CLAIMS

1. Electric propulsion system able to drive at least two shafts, comprising

- at least two electric motors, of which at least one first motor (3) and at least one second motor (4) , each one comprising a stator (S) and a rotor (R) , and
- a fixing system (5) , adapted to lock the stators (S) of said motors to one another;

said first motor (3) is a motor in which the stator (S) is arranged in an inner position with respect to the rotor (R), which is arranged on the outside of said stator (S), and the second motor (4) is a motor in which the stator (S) is arranged in an outer position with respect to the rotor (R) , which is arranged on the inside of said stator (S);

the stator (S) of the first motor (3) comprises at least one housing (31), adapted to at least partially house at least one of said at least one second motor (4)

said electric propulsion system is characterized in that:

- said first motor (3) and said second motor (4) are distinct and independent, in which the second motor (4) has a stator "S", which presents an external casing adapted to be at least partially inserted into said housing (31);
- said housing (31) is a through hole with a diameter substantially equal to the external diameter of the external casing of the stator (S) of the second motor (4).

2. Propulsion system according to claim 1, wherein said first motor (3) is a motor of the torque type.

3. Propulsion system according to claim 1, wherein said fixing system (5) is a flange, adapted to lock the stators (S) of said motors (3, 4).

4. Propulsion system according to claim 3, wherein said flange fixing system (5) comprises at least one plate (51), adapted to lock the stators (S) of at least one first motor (3) and of at least one second motor (4) , and an arm (52), adapted to connect said fixing system (5) to a device, in which said propulsion system is built-in.

5. Propulsion system according to claim 4, wherein the power- supply and control cables of said at least two motors (3, 4) are arranged along said at least one arm (52) and pass through said at least one plate (51).

6. Propulsion system according to claim 1, wherein said at least two shafts are parallel to each other.

7. Propulsion system according to claim 6, wherein the rotors (R) of at least two motors (3, 4) rotate around axes that are parallel to each other.

CLAIMS

1. Electric propulsion system able to drive at least two shafts, comprising

- at least two electric motors, of which at least one first motor (3) and at least one second motor (4) , each one comprising a stator (S1, S2) and a rotor (R1, R2) , and
- a fixing system (5) , adapted to lock the stators (S1, S2) of said motors to one another;

said first motor (3) is a motor in which the stator (S1) is arranged in an inner position with respect to the rotor (R1), which is arranged on the outside of said stator (S1), and the second motor (4) is a motor in which the stator (S2) is arranged in an outer position with respect to the rotor (R2) , which is arranged on the inside of said stator (S1);

the stator (S1) of the first motor (3) comprises at least one housing (31), adapted to at least partially house at least one of said at least one second motor (4)

said electric propulsion system is characterized in that:

- said first motor (3) and said second motor (4) are distinct and independent, in which the stator (S2) of said second motor (4) presents an external casing adapted to be at least partially inserted into said housing (31);
- said housing (31) is a through hole with a diameter substantially equal to the external diameter of the external casing of the stator (S2) of the second motor (4).

2. Propulsion system according to claim 1, wherein said first motor (3) is a motor of the torque type.

3. Propulsion system according to claim 1, wherein said fixing system (5) is a flange, adapted to lock the stators (S1, S2) of said motors (3, 4).

4. Propulsion system according to claim 3, wherein said flange fixing system (5) comprises at least one plate (51), adapted to lock the stators (S1, S2) of at least one first motor (3) and of at least one second motor (4) , and an arm (52), adapted to connect said fixing system (5) to a device, in which said propulsion system is built-in.

5. Propulsion system according to claim 4, wherein the power- supply and control cables of said at least two motors (3, 4) are arranged along said at least one arm (52) and pass through said at least one plate (51).

6. Propulsion system according to claim 1, wherein said at least two shafts are parallel to each other.

7. Propulsion system according to claim 6, wherein the rotors (R1, R2) of at least two motors (3, 4) rotate around axes that are parallel to each other.