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(57) Abstract :
Proposed is an electric machine (1) comprising a housing (10), a stator (11), a rotor (12) and a set of control electronics (RE), the stator comprising a soft iron core (13) and a winding assembly (14) and defining a motor axis (x); the soft iron core (13) comprising soft iron segments (s1-sn) and a connecting element (133); the winding assembly (14) comprising a layered arrangement that has at least two carrier layers (b) and a binder; the carrier layers (b) being interconnected by the binder; at least one conductor track (e1-en) being arranged between the carrier layers (b); the at least one conductor track (e1-en) comprising a first end (f) and a second end (f') and being sealed off with respect to gases and liquids at least in parts by the layered arrangement in the region between the first end (f) and the second end (f'); the first ends (f), the second ends (f'), or the first ends (f) and second ends (f') being interconnected at least in parts by at least one phase bridge (p); the layered arrangement extending with the at least one conductor track (e1-en) between the first end (f) and the second end (f') around the motor axis (x) and forming a layer body (142); the layer body (142) having cells (c1-cn); the soft iron segments (s1-sn) extending through the cells (c1-cn) and together therewith defining the stator poles (j1-jn); the stator poles (j1-jn) forming a matrix (Q) having rows (m) and having at least one column (n); the rows (m) being offset with respect to one another in the circumferential direction; and the at least one column (n), if at least two columns (n) are present, being offset with respect to one another in the direction of the motor axis (x).

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