

Title (en)
Improved rotary valve.

Title (de)
Verbesserter Drehschieber.

Title (fr)
Boisseau rotatif amélioré.

Publication
EP 0625631 A1 19941123 (FR)

Application
EP 94400922 A 19940428

Priority
FR 9306278 A 19930521

Abstract (en)
The present invention relates to a substantially cylindrical rotary spool (valve) intended for the inlet of a fluid into a combustion chamber of an internal combustion engine, including at least one elbowed internal duct (1, 1') for the flow of the said fluid, each duct having an inlet orifice (2, 2') situated on the lateral flank of the said spool, an outlet orifice (3, 3') belonging to the cylindrical surface of the said spool, and an elbow (20, 20') intended to hold back the heaviest elements of the fluid under the effect of centrifugal force, the thickness (21, 21') of the wall of the spool between the outer face of the duct and the outside of the spool being relatively slight in the region of the said elbow (20, 20'). According to the invention, at least one of the outlet orifices (3, 3') of at least one of the said ducts and at least one of the said elbows (20, 20') belong to one and the same transverse section of the spool. <IMAGE>

Abstract (fr)
La présente invention concerne un boisseau rotatif substantiellement cylindrique destiné à l'admission d'un fluide dans une chambre de combustion d'un moteur à combustion interne, comportant au moins un canal interne (1, 1') coudé d'écoulement dudit fluide, chaque canal ayant un orifice d'entrée (2, 2') situé sur le flanc latéral dudit boisseau, un orifice de sortie (3, 3') appartenant à la surface cylindrique dudit boisseau, et un coude (20, 20') destiné à retenir les éléments les plus lourds du fluide sous l'effet de la force centrifuge, l'épaisseur (21, 21') de la paroi du boisseau entre la face externe du canal et l'extérieur du boisseau étant relativement faible au niveau dudit coude (20, 20'). Selon l'invention, l'un au moins des orifices de sortie (3, 3') de l'un au moins desdits canaux et l'un au moins desdits coudes (20, 20') appartiennent à une même section transversale du boisseau. <IMAGE>

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CPC (source: EP US)
F01L 7/02 (2013.01 - EP US); **F02B 2075/027** (2013.01 - EP US)

Citation (search report)
• [AD] FR 2679960 A1 19930205 - INST FRANCAIS DU PETROLE [FR]
• [A] WO 8300530 A1 19830217 - KINNERSLY RICHARD FURNEAUX
• [A] FR 456777 A 19130904 - GUILLAUME MOUNIER [FR]

Cited by
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