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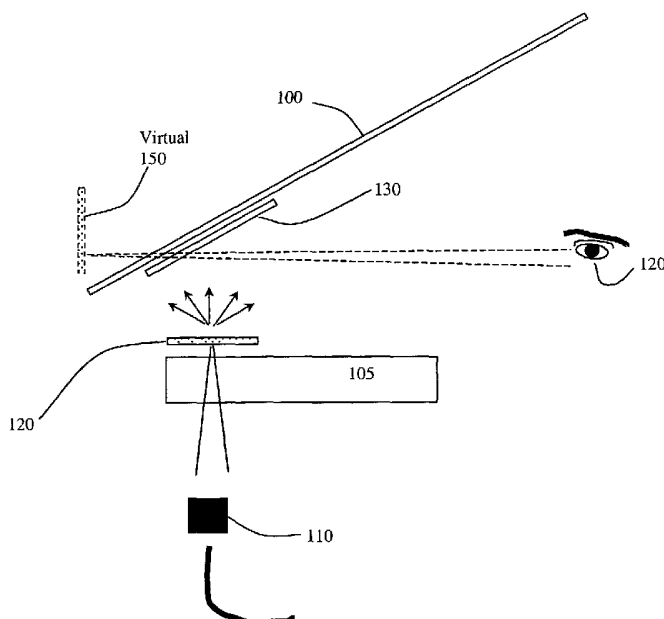
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: REAL IMAGE CONFIGURATION FOR A HIGH EFFICIENCY HEADS-UP DISPLAY (HUD) USING A POLARIZING MIRROR AND A POLARIZATION PRESERVING SCREEN



(57) Abstract: An image display system includes a polarized image projection device (110), a polarization preserving transmissive diffuser (120), and a polarizing reflector element as a non-blocking mirror (130). The combination of a polarization preserving transmissive diffuser or rear projection screen and the polarizing reflector results in a high brightness HUD for applications including automotive, aerospace, or other applications where HUD systems are used. The system also maintains the low haze and high transmittance of the windshield (100).



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/16111

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G02B 5/32, 27/14; G03B 21/00, 21/14; G03H 1/00

US CL : 359/13, 15, 487, 495, 629, 630; 353/8, 20

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)

U.S. : 359/13, 15, 487, 495, 629, 630; 353/8, 20

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,903,396 A (RALLISON) 11 May 1999 (11.05.1999), columns 2-3.	1, 4-8, 18
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Y		2, 3, 9-17, 19
Y	US 5,440,428 A (HEGG et al) 08 August 1995 (08.08.1995), column 5.	2, 3, 9-17, 19

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

☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"T"

later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"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

"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&"

document member of the same patent family

Date of the actual completion of the international search

09 June 2004 (09.06.2004)

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INTERNATIONAL SEARCH REPORT

PCT/US03/16111

Continuation of B. FIELDS SEARCHED Item 3:

APS

search terms: head up display, polarization beam splitter/combiner, holographic duffuser