

Title (en)

DIAPHRAGM ARRAY AND/OR FILTER ARRAY FOR OPTICAL DEVICES, ESPECIALLY MICROSCOPES, THE POSITION, SHAPE, AND/OR OPTICAL PROPERTIES OF WHICH CAN BE MODIFIED

Title (de)

IN LAGE, FORM UND/ODER DEN OPTISCHEN EIGENSCHAFTEN VERÄNDERBARE BLENDEN- UND/ODER FILTERANORDNUNG FÜR OPTISCHE GERÄTE, INSBESONDERE MIKROSKOPE

Title (fr)

ENSEMBLE DIAPHRAGME ET/OU FILTRE A POSITION, FORME ET/OU PROPRIETES OPTIQUES MODIFIABLES, POUR DES APPAREILS OPTIQUES, NOTAMMENT DES MICROSCOPES

Publication

EP 1680699 A1 20060719 (DE)

Application

EP 04797515 A 20041102

Priority

- EP 2004012369 W 20041102
- DE 10352040 A 20031107

Abstract (en)

[origin: WO2005045503A1] The invention relates to the use of two-dimensional arrays comprising individually triggerable elements for creating diaphragms in beam paths of optical devices. At least one two-dimensional array comprising individually triggerable elements for creating diaphragms and/or filters is disposed in the optical imaging and/or illuminating beam path of the diaphragm array and/or filter array for optical devices, the shape, position, and/or optical properties of which can be modified, and is connected to a control unit for triggering the individual elements. The inventive technical solution allows diaphragms and/or filters to be modified very quickly regarding the geometry, optical properties, and/or position thereof by electronically triggering the same. Said modifications can also be done online as an optical fine-tuning step during the measurement and adjustment process. Furthermore, using said systems makes it possible to dispense with the expensive and time-consuming production of diaphragms having geometrical shapes.

IPC 1-7

G02B 26/00; **G02B 5/00**; **G02B 26/08**

IPC 8 full level

G02B 5/00 (2006.01); **G02B 7/00** (2006.01); **G03F 7/20** (2006.01)

CPC (source: EP US)

G02B 5/005 (2013.01 - EP US); **G02B 21/24** (2013.01 - EP US); **G02B 26/007** (2013.01 - EP US); **G03F 7/701** (2013.01 - EP US)

Citation (search report)

See references of WO 2005045503A1

Citation (examination)

WO 9922262 A1 19990506 - MACAULAY CALUM E [CA]

Designated contracting state (EPC)

DE NL SE

DOCDB simple family (publication)

WO 2005045503 A1 20050519; DE 10352040 A1 20050721; EP 1680699 A1 20060719; JP 2007510177 A 20070419; JP 5101106 B2 20121219; US 2006291031 A1 20061228

DOCDB simple family (application)

EP 2004012369 W 20041102; DE 10352040 A 20031107; EP 04797515 A 20041102; JP 2006537233 A 20041102; US 42942806 A 20060508