

Title (en)

MAGNETOCALORIC HEAT PUMP, COOLING DEVICE AND METHOD OF OPERATING THEREOF

Title (de)

MAGNETOKALORISCHE WÄRMEPUMPE, KÜHLVORRICHTUNG UND VERFAHREN ZUM BETRIEB DAVON

Title (fr)

POMPE À CHALEUR MAGNÉTOCALORIQUE, DISPOSITIF DE REFROIDISSEMENT ET PROCÉDÉ D'EXPLOITATION ASSOCIÉ

Publication

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Application

**EP 16795282 A 20161109**

Priority

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Abstract (en)

[origin: CN108351126A] The invention relates to a magnetocaloric heat pump (100) having a regenerator assembly (110) and at least one rotatable magnetic field generator (150), comprising a shaft (160) orientated in a rotation axis (125) and inserted into the axial orifice of the regenerator body (130) of the regenerator assembly (110) and the the axial orifice of at least one magnetic field generator body (150'); the atleast one magnetic field generator (150), wherein the at least one magnetic field generator body (150') is circumferentially disposed around the rotation axis (125) and comprises first and second magnetic ring sections (151', 151'') including first and second permanent magnet (152', 152'') respectively, the first and second permanent magnet (152', 152'') of each magnetic field generator (150) are mounted on a support structure (153), wherein the support structure comprises first and second yoke section (153', 153'') including first and second yoke body (154', 154''), wherein the first and second yoke body (154', 154'') are positioned about the rotation axis (125), and wherein the magnetic field generator (150) is rotatably connected with the shaft (160); and the regenerator assembly (110), wherein the regenerator body (130) is circumferentially disposed around the rotation axis (125) and comprises a magnetocaloric material (120) distributed within the regenerator body (130) and the regenerator assembly (110) is arranged around the shaft (160).

IPC 8 full level

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