannot be said to extend out of an end surface of lens barrel 54 (Appeal Br. 24). However, the Examiner finds that when Ouyang's device is assembled and not shown in an exploded view, the lens barrel 54 is secured to the base seat 40, forming an integral piece comprising protrusion 44 extending out of an end surface of the lens barrel opposite the camera module (Ans. 6–7, citing Ouyang, ¶ 17). In response, Appellant argues that the claim language – "a protrusion ***extending*** out of an end surface ***of*** the lens barrel" – limits the invention to a protrusion extending out of the lens barrel, and would not include a protrusion that is attached, mounted, or otherwise not extending out of the lens barrel (Reply Br. 9[7]). But, Appellant has not explained why the claim language requires an integral connection between the protrusion and the lens barrel. Nor does the Specification explicitly say that the two items need be integral with each other and the Figures show two distinct items, which suggests that they are not integral (*see, e.g.* items 112 and 114 in FIG. 3).

It is well established that "the PTO must give claims their broadest reasonable construction consistent with the specification . . . Therefore, we look to the specification to see if it provides a definition for claim terms, but otherwise apply a broad interpretation." *In re ICON Health & Fitness, Inc.*, 496 F.3d 1374, 1379 (Fed. Cir. 2007). "[A]s applicants may amend claims to narrow their scope, a broad construction during prosecution creates no unfairness to the applicant or patentee." *Id.* In this instance, nothing in the

[7] Appellant did not number the pages of its Reply Brief. The page numbers cited in this Decision are sequential, with the first page being Page 1.

Specification or elsewhere requires or even suggests that the protrusion and the lens barrel be integral.

Accordingly, we determine that Appellant has not demonstrated reversible error in the anticipation rejection of claim 1, which we therefore sustain. Appellant groups claims 3, 4, and 21 with claim 1 and, therefore, we also sustain the rejection of those claims.[8]

Appellant makes the same arguments with respect to the anticipation rejection of independent claims 9 and 14 over Ouyang, as well as the claims which depend from them. These arguments are similarly unpersuasive, and we sustain those rejections.

Rejection 3–Claims 1, 3–5, 21, 24, and 27 as unpatentable over Han in view of Webster. This rejection relies on the same findings as supported the anticipation rejection over Han (Non-Final Act. 10–11). Appellant makes the same arguments as were proffered in opposition to the anticipation rejection over Han. These arguments are persuasive for the reasons outlined above in connection with Rejection 1. The Examiner's reliance on Webster does not cure this deficiency and we therefore reverse this rejection.

[8] Appellant states that claims 2, 4, and 21 are "also allowable for their own recited features which, in combination with those recited in claim 1, are not disclosed by Ouyang" (Appeal Br. 25). However, Appellant provides not explanation of the differences between those claims and the disclosure of Ouyang. Such a naked assertion of patentability is insufficient to show reversible error in the rejection.

CONCLUSION

In summary:

Claims Rejected	Basis	Affirmed	Reversed
9, 11, 12, 14, 16, 17, 19, 20, 22, 23, 25, and 26	§ 102(a)(1) Han		9, 11, 12, 14, 16, 17, 19, 20, 22, 23, 25, and 26
1, 3, 4, 9, 11, 12, 14, 16, 17, and 19–23	§ 102(a)(1) Ouyang	1, 3, 4, 9, 11, 12, 14, 16, 17, and 19–23	
1, 3–5, 21, 24, and 27	§ 103 Han and Webster		1, 3–5, 21, 24, and 27
6	§ 103 Ouyang and Xu	6	
7	§ 103 Han and Tecu	7	
Overall Outcome		1, 3, 4, 6, 7, 9, 11, 12, 14, 16, 17, and 19–23	5, 24, 25, 26, and 27

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

AFFIRMED-IN-PART