

Title (en)

PROJECTOR DEVICE WITH SELF-CORRECTING FUNCTION, AND MEDICAL DEVICE COMPRISING THE PROJECTOR DEVICE

Title (de)

PROJEKTORVORRICHTUNG MIT SELBSTKORREKTURFUNKTION SOWIE MEDIZINGERÄT MIT DER PROJEKTORVORRICHTUNG

Title (fr)

ENSEMBLE PROJECTEUR PRÉSENTANT UNE FONCTION D'AUTOCORRECTION ET APPAREIL MÉDICAL ÉQUIPÉ DE CET ENSEMBLE PROJECTEUR

Publication

EP 2680739 A1 20140108 (DE)

Application

EP 12706563 A 20120228

Priority

- DE 102011001083 A 20110304
- EP 2012053308 W 20120228

Abstract (en)

[origin: WO2012119885A1] The aim the invention is to provide a projector device and a medical device comprising the projector device, said projector device allowing an improved measurement of the local refractive power of an optical body, in particular an eye. For this purpose, the invention proposes a projector device 1 for projecting a flat pattern 2 on a plane 3, in particular in a human eye 4, comprising at least one light source (LS1, LS2) which generates a light beam, comprising a deflecting device (MSS) which allows a deflection of the light beam at a deflection angle in order to generate the flat pattern (2) on the plane (3), comprising a beam path (7) which extends at least from the light source (LS1, LS2) to the plane (3), comprising at least one sensor device (L1, D1, W2, D2) which is designed to determine the actual state of a light beam wavefront in any position of the beam path (7), and comprising at least one correcting device (EL; O2, O3) which is arranged in the beam path (7) and which allows an alteration of the light beam wavefront. According to the invention, a high-resolution alteration of the wavefront is carried out by an optical control element with a variable focal length.

IPC 8 full level

A61B 3/10 (2006.01); **A61B 3/103** (2006.01); **A61F 9/008** (2006.01)

CPC (source: EP US)

A61B 3/1015 (2013.01 - EP US); **A61F 9/008** (2013.01 - EP US); **A61B 3/1005** (2013.01 - EP US); **A61B 3/103** (2013.01 - EP US)

Citation (search report)

See references of WO 2012119885A1

Cited by

CN109782519A

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

DE 102011001083 A1 20120906; **DE 102011001083 B4 20151105**; EP 2680739 A1 20140108; US 2014081247 A1 20140320; WO 2012119885 A1 20120913

DOCDB simple family (application)

DE 102011001083 A 20110304; EP 12706563 A 20120228; EP 2012053308 W 20120228; US 201214003112 A 20120228