

Title (en)
Volumetric machine with magnetic driving system

Title (de)
Verdrängermaschine mit magnetischer Führung

Title (fr)
Machine volumétrique à guidage magnétique

Publication
EP 0618365 B1 19970507 (FR)

Application
EP 94400343 A 19940216

Priority
FR 9301926 A 19930219

Abstract (en)
[origin: FR2701737A1] Positive-displacement machine including a piston (1) situated in a capsule (2). The piston has a hypotrochoid profile as well as the internal recess (3) of the capsule. The piston has n axes of symmetry and the capsule has n + 1. Inside the capsule, the piston accomplishes a planetary movement about the axis DELTA c of the capsule. In order to obtain this planetary movement, the piston is, on the one hand, mounted so that it can rotate freely on a wrist pin (4) which is off-centred relative to a carrying shaft (7) coaxial with the axis DELTA c of the capsule, the shaft (7) being driven in rotation and, on the other hand, the surface of the piston and the internal surface of the recess (3) of the capsule (2) are equipped with permanent magnets (12, 13) creating magnetic repulsion forces. <IMAGE>

IPC 1-7
F04C 15/00; F04C 2/10

IPC 8 full level
F04C 25/02 (2006.01); **F04C 2/10** (2006.01); **F04C 15/00** (2006.01); **H01F 7/02** (2006.01); **F04C 2/22** (2006.01)

CPC (source: EP US)
F04C 2/10 (2013.01 - EP US); **F04C 15/008** (2013.01 - EP US); **F04C 2/22** (2013.01 - EP US)

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FR 2701737 A1 19940826; FR 2701737 B1 19950414; CA 2114601 A1 19940802; DE 69403020 D1 19970612; DE 69403020 T2 19970814;
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