

Title (en)
Water pump

Title (de)
Wasserpumpe

Title (fr)
Pompe à eau

Publication
EP 1443209 A3 20050831 (EN)

Application
EP 03078651 A 20031120

Priority
IT RE20030001 U 20030116

Abstract (en)
[origin: EP1443209A2] Water pump, comprising a casing (1) carrying a rotatable shaft (9) provided with at least one eccentric cam (7) for operating at least one automatically returning radial piston (13), the operative chamber of which is connected to intake and delivery conduits respectively by way of interposed automatic valve means, between the eccentric cam and the piston there being interposed an idle annular thrust member (6) which constantly contacts the piston head. <IMAGE>

IPC 1-7
F04B 1/04

IPC 8 full level
F04B 1/04 (2006.01)

CPC (source: EP)
F04B 1/0413 (2013.01)

Citation (search report)
• [X] US 4997344 A 19910305 - NELSON ROGER J [US], et al
• [X] US 3570372 A 19710316 - CAMPBELL JOHN F
• [X] US 3885893 A 19750527 - GLOCK WILFRIED, et al
• [X] GB 491327 A 19380831 - JOHN MAURICE TOWLER, et al
• [A] DE 4310062 A1 19940929 - TEVES GMBH ALFRED [DE]
• [A] US 5156531 A 19921020 - SCHMID PETER [DE], et al
• [A] US 6213729 B1 20010410 - FASSBENDER AXEL [DE], et al

Cited by
US10968899B2; USRE49589E

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1443209 A2 20040804; EP 1443209 A3 20050831; IT RE20030001 U1 20040717; IT RE20030001 V0 20030116

DOCDB simple family (application)
EP 03078651 A 20031120; IT RE20030001 U 20030116