Title (en)

PUMP COMPRISING AT LEAST ONE PUMP CHAMBER AND ELECTRODES FOR PRODUCING AN ELECTRIC ALTERNATING FIELD

Title (de)

PUMPE MIT MINDESTENS EINER PUMPKAMMER UND ELEKTRODEN ZUM ERZEUGEN EINES ELEKTRISCHEN WECHSELFELDES

Title (fr)

POMPE COMPORTANT AU MOINS UNE CHAMBRE DE POMPE ET DES ELECTRODES DESTINEES A PRODUIRE UN CHAMP ELECTRIQUE ALTERNATIF

Publication

EP 1646789 A1 20060419 (DE)

Application

EP 04738826 A 20040624

Priority

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- DE 10329979 A 20030627

Abstract (en)

[origin: WO2005001286A1] The invention relates to a pump comprising at least one pump chamber used to pump a fluid, also comprising an electrode device which is used to produce an electric alternating field and at least one dielectric element which is used to influence the field profile of the electric alternating field. Pump force required for pumping the fluid is produced by the electric alternating field. The aim of the invention is to produce a pump chamber having a particularly high pumping effect. Said aim is achieved by virtue of the fact that a dielectric element is arranged and embodied in such manner that the electric alternating field consists of a stationary and time-independent field gradient inside the pump chamber in the direction of pumping and a stationary and time-independent polarisation gradient is provided in the liquid in the direction of pumping.

IPC 1-7

F04B 19/00; F04B 43/04

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