

Title (en)

HEAT ENGINE COMPRISING MAGNETOCALORIC MATERIAL OF THE REFRIGERATING MACHINE OR HEAT PUMP TYPE

Title (de)

WÄRMEKRAFTMASCHINE MIT MAGNETOKALORISCHEM MATERIAL VOM KÄLTEMASCHINEN- ODER WÄRMEPUMPENTYP

Title (fr)

MACHINE THERMIQUE À MATÉRIAU MAGNÉTOCALORIQUE DU GENRE MACHINE FRIGORIFIQUE OU POMPE À CHALEUR

Publication

EP 3177879 A1 20170614 (FR)

Application

EP 15748021 A 20150803

Priority

- FR 1457627 A 20140806
- EP 2015067828 W 20150803

Abstract (en)

[origin: WO2016020327A1] A heat engine comprising magnetocaloric material comprises a central shaft (4), a rotor (6) mounted so as to rotate on the central shaft (4), the rotor (6) having an active bed (60) comprising magnetocaloric material, the active bed (60) being designed to guide a heat transfer fluid, a hot distributor (7c) and a cold distributor (7f) that are placed respectively next to the hot and cold ends (600c, 600f) in order to supply or receive the heat transfer fluid circulating through the active bed (60). The rotor (6) has a hot plate (61c) and a cold plate (61f) that are mounted so as to rotate on the central shaft (4) and support the active bed (60) of magnetocaloric material. The machine (1) has first rotating sealing means (16) between the plate (61) and the central shaft (4), and second rotating sealing means (17) between the plate (61) and the adjacent distributor (7) beyond the connecting ring.

IPC 8 full level

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