

Title (en)
DRIVE MECHANISM FOR A SCREW PUMP

Title (de)
ANTRIEB EINER SCHRAUBENSPINDELPUMPE

Title (fr)
SYSTEME D'ENTRAINEMENT DE POMPE A VIS

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Application
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Abstract (en)
[origin: US6666672B1] The invention concerns a screw pump (10) that is configured as a dual-shaft positive displacement motor and that comprises two positive displacement spindle rotors (1 and 2) rotating in opposite directions and having external toothing. In order to provide a quiet and simple drive mechanism for said rotors (1 and 2) while ensuring synchronization and increased rotational speed, contrate gear-like gearwheels (3 and 4) are mounted on both rotors (1 and 2) rotating in opposite directions or the rotor spindles in a corresponding plane, in which a larger contrate gear-like driving toothed wheel (5) engages in such a way that both spindle rotors (1 and 2) are driven in opposite directions at an increased rotational speed, wherein said contrate gear similarity also includes a crown gear with internal and external toothing working in connection with front toothed wheels or bevel gears and the possibility that only the driving toothed wheel (5) or only the driven gearwheels (3 and 4) are contrate gear-like.

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