

Title (en)
FIVE PISTON DIAPHRAGM PUMP

Title (de)
MEMBRANPUMPE MIT FÜNF KOLBEN

Title (fr)
POMPE A MEMBRANE A CINQ PISTONS

Publication
EP 1751427 A2 20070214 (EN)

Application
EP 05739966 A 20050421

Priority
• US 2005014063 W 20050421
• US 56465604 P 20040421

Abstract (en)
[origin: US2005249610A1] A pump having top and bottom pieces coupled together by a coupling device features a circumferential clamp that is a lightweight plastic clamp having clamping members, each with one or more strengthening members oriented along a longitudinal axis defined in relation to the top and bottom pieces. The clamping members may include two semi-circular clamping members, each with circumferentially spaced strengthening rib members oriented along the longitudinal axis of the pump housing.

IPC 8 full level
F04B 53/16 (2006.01); **B65D 45/30** (2006.01); **B65D 45/32** (2006.01); **F01B 19/00** (2006.01); **F04B 17/00** (2006.01); **F04B 35/00** (2006.01); **F04B 43/02** (2006.01); **F04B 43/04** (2006.01); **F04B 43/14** (2006.01)

CPC (source: EP US)
F04B 43/026 (2013.01 - EP US); **F04B 43/04** (2013.01 - EP US); **F04B 53/16** (2013.01 - EP US)

Citation (search report)
See references of WO 2005106247A2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR LV MK YU

DOCDB simple family (publication)
US 2005249610 A1 20051110; AU 2005238957 A1 20051110; CN 101142408 A 20080312; EP 1751427 A2 20070214; WO 2005106247 A2 20051110; WO 2005106247 A3 20070628

DOCDB simple family (application)
US 11272605 A 20050421; AU 2005238957 A 20050421; CN 200580016537 A 20050421; EP 05739966 A 20050421; US 2005014063 W 20050421