

Title (en)

STAGGERED ELECTROMAGNETICALLY ACTUATED VALVE DESIGN

Title (de)

AUFBAU MIT GESTUFTEN ELEKTROMAGNETISCH BETÄTIGTEN VENTILEN

Title (fr)

MODELE DE SOUPAPES ECHELONNEES A ACTIONNEMENT ELECTROMAGNETIQUE

Publication

**EP 0799394 A1 19971008 (EN)**

Application

**EP 95918850 A 19950427**

Priority

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- US 23638394 A 19940428

Abstract (en)

[origin: WO9530104A1] A compact staggered electromagnetically actuated valve assembly (70) includes a first electromagnetic actuator (72) defining an upper horizontal surface (78) and an outer circumference (80) and a second electromagnetic actuator (74) defining a vertical axis (82) and a lower horizontal surface (84). The second actuator lower horizontal surface is located vertically above the first actuator upper horizontal surface and the second actuator vertical axis is disposed outside of the first actuator outer circumference. An electromagnetic actuator (10) for a valve having a valve stem (22) exhibiting thermal expansion is further disclosed. The actuated valve includes an electromagnet (12), valve seating springs (38) and an armature element (16). The seating springs and valve stem have a substantially equal degree of thermal expansion. The valve may further include an armature element adjustment member (52) to axially displace the armature element (16) relative to a normal biased spaced apart first position distal from the electromagnet when the electromagnet is not energized.

IPC 1-7

**F16K 31/06**; F01L 9/04

IPC 8 full level

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