

Title (en)
A COMPACT MAGNETIC POWER UNIT

Title (de)
KOMPAKTE MAGNETISCHE ANTRIEBSEINHEIT

Title (fr)
UNITÉ DE PUISSANCE MAGNÉTIQUE COMPACTE

Publication
EP 3319096 A1 20180509 (EN)

Application
EP 16002354 A 20161107

Priority
EP 16002354 A 20161107

Abstract (en)
It comprises a magnetic core (10) including at least one coil (70a, 70b, 70c) wound around the magnetic core (10) and at least one cooling structure (50) including a non-metallic thermally conductive element built as a heat pipe (51) arranged inside a hole or inner cavity (30) of said magnetic core (10) and comprising at one of its ends a heat dissipation member (52). The heat pipe (51) can be made in a thermoplastic or ceramic material having magnetic, or non-magnetic, paramagnetic or diamagnetic properties and is a hollow pipe filled with a fluid having a low boiling point. The heat dissipation member (52) ends in a dissipation plate.

IPC 8 full level
H01F 27/18 (2006.01)

CPC (source: EP)
H01F 27/18 (2013.01)

Citation (applicant)

- DE 19814896 A1 19990708 - VACUUMSCHMELZE GMBH [DE]
- EP 0498897 A1 19920819 - FURUKAWA ELECTRIC CO LTD [JP]
- US 6777835 B1 20040817 - SINES EDDIE [US]
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Citation (search report)

- [XYI] US 2015310976 A1 20151029 - TONG AI-XING [CN], et al
- [Y] DE 19814897 A1 19991014 - VACUUMSCHMELZE GMBH [DE]
- [Y] US 3541487 A 19701117 - LEONARD MERRILL G
- [Y] US 3681628 A 19720801 - KRASTCHEW CHRISTOSLAW
- [Y] US 4210859 A 19800701 - CARMON AMIRAM [IL], et al
- [A] US 2007251673 A1 20071101 - HOU CHUEN-SHU [TW], et al

Cited by
CN114005651A; EP4254444A1; EP4254445A1; EP3578880A1; US11152146B2; EP3428937A1; EP3493228A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

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