

Title (en)
ELECTRIC SUBMERSIBLE VIBRATION PUMP

Title (de)
ELEKTRISCHE TAUCHVIBRATIONSPUMPE

Title (fr)
POMPE À VIBRATION SUBMERSIBLE ÉLECTRIQUE

Publication
EP 3906365 A4 20220216 (EN)

Application
EP 19924775 A 20191106

Priority
• RU 2019111942 A 20190419
• RU 2019000791 W 20191106

Abstract (en)
[origin: WO2020214056A1] Electric vibration pump has an electromagnet (1), consisting of a core (15) and a winding (16), a vibrator with an armature (2) and a rod (3), and a pump with a housing (11) and a piston (8), while the armature (2) of the vibrator is connected with the core (15) of the electromagnet (1) on one side and with the rod (3) on the other side, on which a shock absorber (4) is fixed, a diaphragm (6) is mounted and a pump piston (8) is set, located in the operating chamber (33) of the pump housing (11). The pump housing (11) is made with channels (30, 31) for connecting the operating chamber (33) to the discharge cavity (32) of the pump, equipped with a built-in check valve (9) and with arc-shaped filtering meshes (12) covering the pump housing (11) along the perimeter of the fluid being pumped from the well, installed to form a flowing volume (18) of purified liquid connected through the check valve (9) with the operating chamber (33) for alternating connection or disconnection.

IPC 8 full level
F04F 7/00 (2006.01)

CPC (source: EP)
F04B 15/02 (2013.01); **F04B 17/044** (2013.01); **F04B 47/06** (2013.01); **F04B 53/20** (2013.01)

Citation (search report)
• [A] WO 0079130 A1 20001228 - ANAUGER MOTORES IND LTD [BR], et al
• [A] FR 2224650 A1 19741031 - DOLZ HEINRICH [DE]
• [A] CH 478345 A 19690915 - CIBA GEIGY [CH]
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• [A] US 9957782 B1 20180501 - FORD MICHAEL BRENT [US]
• See references of WO 2020214056A1

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CN115289054A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
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DOCDB simple family (application)
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