PATENT CLAIMS

1. ELECTRICAL MACHINE – FLUID MACHINE STANCHEV AGGREGATION SET comprising: a Stator/Body Unit, Rotor/Piston Units and a Power Supply and Control Module, characterized by the feature that its stator/body unit (1) is made up of not less than two components shaping a volume of rotation in which there are two segment-type rotor/piston units (11) the profile of which matches that of the volume of rotation whereby both rotor/piston units (11) are of equal dimension, and their central angle is smaller than π rad (180°) and there are two channels (30) in the walls shaping the volume of rotation, in contact with two external areas from and to which fluid is fed and discharged, and there are equidistant permanent magnets(12) in the rotor/piston units (11) the lines of magnetization of which are collinear with the axis of the volume of rotation and there are equidistant electromagnets along the whole length of the volume of rotation, framing them with the magnetic yokes (3) and (7) and the coils (5) whereby the poles of the electromagnet (7) face the trajectory of the poles of the magnetic yokes (7) of the permanent magnets (12) in the rotor/piston units (11), and the terminal ends of the coils (5) of the electromagnets are connected to the electronic control module (24) with its commutation components(26), and there are position sensors (10) in the stator/body unit (1) near the permanents magnets (12), and there is a distant control and reading interface, whereby the control module (24)

secures control of the electromagnets, so that their magnetic fields, interacting with the magnetic fields of the permanent magnets (12), set up synchronized rotation of the rotor/piston units (11) which pushes out, and at the same time lets in (in a cycle of operation π radians (180°), an equal amount of fluid.

2. ELECTRICAL MACHINE – FLUID MACHINE / STANCHEV AGGREGATION SET per Claim 1, in which the channels (31), are opposite the channels (30), as regards the volume of rotation, and their cross-section size are identical as regards the volume of rotation, as are also their central angles and their positions, and the channels (30) are connected with the channels (31).

3. ELECTRICAL MACHINE – FLUID MACHINE / STANCHEV AGGREGATION SET per Claim 1, in which the channels (30) are equal in length to the shortest arcs of the rotor/piston units (11) and the longest arcs of the channel (30) are equal to the longest arcs of the rotor/piston units (11).