

Title (en)

VARIABLE FLUID LENS HAVING TWO MENISCI

Title (de)

VARIABLE FLÜSSIGLINSE MIT ZWEI MENISKEN

Title (fr)

LENTILLE VARIABLE CONTENANT DES LIQUIDES ET POSSEDANT DES MENISQUES

Publication

**EP 1894041 A1 20080305 (EN)**

Application

**EP 06756067 A 20060606**

Priority

- IB 2006051800 W 20060606
- EP 05105116 A 20050610
- EP 06756067 A 20060606

Abstract (en)

[origin: WO2006131882A1] A variable lens and a method of operation of a variable lens are described. The variable lens has an optical axis (19) . The lens includes a first and a second lens element. The first lens element includes two fluids in contact over a first meniscus (132) extending transverse the optical axis, the fluids being non-miscible and having different indices of refraction. A second lens element includes two fluids in contact over a second meniscus (134) extending transverse the optical axis, the fluids being non-miscible and having different indices of refraction. A meniscus controller is arranged to control the shape of each meniscus. The meniscus controller (110) is arranged to control the shapes of the menisci such that the amount of spherical aberration produced by the first meniscus is substantially compensated by the amount of spherical aberration produced by the second meniscus for radiation of at least a predetermined wavelength. Such a variable lens can be incorporated in a variety of apparatus, including an optical scanning device, a camera, a microscope or a telescope .

IPC 8 full level

**G02B 3/14** (2006.01); **G11B 7/135** (2012.01)

CPC (source: EP KR)

**G02B 3/00** (2013.01 - KR); **G02B 3/14** (2013.01 - EP KR); **G02B 21/025** (2013.01 - EP); **G02B 23/00** (2013.01 - EP); **G02B 26/005** (2013.01 - EP); **G02B 27/0025** (2013.01 - EP); **G11B 7/1378** (2013.01 - EP); **G11B 7/13925** (2013.01 - EP)

Citation (search report)

See references of WO 2006131882A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2006131882 A1 20061214**; CN 101194188 A 20080604; EP 1894041 A1 20080305; JP 2008546031 A 20081218; KR 20080022186 A 20080310; MY 146797 A 20120928; TW 200706916 A 20070216

DOCDB simple family (application)

**IB 2006051800 W 20060606**; CN 200680020675 A 20060606; EP 06756067 A 20060606; JP 2008515359 A 20060606; KR 20087000703 A 20080110; MY PI20062681 A 20060608; TW 95120279 A 20060607