

Title (en)
ROTODYNAMIC MACHINE FOR CONVEYING A FLUID

Title (de)
ROTODYNAMISCHE MASCHINE ZUR FÖRDERUNG EINES FLUIDES

Title (fr)
MACHINE ROTODYNAMIQUE POUR TRANSPORTER UN FLUIDE

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Application
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Abstract (en)
[origin: WO9713986A1] The invention relates to a rotodynamic machine for conveying a fluid, like a turbo-machine (2) or a centrifugal pump, with at least one drive and bearing device (1) in the form of an electric motor with a stator and a magnetic-bearing rotor (4a), in which the windings (15, 16) generating the torque and the magnetic bearing force are arranged together in the stator, the rotor (4a) forms a section of the shaft (4) of the turbo-machine (2) and there is a control device (7) controlling one of the two windings, in such a way that a magnetic bearing force acting on the rotor (4a) can be generated by the first winding (16) in order contactlessly to hold the shaft (4) radially and a torque acting on the rotor (4a) can be generated by the second winding (15).

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