

Title (en)

ADJUSTMENT DEVICE ON AN OPTICAL UNIT

Title (de)

VERSTELLEINRICHTUNG AN EINEM OPTISCHEN GERÄT

Title (fr)

SYSTÈME DE RÉGLAGE D'UN APPAREIL OPTIQUE

Publication

EP 2745159 A1 20140625 (DE)

Application

EP 12748405 A 20120727

Priority

- DE 102011110991 A 20110818
- EP 2012064807 W 20120727

Abstract (en)

[origin: WO2013023895A1] The invention relates to an adjustment device (100) having a mechanism for displacement of an assembly, in particular for the linear displacement (A1, A2) of at least one focussing lens (6) along an optical axis (A) of an optical unit, which mechanism can be driven in opposite rotation directions (D1, D2) by a rotary knob (1), wherein a rapid displacement of the assembly in a first direction (A1) takes place by means of the mechanism when the rotary knob (1) is rotated in the first rotation direction (D1) and a slow displacement of the assembly in an opposite direction (A2) takes place when the rotary knob (1) is rotated in the opposite rotation direction (D2) for a defined rotary angle. In order to simplify the construction, according to the invention the rotary knob (1) is connected in a rotationally fixed manner to an articulated axle (4), on the outside of which a first external thread (8) having a first steep pitch is formed at least in sections, wherein a driving nut (2) having a first internal thread (9) corresponding to the first external thread (8) is arranged rotatably on the first external thread (8), a second external thread (10) having a second, less steep pitch than the first pitch is formed at least in sections on the driving nut (2), wherein a driving piece (3) having a second internal thread (11) corresponding to the second external thread (10) is arranged rotatably on the second external thread (10), the driving piece (3) is connected to a dog (5) of the assembly for linear displacement (A1, A2) of the latter, wherein a stop (5a) extending in a linear manner is formed on the dog (5), and a stop segment (12) cut out over the defined rotary angle is formed on the driving nut (2).

IPC 8 full level

G02B 21/24 (2006.01)

CPC (source: EP US)

G02B 7/04 (2013.01 - EP US); **G02B 21/242** (2013.01 - EP US); **G02B 23/00** (2013.01 - US); **G02B 23/18** (2013.01 - EP US)

Citation (search report)

See references of WO 2013023895A1

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 102011110991 A1 20130221; EP 2745159 A1 20140625; US 2014160561 A1 20140612; WO 2013023895 A1 20130221

DOCDB simple family (application)

DE 102011110991 A 20110818; EP 12748405 A 20120727; EP 2012064807 W 20120727; US 201414183104 A 20140218