

Title (en)
DIRECT-ACTING BOOST-ENHANCED PRESSURE REGULATOR

Title (de)
DIREKTER, BOOSTVERSTÄRKTER DRUCKREGLER

Title (fr)
REGULATEUR DE PRESSION AMELIORE PAR UN ACCELERATEUR A ACTION DIRECTE

Publication
EP 0888510 A4 19990623 (EN)

Application
EP 97917695 A 19970328

Priority
• US 9705119 W 19970328
• US 1429096 P 19960329

Abstract (en)
[origin: WO9737162A1] A boost-enhanced gas pressure regulator (53) consists of a bonnet (11) and a body (12; main casing) that are secured together so as to capture a diaphragm (13) between both components. An actuator (16) providing a pair of control channels (38) and a relief seat (32) in one component is connected to the diaphragm (13) to be moved with and by the latter. A boost/seat tube (20) has external guide surfaces (49) which serve to guide and control its movement, and it also has an internal gas flow passage (52) in which an elastomeric seat disk (21; valve member) is mounted. The boost/seat tube (20) is restricted to travel in a linear fashion (direct action) with respect to an inlet orifice/valve seat (44) by a plurality of guide surfaces (49) that are an integral part of the orifice insert (44), upon which certain contact areas (70, 72) of the boost/seat tube (20) are slidable.

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F16K 31/36

IPC 8 full level
G05D 16/06 (2006.01)

CPC (source: EP)
G05D 16/0658 (2013.01)

Citation (search report)
• [XA] US 2519798 A 19500822 - TEMPLE PAUL C
• See references of WO 9737162A1

Designated contracting state (EPC)
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