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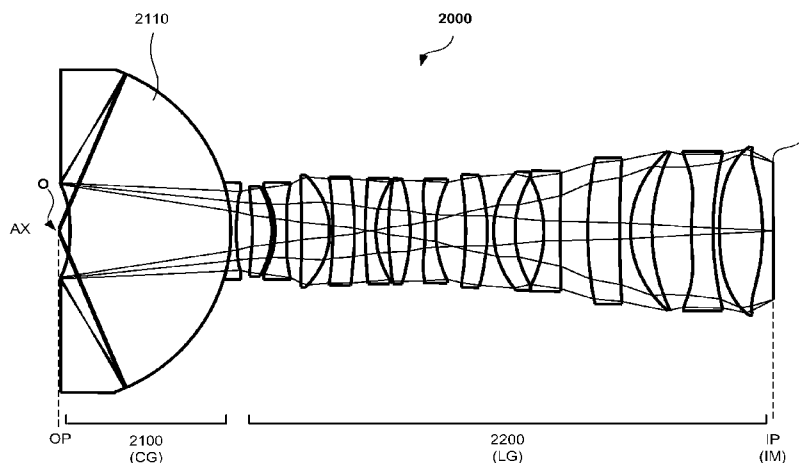
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(54) Title: OPTICAL SYSTEM WITH CATADIOPTRIC OPTICAL SUBSYSTEM

FIG. 3



(57) Abstract: An optical system to form an image on an image plane includes, a catadioptric optical subsystem configured to collect light from an object plane; and a refractive optical subsystem configured to form the image on the image plane, the catadioptric and refractive optical subsystems being arranged in order from the object plane to the image plane along an optical axis of the optical system. A baffle to shut off light traveling toward the image plane without being reflected by the catadioptric optical subsystem is placed in the optical system, in order to form a shielded portion in a center of an exit pupil plane of the optical system, and the catadioptric optical subsystem includes a partially transparent surface around the optical axis of the optical system so that transmissivity of a region, other than the shielded portion, at the exit pupil plane varies in a radial direction of the exit pupil plane.

INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G02B 17/08 (2012.01)

USPC - 359/351

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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USPC - 359/351, 355, 366, 728

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PatBase, Google Patent Search, Google Scholar

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,841,574 A (WILLEY) 24 November 1998 (24.11.1998) entire document	1-11
Y	US 4,907,864 A (HAGERTY et al) 13 March 1990 (13.03.1990) entire document	1-11
Y	US 2009/0086338 A1 (EPPL) 02 April 2009 (02.04.2009) entire document	2, 3, 5
A	US 6,449,103 B1 (CHARLES) 10 September 2002 (10.09.2002) entire document	1-11
A	US 2006/0091324 A1 (MARIE DIERICHS) 04 May 2006 (04.05.2006) entire document	1-11

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