

Title (en)
Liquid driven pump or propulsive apparatus.

Title (de)
Flüssigkeitsgetriebene Pumpe oder Schubeinrichtung.

Title (fr)
Pompe entraînée par un liquide ou dispositif propulsif.

Publication
EP 0178873 A1 19860423 (EN)

Application
EP 85307332 A 19851014

Priority
US 66122384 A 19841015

Abstract (en)
The apparatus relates to a jet pump or apparatus which displaces a main fluid by a pressurised driving liquid. The apparatus has a duct (13) to receive the main fluid, and a driving liquid manifold (14) cooperating with the duct to receive the pressurised driving liquid. First and second sets of inwardly facing jet nozzles (64, 65) are disposed adjacent a transverse plane of the duct and penetrate the duct side wall (42) to pass the driving liquid into the duct at a mixing portion (50) of the duct having a constant cross-sectional area. The first and second sets of jet nozzles are inclined at angles (71, Fig. 4; 74, Fig. 5) to the duct axis so that the first nozzles are inclined at a greater angle than the second nozzles. Efficiency of the pump is improved by admitting pressurised gas into the duct and providing the pump with a diverging outlet portion (18) to act as diffuser.

IPC 1-7
F04F 5/10; **F04F 5/46**

IPC 8 full level
F04F 5/24 (2006.01); **F04F 5/10** (2006.01); **F04F 5/46** (2006.01)

CPC (source: EP)
F04F 5/10 (2013.01); **F04F 5/463** (2013.01)

Citation (search report)
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• [Y] FR 1410801 A 19650910
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• [AP] PATENTS ABSTRACTS OF JAPAN, vol. 9, no. 51 (M-361)[1774], 6th March 1985; & JP - A - 59 188 099 (TOSHIAKI KEZUKA) 25-10-1984

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Designated contracting state (EPC)
DE FR GB IT NL

DOCDB simple family (publication)
EP 0178873 A1 19860423; **EP 0178873 B1 19881228**; CA 1256318 A 19890627; DE 3567067 D1 19890202; JP S6199000 A 19860517

DOCDB simple family (application)
EP 85307332 A 19851014; CA 492771 A 19851011; DE 3567067 T 19851014; JP 22978085 A 19851015