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(54) Title: MIXED POLARIZATION IMAGING SYSTEM FOR THREE-DIMENSIONAL PROJECTION

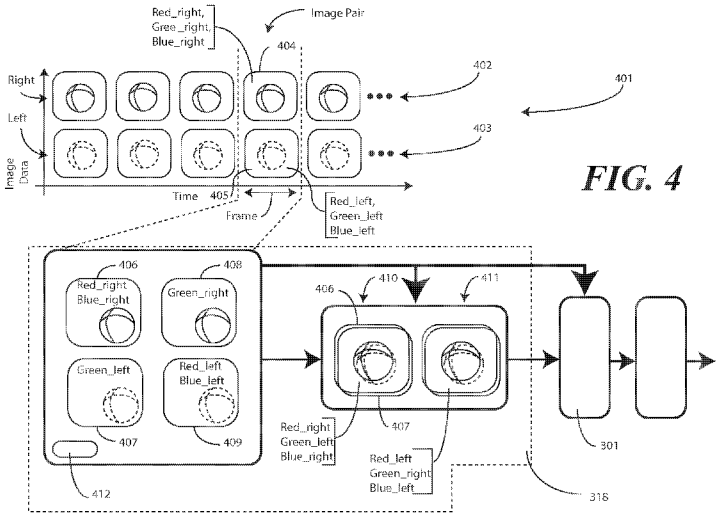


FIG. 4

(57) Abstract: An imaging system (300) configured to reduce perceived flicker in three-dimensional images is provided. The imaging system (300) can include a plurality of light sources (305,306,307), a light combiner (302), a light modulator (303) and a polarization rotator (301). The light combiner (302) combines light received from each of the light sources into a combined beam (304). A first light portion (313) in the combined beam has a first light portion polarization state that is different from a second light portion polarization state of a second light portion (314). The light modulator (303) produces images by modulating the combined beam (304) along a projection surface (316). The polarization rotator (301) selectively rotates a polarization state of the combined beam (304) in synchrony with an image refresh cycle of the imaging system. A circular polarizer (1004) can be used to transform linear polarization states to circular polarization states.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

G02B 27/22(2006.01)i, H04N 13/04(2006.01)i, G03B 35/00(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)

G02B 27/22; G03B 21/00; G02B 27/26

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) & Keywords: three-dimensional, projection, polarization, rotator, scanning display, light combiner

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	US 2011-0063574 A1 (FREEMAN) 17 March 2011 See abstract, paragraphs [0021], [0025] and figure 3.	1-2,4-8 3,9-15
Y A	US 2009-0213330 A1 (SILVERSTEIN et al.) 27 August 2009 See abstract, paragraphs [0069]-[0070] and figure 16.	1-2,4-8 3,9-15
A	US 6433907 B1 (LIPPERT et al.) 13 August 2002 See abstract, claim 1 and figure 3.	1-15
A	US 2007-0132953 A1 (SILVERSTEIN) 14 June 2007 See abstract and claim 53.	1-15

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
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