

Title (en)
Electrically driven high speed pump

Title (de)
Elektrisch angetriebene Hochgeschwindigkeitspumpe

Title (fr)
Pompe axiale à grande vitesse à entraînement électrique

Publication
EP 0635101 B1 19980506 (FR)

Application
EP 94904940 A 19940203

Priority

- CH 9400023 W 19940203
- CH 30493 A 19930203

Abstract (en)
[origin: WO9418458A1] An axial-flow pump combined with an electric motor coaxially arranged therearound. The rotor (1) and stator (2) are common to both the electric motor and the pump. The rotor comprises a central tubular portion (11) defining a central channel (14) with a wall (15) provided with blades (16). The blades preferably do not extend as far as the channel axis (3) so that they define a central free area therealong. The outer portion of the rotor (1) has pairs of permanent magnets (24, 25) with stator coils (9) therebetween. The coils are actuated and deactuated by an electronic switching device (28) controlled by sensors (36, 37) for sensing markings on the rotor. The length of the rotor is smaller than its outer diameter. Said pump may be used to pump liquids or gases and drive vehicles, particularly submarines.

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F04D 13/06; F04D 25/06

IPC 8 full level
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