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Lai et al.

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(54) **OPTICAL IMAGE CAPTURING SYSTEM**

(71) Applicant: **ABILITY OPTO-ELECTRONICS TECHNOLOGY CO.LTD.**, Taichung (TW)

(72) Inventors: **Chien-Hsun Lai**, Taichung (TW);
Nai-Yuan Tang, Taichung (TW);
Yeong-Ming Chang, Taichung (TW)

(73) Assignee: **ABILITY OPTO-ELECTRONICS TECHNOLOGY CO. LTD.**, Taichung (TW)

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(51) **Int. Cl.**

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G02B 9/34 (2006.01)
G02B 7/04 (2006.01)
G02B 27/64 (2006.01)
G02B 27/00 (2006.01)
G02B 5/20 (2006.01)

(52) **U.S. Cl.**

CPC **G02B 13/004** (2013.01); **G02B 7/04** (2013.01); **G02B 9/34** (2013.01); **G02B 27/0025** (2013.01); **G02B 27/646** (2013.01); **G02B 5/20** (2013.01)

(58) **Field of Classification Search**

CPC G02B 13/004; G02B 7/04; G02B 9/34;
G02B 27/0025; G02B 27/646; G02B 5/20
USPC 359/715
See application file for complete search history.

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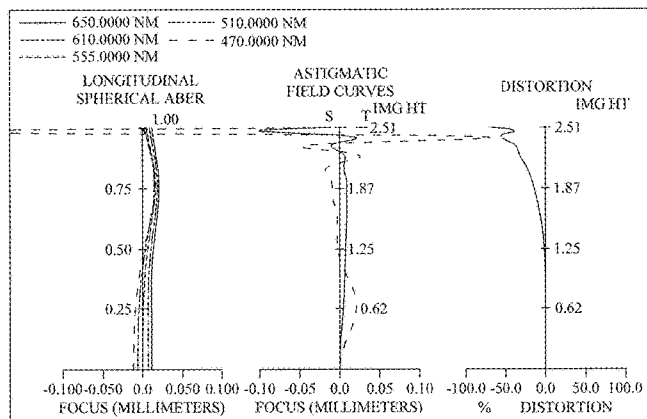
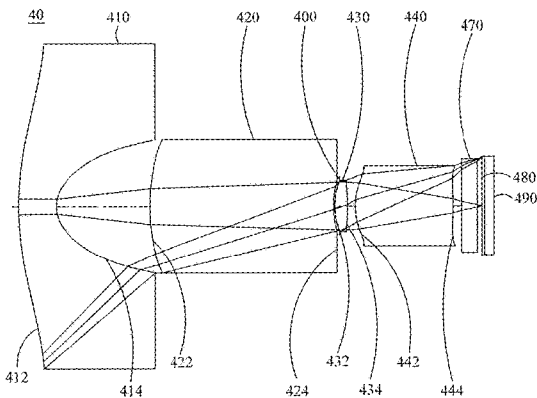
Primary Examiner — Wen Huang

(74) *Attorney, Agent, or Firm* — Muncy, Geissler, Olds & Lowe, P.C.

(57) **ABSTRACT**

A four-piece optical lens for capturing image and a five-piece optical module for capturing image are provided. In the order from an object side to an image side, the optical lens along the optical axis includes a first lens with positive refractive power; a second lens with refractive power; a third lens with refractive power; and a fourth lens with refractive power; and at least one of the image-side surface and object-side surface of each of the four lens elements are aspheric. The optical lens can increase aperture value and improve the imagining quality for use in compact cameras.

23 Claims, 18 Drawing Sheets



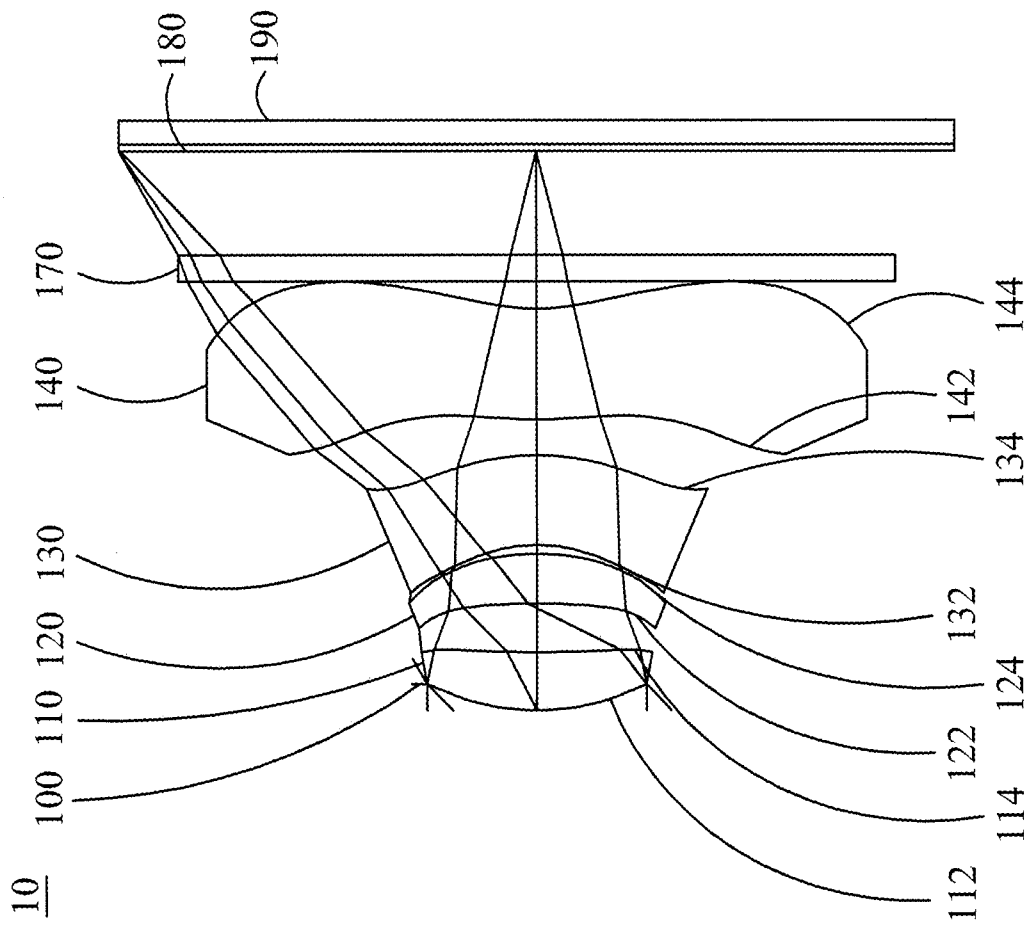


FIG. 1A

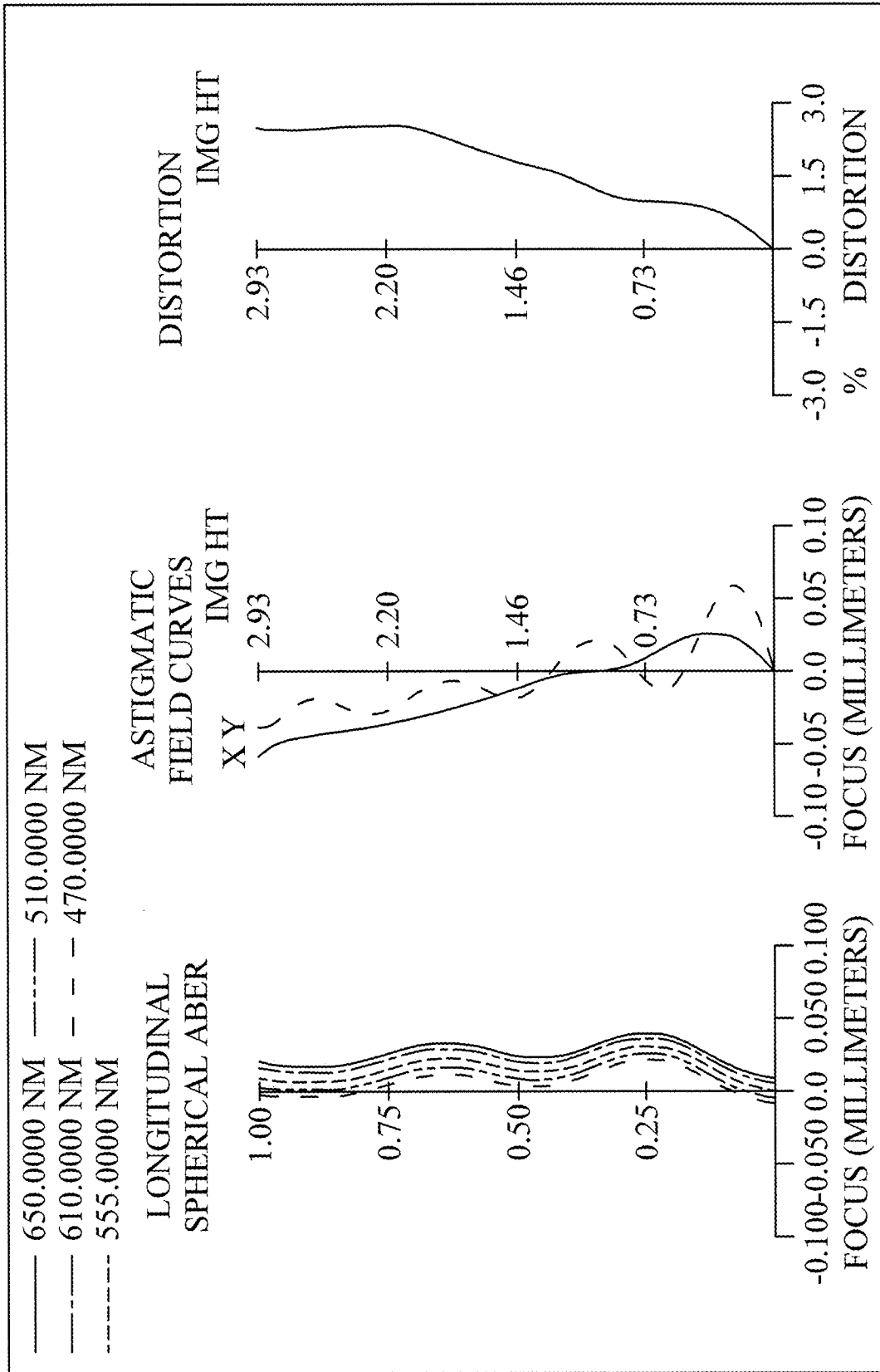


FIG. 1B

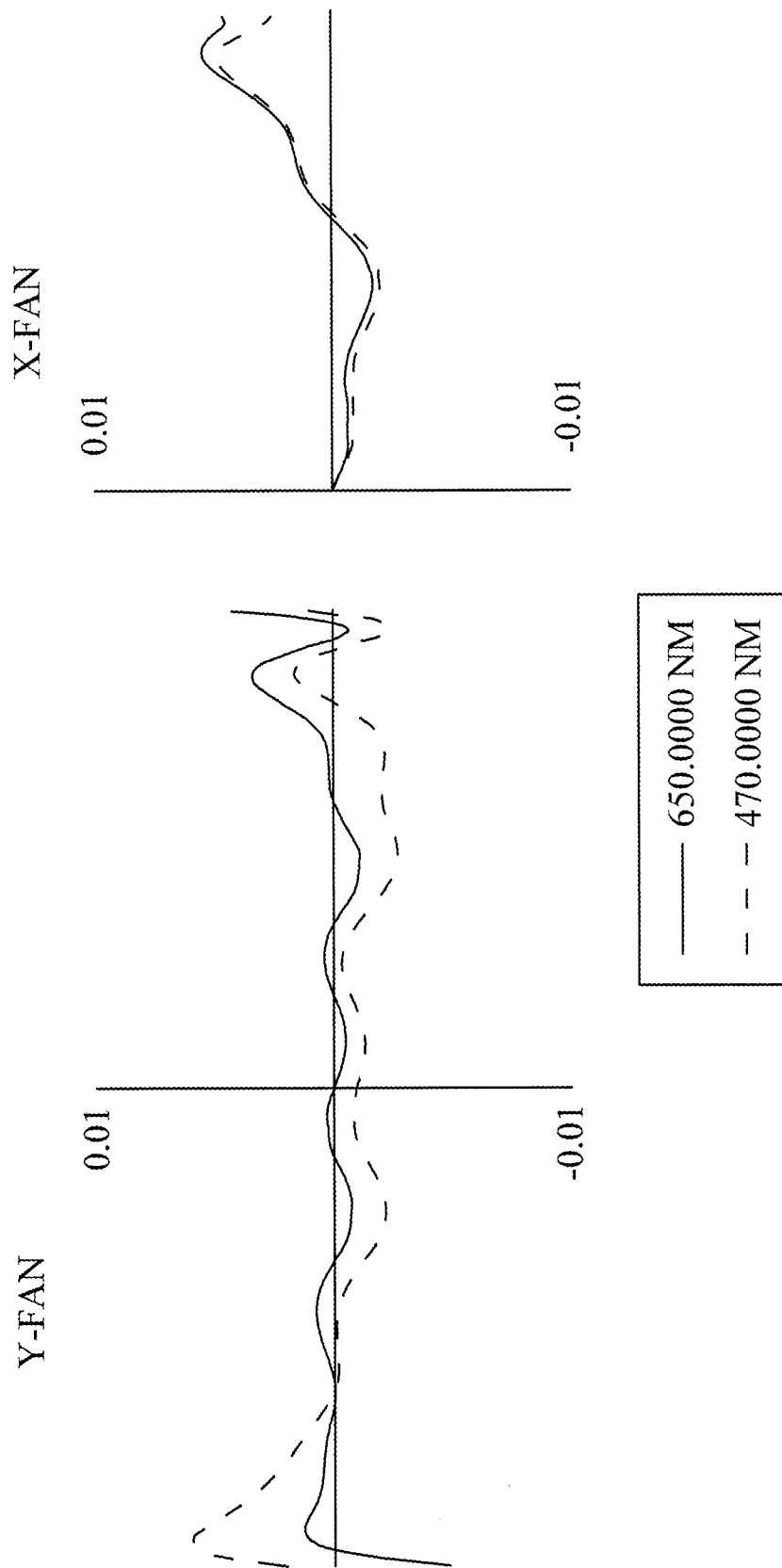


FIG. 1C

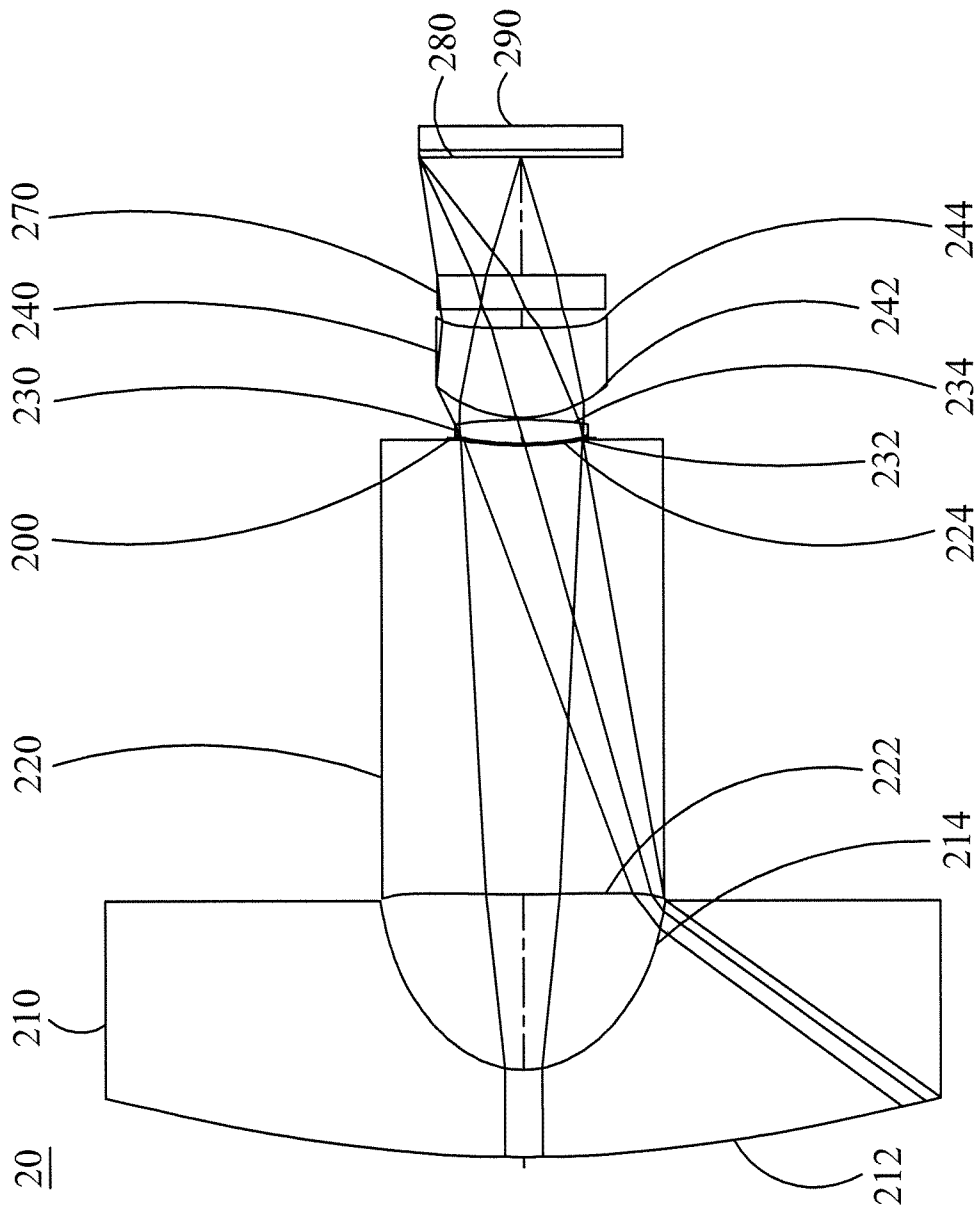


FIG. 2A

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