

Title (en)
ELECTRICAL FLUID PUMP

Publication
EP 0288216 B1 19920415 (EN)

Application
EP 88303388 A 19880414

Priority
GB 8709082 A 19870415

Abstract (en)
[origin: EP0288216A1] The pump operates using an electromagnetically vibrated armature (26) with a central through-conduit (4) and passive valves (5,6,). The armature has a narrower extension (32) to operate the valves, through which the conduit also passes. In order to avoid fluid building up between the armature and its guide (13), and impeding the movements of the armature, at least one of these is irregularly shaped, to provide firstly longitudinal through paths for such fluid to be quickly scavenged and removed, and secondly, cooperating guiding surfaces which are bypassed by the fluid, and not subject to fluid build-up between them. Therefore, power losses through fluid build ups is avoided, without necessity for state of the art radial drilling of the armature (13).

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F04B 17/04

IPC 8 full level
F04B 17/04 (2006.01)

CPC (source: EP)
F04B 17/046 (2013.01); **F01M 2001/0223** (2013.01)

Cited by
DE102012020274B4; WO2011029577A1; EP2502532A1; ES2442618A1; EP2213957A3; EP1503078A1; ITMI20082174A1; FR2823260A1; CN102781293A; EP1365149A3; IT201900025225A1; EP0953764A1; ITGE20120097A1; EP2711548A3; DE102013107482A1; US5567131A; IT201800003064A1; DE202007019534U1; DE102007007297A1; US6554588B1; DE202011050599U1; DE212006000098U1; EP2107242A1; CN101554986A; AU2009256755B2; US2014245894A1; DE102005048765A1; EP1236895A1; DE4437670C1; EP0708243A1; EP2273117A1; CN102597517A; IT201700060837A1; CN110998091A; EP1717439A1; EP3078854A1; EP4299905A3; WO9425753A3; WO2015007428A1; WO2009150030A1; DE202011050598U1; DE202011050601U1; WO2016180579A1; WO2019166954A1; WO2015007429A1; WO0061946A1; DE102015107207A1; WO2008110187A1; WO2005059361A1; WO2016139531A1; WO2018224903A1; DE102010044775A1; US8344896B2; WO2013004620A1; DE102013112306A1; US10151307B2; JP2010001071A; JP2011523868A; US8733230B2; EP4015823A1

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