

## Title (en)

OPTICAL DEVICE HAVING A CONTINUOUS-CROWN-SHAPED PIEZOELECTRICALLY ACTUATED DEFORMABLE DIAPHRAGM

## Title (de)

OPTISCHE VORRICHTUNG MIT DURCHGEHEND KRONENFÖRMIGER PIEZOELEKTRISCH BETÄTIGTER VERFORMBARER MEMBRAN

## Title (fr)

DISPOSITIF OPTIQUE A MEMBRANE DEFORMABLE A ACTIONNEMENT PIEZOELECTRIQUE EN FORME DE COURONNE CONTINUE

## Publication

**EP 2478394 A1 20120725 (FR)**

## Application

**EP 10755131 A 20100914**

## Priority

- FR 0956328 A 20090915
- EP 2010063430 W 20100914

## Abstract (en)

[origin: WO2011032927A1] The invention relates to an optical device having a deformable diaphragm (2) comprising an area for attaching (2.3) onto a holder (1) containing a liquid or gaseous fluid, a central area (2.1) capable of being reversibly deformed from an inoperative position, and actuating means for moving the fluid (4) urging the diaphragm (2) into an intermediate area between the attachment area (2.3) and a central area (2.1). The actuating means comprise a continuous piezoelectric crown receiving a plurality of actuators, said crown surrounding the central area (2.1), the actuating means (5) being attached to the diaphragm (2) in at least the intermediate area (2.2), the actuating means (5) and the diaphragm (2) to which the same are attached forming at least one piezoelectric bimorph (B), the actuating means (5) contracting or extending radially during actuation so as to produce a movement of said fluid (4) from the intermediate area (2.2) toward the central area (2.1) of the diaphragm or vice versa, thereby deforming the central area (2.1) relative to the inoperative position thereof.

## IPC 8 full level

**G02B 3/14** (2006.01); **G02B 26/08** (2006.01)

## CPC (source: EP US)

**G02B 3/12** (2013.01 - US); **G02B 3/14** (2013.01 - EP US); **G02B 26/004** (2013.01 - US); **G02B 26/0825** (2013.01 - EP US); **G02B 27/0068** (2013.01 - US); **H10N 30/2048** (2023.02 - EP US)

## Citation (search report)

See references of WO 2011032927A1

## Citation (examination)

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## 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 SE SI SK SM TR

## DOCDB simple family (publication)

**FR 2950154 A1 20110318; FR 2950154 B1 20111223**; EP 2478394 A1 20120725; EP 2708923 A1 20140319; JP 2013504779 A 20130207; JP 2014044446 A 20140313; JP 2016053735 A 20160414; JP 2018156114 A 20181004; JP 5808328 B2 20151110; JP 6360823 B2 20180718; JP 6889867 B2 20210618; US 10324236 B2 20190618; US 2012170920 A1 20120705; US 2014104696 A1 20140417; US 2017123113 A1 20170504; US 9075190 B2 20150707; US 9541677 B2 20170110; WO 2011032927 A1 20110324

## DOCDB simple family (application)

**FR 0956328 A 20090915**; EP 10755131 A 20100914; EP 13195794 A 20100914; EP 2010063430 W 20100914; JP 2012528386 A 20100914; JP 2013250870 A 20131204; JP 2015240969 A 20151210; JP 2018120026 A 20180625; US 201013394641 A 20100914; US 201314098981 A 20131206; US 201715402130 A 20170109