

Title (en)

OPTICAL DEVICE FOR HELMET VISOR COMPRISING A DIFFRACTIVE MIRROR

Title (de)

OPTISCHE VORRICHTUNG MIT DIFFRAKTIVEM SPIEGEL FÜR HELMVISIER

Title (fr)

DISPOSITIF OPTIQUE POUR VISEUR DE CASQUE COMPORTANT UN MIROIR DIFFRACTIF

Publication

**EP 1127288 A1 20010829 (FR)**

Application

**EP 99970171 A 19991005**

Priority

- FR 9902378 W 19991005
- FR 9812499 A 19981006

Abstract (en)

[origin: US6788442B1] An optical device for a system presenting collimated images through an off-axis spherical concave mirror. An image can be presented to a user with correction of eccentric distortion caused by the off-axis spherical concave mirror without altering the quality of the image. A diffractive mirror is set in the neighborhood of an intermediate image, and preferably a second intermediate image. The extent of the neighborhood is limited by image resolution and, in the neighborhood, the correction by the diffractive mirror does not alter the resolution. The diffractive mirror may include a hologram which may be digital or made of a photosensitive material. A hologram substrate is preferably not planar to operate partly upon the correction, the residual correction being carried out by the hologram. Such a device may find application to an aircraft pilot's visor.

IPC 1-7

**G02B 27/01**; G02B 17/06; G02B 27/00; G02B 5/18

IPC 8 full level

**G02B 27/01** (2006.01)

CPC (source: EP US)

**G02B 27/0172** (2013.01 - EP US)

Citation (search report)

See references of WO 0020913A1

Designated contracting state (EPC)

GB

DOCDB simple family (publication)

**US 6788442 B1 20040907**; EP 1127288 A1 20010829; FR 2784201 A1 20000407; FR 2784201 B1 20030131; IL 142439 A0 20020310; IL 142439 A 20061210; WO 0020913 A1 20000413

DOCDB simple family (application)

**US 80693601 A 20010406**; EP 99970171 A 19991005; FR 9812499 A 19981006; FR 9902378 W 19991005; IL 14243901 A 20010404; IL 14243999 A 19991005