

Title (en)

VALVE HAVING A LINEAR DRIVE FOR THE VALVE PISTON

Title (de)

VENTIL MIT EINEM LINEARANTRIEB FÜR DEN VENTILKOLBEN

Title (fr)

SOUPAPE À ENTRAÎNEMENT LINÉAIRE POUR LE PISTON DE SOUPAPE

Publication

EP 3027945 A1 20160608 (DE)

Application

EP 14747000 A 20140730

Priority

- DE 102013108164 A 20130730
- EP 2014066363 W 20140730

Abstract (en)

[origin: WO2015014887A1] A valve having a valve piston (13) which can be moved linearly in a valve housing (10) and a linear drive (20) which comprises a stator (21) which is connected immovably to the valve housing (10) and a rotor (22) which can be moved therein and loads the valve piston (13), is characterized in that, if a coil (23) is embedded in the stator housing, in each case one outer web (25) is arranged on the outer sides thereof or, if a plurality of coils (23) are embedded in the stator housing, in each case one inner web (24) is arranged between the coils (23) and in each case one associated outer web (25) is arranged on the outer sides of the outermost coils (23), wherein the axial extents of inner webs (24) and outer webs (25), permanent magnets (26) and pole pieces (27) are adapted to one another in such a way that, in order to configure a force increase which is active when the at least one pole (23) is energized, at least one corner (A, B) (C, D) of a pole piece (27) on one side and at least one corner (A', B') (C', D') of an outer web (25) on the other side lie opposite one another in the stroke region of the valve piston (13) in such a way that, at this point in the air gap (28), the magnetic fields of permanent magnet (26) and energized coil (23) are rectified and concentrated.

IPC 8 full level

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CPC (source: EP US)

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See references of WO 2015014887A1

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