

Title (en)
DIAPHRAGM TYPE PUMP DEVICE

Publication
EP 0144609 A3 19861203 (EN)

Application
EP 84111969 A 19841005

Priority
JP 15981883 U 19831014

Abstract (en)
[origin: EP0144609A2] A diaphragm type pompe device comprises a connecting rod (1), a diaphragm (2) connected to an end of the connecting rod, a cover (13) which firmly secures the outer circumferential part of the diaphragm and constitutes a first operation chamber (14), a frame (19) which opposes the cover to firmly secure the outer circumferential part of the diaphragm (2) in association with the cover (13) and constitutes a second operation chamber (20), and an intake port (15; 21) and a discharge port (16; 22) which are respectively communicated with the first operation chamber (14) and the second operation chamber (20) and provided with check valves (17, 23; 18, 24) each having different communicating direction, wherein the first and second operation chambers (14; 20) alternatively perform pumping operation by the amplitude movement of the diaphragm (2) due to a combination of the reciprocating movement of the connecting rod and the action of the check valves.

IPC 1-7
F04B 43/02

IPC 8 full level
F04B 43/02 (2006.01)

CPC (source: EP US)
F04B 43/023 (2013.01 - EP US)

Citation (search report)
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• [X] US 3461808 A 19690819 - NELSON LOWELL F, et al
• [X] DE 2511298 A1 19750925 - AGROTECHNIKA NP
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• [A] DE 1907454 B2 19740808

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US11002270B2; WO2013171453A1

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 0144609 A2 19850619; EP 0144609 A3 19861203; JP S6066883 U 19850511

DOCDB simple family (application)
EP 84111969 A 19841005; JP 15981883 U 19831014