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(54) Title: EYEPIECE FOR NEAR-TO-EYE DISPLAY WITH MULTI-REFLECTORS

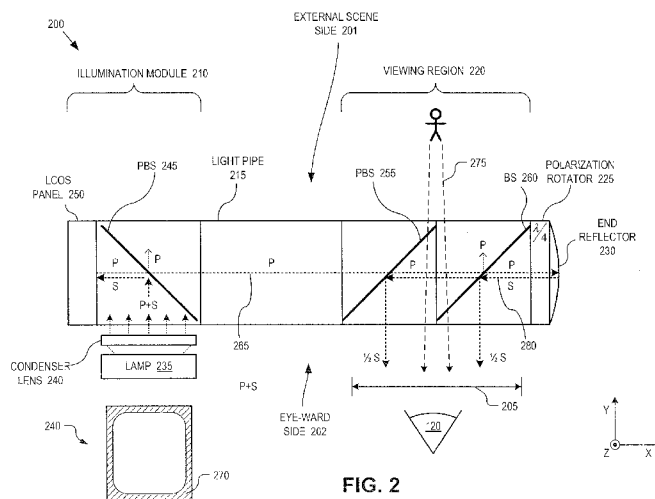


FIG. 2

(57) Abstract: An eyepiece for a head mounted display includes an illumination module, an end reflector, a viewing region, and a polarization rotator. The illumination module includes an image source for launching computer generated image ("CGI") light along a forward propagating path. The end reflector is disposed at an opposite end of the eyepiece from the illumination module to reflect the CGI back along a reverse propagation path. The viewing region is disposed between the illumination module and the end reflector. The viewing region includes a polarizing beam splitter ("PBS") and non-polarizing beam splitter ("non-PBS") disposed between the PBS and the end reflector. The viewing region redirects the CGI light from the reverse propagation path out of an eye-ward side of the eyepiece. The polarization rotator is disposed in the forward and reverse propagation paths of the CGI light between the viewing region and the end reflector.

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**A. CLASSIFICATION OF SUBJECT MATTER****G02B 27/02(2006.01)i**

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) &amp; Keywords: HMD, polarization, beam, splitter, reflect, propagate

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2010-0157433 A1 (HIROSHI MUKAWA et al.) 24 June 2010 See abstract, Figs.8-9 and paragraphs [0074],[0144]-[0156].	1-24
A	US 5886822 A (MARK B. SPITZER) 23 March 1999 See abstract, Figs.9,14,19B and col.8, lines 26-43, col.9, line 51 - col.10, line 43, col.13, lines 33-56.	1-24
A	JP 2007-156096 A (SHIMADZU CORP.) 21 June 2007 See abstract, Fig.1 and paragraphs [0012]-[0020].	1-24
A	US 2003-0165017 A1 (YAAKOV AMITAI) 04 September 2003 See abstract, Fig.2 and paragraphs [0064]-[0067].	1-24

 Further documents are listed in the continuation of Box C. See patent family annex.

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