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Application
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Abstract (en)
[origin: WO2021032746A1] Pump (1) comprising: - means (2) for pumping a working fluid; - an electric motor (3) for actuating the pumping means (2); said motor (3) comprising a stator (31) and a rotor (32) that interact for the actuation of the pumping means (2); said rotor (32) being rotatable about an axis of rotation (320); a shell (8) that encloses a stator (31) of the electric motor (3); - an electronic unit (4) for controlling the electric motor (3); - a conduit (5) for the delivery of the working fluid downstream of the pumping means (2); - a line (6) for cooling the electric motor (3) and the electronic unit (4), said cooling line (6) drawing off the working fluid processed by the pumping means (2). The cooling line (6) comprises: i) at least a first cavity (621) in which said working fluid circulates; said first cavity (621) being partially defined by the stator (31) and partially by the shell (8). ii) a heat exchange manifold (92) into which said at least a first cavity (621) opens and which is intended to cool said electronic unit (4); iii) a return manifold (93) positioned downstream of the heat exchange manifold (92); iv) means (63) for the communication of fluid from said heat exchange manifold (92) to said return manifold (93); the fluid communication means (63) are at least partially defined by the stator (31).

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