

Title (en)

Process and installation for circulating fluids by pumping.

Title (de)

Verfahren und Anlage zum Transport von Fluiden durch Pumpen.

Title (fr)

Procédé et installation pour faire circuler des fluides par pompage.

Publication

EP 0236166 A1 19870909 (FR)

Application

EP 87400158 A 19870123

Priority

FR 8601763 A 19860210

Abstract (en)

[origin: US4712984A] Process for pumping fluid composed of a liquid phase and of a gaseous phase, which involves conveying liquid under pressure to the inlet of the turbine of a turbo-machine comprising a pump and a turbine, mixing some of the liquid coming from the turbine with the fluid, and sucking the mixture through the inlet of the pump so as to reduce the gas content of the fluid and allow it to be conveyed by the pump.

Abstract (fr)

Installation comprenant une source (1), la sortie de la turbine débouchant dans un conduit mettant la source (1) en communication avec la pompe (7).

IPC 1-7

F04D 13/00; **F04D 31/00**

IPC 8 full level

F04B 19/06 (2006.01); **E21B 43/12** (2006.01); **F04D 13/04** (2006.01); **F04D 31/00** (2006.01)

CPC (source: EP US)

F04D 13/04 (2013.01 - EP US); **F04D 31/00** (2013.01 - EP US)

Citation (search report)

- [Y] DE 2554608 A1 19760819 - SUNDSTRAND CORP
- [Y] FR 2557643 A1 19850705 - INST FRANCAIS DU PETROLE [FR]
- [Y] FR 2417057 A1 19790907 - INST FRANCAIS DU PETROLE [FR]
- [A] GB 2014862 A 19790905 - INST FRANCAIS DU PETROLE
- [A] US 4035023 A 19770712 - COCKRELL CLIFFORD MCDONALD
- [A] US 4233154 A 19801111 - PRESLEY CHARLES L
- [A] SOVIET INVENTIONS ILLUSTRATED, Derwent Publications Ltd, Section Mechanical, Week D48, résumé no. 88902 D/48, Q56, 13 janvier 1982; & SU-A-808 699 (IVANO-FRANK OIL GAS) 28 février 1981

Cited by

US4979880A; US5755554A; EP0671563A1; US5562405A

Designated contracting state (EPC)

DE ES FR GB IT NL

DOCDB simple family (publication)

FR 2594183 A1 19870814; DE 3765271 D1 19901108; EP 0236166 A1 19870909; EP 0236166 B1 19901003; ES 2018026 B3 19910316; JP S62191671 A 19870822; NO 168965 B 19920113; NO 168965 C 19920422; NO 870493 D0 19870209; NO 870493 L 19870811; US 4712984 A 19871215

DOCDB simple family (application)

FR 8601763 A 19860210; DE 3765271 T 19870123; EP 87400158 A 19870123; ES 87400158 T 19870123; JP 2742687 A 19870210; NO 870493 A 19870209; US 1068687 A 19870204