

Title (en)
ILLUMINATION SYSTEMS FOR EYEGLASS AND FACEMASK DISPLAY SYSTEMS

Title (de)
BELEUCHTUNGSSYSTEME FÜR BRILLEN- UND GESICHTSMASKEN-ANZEIGEVORRICHTUNG

Title (fr)
SYSTEMES D'ECLAIRAGE POUR SYSTEMES D'AFFICHAGE DE LUNETTES ET MASQUES FACIAUX

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Application
EP 00937883 A 20000530

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Abstract (en)
[origin: WO0079328A1] A display illumination and viewing system (figure 4) has an illumination optical path and a viewing optical path coinciding along a portion of their lengths. A display (60) is located at one end of the coinciding path portion. A first lens system is located on the coinciding path portion and a second lens system is located on the viewing optical path. An illumination assembly is located on the illumination optical path and off the coinciding path portion. The illumination assembly is spaced from the first lens system by a distance corresponding to a focal length of the first lens system. A reflective and transmissive element is located at an opposite end of the coinciding path portion to reflect light from the illumination assembly onto the coinciding path portion toward the display onto the coinciding path portion toward the display and to transmit light from the display along the viewing optical path. In another aspect of the invention, the image display system is operable in a color mode and a monochrome mode. Illumination circuitry (figures 8-11) is in communication with an illumination source and includes a switch operative to switch the illumination source between the color mode to provide a color display and the monochrome mode to provide a monochrome display.

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Cited by
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