



US 20150226217A1

(19) **United States**(12) **Patent Application Publication****Simeonov**(10) **Pub. No.: US 2015/0226217 A1**(43) **Pub. Date: Aug. 13, 2015**(54) **ELECTRIC MACHINE - FLUID MACHINE
STANCHEV AGGREGATION SET**(52) **U.S. Cl.**CPC **F04C 15/0069** (2013.01); **F04C 2/063**
(2013.01)(71) Applicant: **Simeon Stanchev SIMEONOV, (US)**(72) Inventor: **Simeon Stanchev Simeonov, Vratza
(BG)**

(57)

ABSTRACT(21) Appl. No.: **14/419,286**(22) PCT Filed: **May 22, 2013**(86) PCT No.: **PCT/BG2013/000023**

§ 371 (c)(1),

(2) Date: **Feb. 3, 2015**(30) **Foreign Application Priority Data**

Aug. 3, 2012 (BG) 111282

Publication Classification(51) **Int. Cl.****F04C 15/00**

(2006.01)

F04C 2/063

(2006.01)

Electrical machine-Fluid Machine Stanchev aggregation set comprising Stator/Body Unit, Rotor/Piston Units, Power Supply and Control Module. The stator/body unit (1) shapes volume of rotation in which there are two segment-type rotor/piston units (11). Two channels (30) in the walls, shaping the volume of rotation, are in contact with two external areas from and to which fluid is fed and let out. The permanent magnets (12) are fixed in the rotor/piston units (11). Electromagnets frame the permanent magnets with their magnetic yokes (3) and (7) and coils (5). The poles of the electromagnets (7) face the trajectory of the poles of the magnetic yokes (7) of the permanent magnets (12). The terminal ends of the coils (5) of the electromagnets are connected to the electronic control module (24). Position sensors (10) fixed in the stator/body unit (1). Control module (24) secures control of the electromagnets.

