

Title (en)

ACTUATOR-SENSOR SYSTEM AND FAST STEERING MIRROR (FSM) HAVING AN ACTUATOR-SENSOR SYSTEM OF THIS TYPE

Title (de)

AKTOR-SENSOR-SYSTEM UND FAST STEERING MIRROR (FSM) MIT DERARTIGEM AKTOR-SENSOR-SYSTEM

Title (fr)

SYSTÈME D'ACTIONNEUR-CAPTEUR ET MIROIR DE DIRECTION RAPIDE (FSM) DOTÉ D'UN SYSTÈME D'ACTIONNEUR-CAPTEUR DE CE TYPE

Publication

**EP 4111576 A1 20230104 (DE)**

Application

**EP 22717058 A 20220222**

Priority

- DE 102021202120 A 20210304
- DE 2022200025 W 20220222

Abstract (en)

[origin: WO2022184214A1] The invention relates to an actuator-sensor system for the controlled diverting or deflecting of electromagnetic radiation (e.g. visible light) in at least one axis (9), comprising an actuator (5) for mechanically moving a deflecting element (10) and a measuring element (2) for sensing the position of the deflecting element (10). The measuring element (2) consists of a flat substrate (3) comprising at least one sensor element (4). The actuator (5) can consist of at least one stationary coil (6, 6') and a movable element (8) with at least one magnet (7, 7'). The invention also relates to a fast steering mirror (FSM) having an actuator-sensor system of this type.

IPC 8 full level

**H02K 29/12** (2006.01); **H02K 33/18** (2006.01); **H02K 41/035** (2006.01)

CPC (source: EP US)

**G01B 7/003** (2013.01 - US); **G02B 7/181** (2013.01 - US); **G02B 26/0816** (2013.01 - US); **H02K 29/12** (2013.01 - EP); **H02K 41/0354** (2013.01 - EP); **H02K 11/225** (2016.01 - EP); **H02K 33/18** (2013.01 - EP); **H02K 2201/18** (2013.01 - EP)

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

Designated extension state (EPC)

BA ME

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

**DE 102021202120 A1 20220908**; CN 116941170 A 20231024; EP 4111576 A1 20230104; JP 2024511935 A 20240318; US 2024134183 A1 20240425; US 2024231076 A9 20240711; WO 2022184214 A1 20220909

DOCDB simple family (application)

**DE 102021202120 A 20210304**; CN 202280017763 A 20220222; DE 2022200025 W 20220222; EP 22717058 A 20220222; JP 2023552215 A 20220222; US 202218547785 A 20220222