

Title (en)
PUMPING DEVICE FOR DISCHARGING LARGE AMOUNTS OF LIQUID

Title (de)
VORRICHTUNG ZUM PUMPEN GROSSER FÖRDERMENGEN EINER FLÜSSIGKEIT

Title (fr)
DISPOSITIF DE POMPAGE POUR LE REFOULEMENT DE GRANDES QUANTITES DE LIQUIDE

Publication
EP 1194694 A2 20020410 (DE)

Application
EP 00954487 A 20000712

Priority
• DE 19932078 A 19990712
• EP 0006633 W 20000712

Abstract (en)
[origin: DE19932078A1] The invention concerns a pumping device for discharging large amounts of liquid, comprising at least two pumps forming each an individual unit. Said two pumps are mutually connected to a discharge pipe on the discharge side, and are coupled to a common powering unit. The inventive device aims at improving a known device, described above, so as to produce an easily transportable device. To achieve this, at least one of the pumps (4) is arranged in a vertical plane away from the plane wherein the other pump (5, 6) is arranged.

IPC 1-7
F04D 1/00

IPC 8 full level
F04B 17/06 (2006.01); **F04B 23/04** (2006.01); **F04D 1/00** (2006.01)

CPC (source: EP US)
F04B 17/06 (2013.01 - EP US); **F04B 23/04** (2013.01 - EP US)

Citation (search report)
See references of WO 0104494A2

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

DOCDB simple family (publication)
DE 19932078 A1 20010201; DE 50005146 D1 20040304; EP 1194694 A2 20020410; EP 1194694 B1 20040128; EP 1194694 B2 20181226; US 6773238 B1 20040810; WO 0104494 A2 20010118; WO 0104494 A3 20010712

DOCDB simple family (application)
DE 19932078 A 19990712; DE 50005146 T 20000712; EP 0006633 W 20000712; EP 00954487 A 20000712; US 3066802 A 20020515