

Title (en)
Full-circumferential flow pump.

Title (de)
Seitenströmungspumpe.

Title (fr)
Pompe à écoulement latéral.

Publication
EP 0648934 A1 19950419 (EN)

Application
EP 94113241 A 19940824

Priority
• JP 28011493 A 19931013
• JP 5486194 A 19940301

Abstract (en)
A full-circumferential flow pump includes a motor having a stator, a shaft rotatably disposed in the stator, and a rotor mounted on the shaft for rotation relative to the stator, an outer frame casing (25) disposed around the stator, an outer cylindrical pump casing (5) disposed around the outer frame casing with an annular space (40) defined therebetween, and a pump assembly mounted on an end of the shaft for pumping a fluid into the annular space (40). The outer cylindrical pump casing has a suction window (5a,5b) for introducing a fluid therethrough. A suction case (10) is mounted on the outer cylindrical pump casing (5) for introducing a fluid therethrough and through the suction window (5a,5b) into the pump assembly, the suction casing having a suction port defined therein. <IMAGE>

IPC 1-7
F04D 1/00; **F04D 13/14**; **F04D 1/06**; **F04D 29/42**; **F04D 13/06**; **F04D 29/22**

IPC 8 full level
F04D 1/00 (2006.01); **F04D 1/06** (2006.01); **F04D 13/06** (2006.01); **F04D 13/14** (2006.01); **F04D 29/22** (2006.01); **F04D 29/40** (2006.01); **F04D 29/42** (2006.01); **F04D 29/52** (2006.01)

CPC (source: EP KR)
F04D 1/00 (2013.01 - KR); **F04D 1/006** (2013.01 - EP); **F04D 1/06** (2013.01 - EP); **F04D 13/0606** (2013.01 - EP); **F04D 13/14** (2013.01 - EP); **F04D 29/2211** (2013.01 - EP); **F04D 29/2266** (2013.01 - EP); **F04D 29/406** (2013.01 - EP); **F04D 29/4266** (2013.01 - EP); **F04D 29/4273** (2013.01 - EP)

Citation (search report)
• [A] GB 2007770 A 19790523 - MATERIEL TELEPHONIQUE
• [A] US 4172695 A 19791030 - UESUGI HISAO [JP]
• [A] EP 0420218 A1 19910403 - EBARA CORP [JP]
• [A] DE 739006 C 19430908 - JOSEF RITZ
• [A] FR 1157493 A 19580529 - EMERJY
• [A] EP 0346731 A2 19891220 - GRUNDFOS INT [DK]
• [DA] DE 1653692 A1 19710609 - ITT IND GMBH DEUTSCHE
• [A] PATENT ABSTRACTS OF JAPAN vol. 7, no. 89 (M - 207)<1234> 13 April 1983 (1983-04-13)
• [A] WILLIAM O'KEEFE: "novel pump-impeller concept may solve low-flow recirc problems", POWER, vol. 133, no. 10, October 1989 (1989-10-01), NEW YORK US, pages 29 - 33, XP000094443

Cited by
CN103541906A; US5888053A; GB2414278A; CN109441843A

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
EP 0648934 A1 19950419; **EP 0648934 B1 19981104**; AT E173060 T1 19981115; AU 6751694 A 19950504; AU 678015 B2 19970515; DE 69414344 D1 19981210; DE 69414344 T2 19990617; ES 2127317 T3 19990416; JP 2886444 B2 19990426; JP H07158594 A 19950620; KR 100320288 B1 20020622; KR 950011859 A 19950516

DOCDB simple family (application)
EP 94113241 A 19940824; AT 94113241 T 19940824; AU 6751694 A 19940718; DE 69414344 T 19940824; ES 94113241 T 19940824; JP 5486194 A 19940301; KR 19940017365 A 19940719