

Roschin/Godin: Russian Patent # 2,155,435
Mechanical Energy Generating Device & Process

V. V. Roschin(rochtchin@mail.ru)

c/o: S. M. Godin(serjio@glasnet.ru)

Institute for High Temperatures, Russian Academy of Science, Izhorskaya 13/19, Moscow 127412, Russia

(Dated: Publication date: 2000-08-27)

(Plication Number: RU19990122275 19991027 Priority Number(s): RU19990122275 19991027)

(C Classification: H02N11/00; F03H5/00)

Power engineering and transport; miscellaneous industries.
UBSTANCE: Single-row power module has stator and rotor with rollers combined by common separator. Stator and rotor are made of permanent magnets or electromagnets based on composite laminated magnetic, conducting, and insulating materials. Main shaft of device is coupled via free-wheel clutches with starting motor that brings device to automatic speed-maintaining mode of operation and device loading system which is, essentially, electrodynamic generator mechanically coupled with main shaft of device. Electromagnetic transducers are radially arranged on device periphery. Propul-

sion control is effected by adjusting mechanical energy taken off the device and by producing radial electric polarization on its periphery by means of annular electrodes separated from rotor rollers by air gap. Electrodes are connected to high-voltage power supply. Generating process includes electric power supply to starting gear, acceleration of rotor shaft to working speed, take-off of generated energy, and adjustment of mentioned energy and propulsion by varying rotor and stator speed through varying load of generator connected to device as well as by adjusting high voltage applied from external power supply. EFFECT: Reduced energy consumption. 9 cl, 17 dwg.