

Title (en)
PUMP HAVING AN AXIAL BALANCING DEVICE

Title (de)
PUMPE MIT ACHSENAUSGLEICHSVORRICHTUNG

Title (fr)
POMPE A DISPOSITIF D'EQUILIBRAGE AXIAL.

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Application
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Abstract (en)
[origin: WO2010079309A1] The pump of the invention includes a stator (112) and a rotor comprising an impeller through which a fluid stream (114) passes. An axial balancing device provided on said impeller (111) comprises a rear balancing chamber (118) and a passage (120) which are provided between the impeller (111) and the stator (112), thus enabling the discharge of fluid from the fluid stream (114) to the balancing chamber (118). Fluid pressure in the balancing chamber (118) compensates for the pressures exerted by the fluid onto the rest of the rotor (111), thus enabling the axial balance of the rotor. The passage (120) comprises an upstream nozzle (140), a downstream nozzle (160), and an intermediate annular chamber (150) which are provided between the walls (151, 152; 141, 142; 161, 162) of the impeller (111) and the stator (112), the intermediate chamber being provided downstream from the upstream nozzle (140) and upstream from the downstream nozzle (160).

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