

Title (en)

Actuator for controlling internal combustion engines

Title (de)

Stellglied für die Steuerung von Verbrennungsmotoren

Title (fr)

Actionneur pour contrôle d'un moteur à combustion interne

Publication

**EP 1508681 B1 20160907 (DE)**

Application

**EP 04017578 A 20040724**

Priority

- DE 10336265 A 20030807
- DE 102004016912 A 20040406

Abstract (en)

[origin: EP1508681A1] The device is movable between minimum and maximum positions and is subjected to a spring element (1) acting in the opening and closing directions. The first end (3) of the spring element is accommodated in a housing and the spring element transfers its inherent tension in the radial and tangential direction either to a bearing point (24) on the final control element (13) or a second bearing point (21) of the housing.

IPC 8 full level

**F02D 11/04** (2006.01)

CPC (source: EP US)

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Cited by

EP2202398A2; DE102008055127A1

Designated contracting state (EPC)

DE FR IT

DOCDB simple family (publication)

**EP 1508681 A1 20050223; EP 1508681 B1 20160907**; DE 102004016912 A1 20051103; US 2005120997 A1 20050609; US 6973913 B2 20051213

DOCDB simple family (application)

**EP 04017578 A 20040724**; DE 102004016912 A 20040406; US 91034504 A 20040804