

Title (en)

ELECTRICAL MACHINE WITH AIR-COOLED CONTROL CHIP

Title (de)

ELEKTRISCHE MASCHINE MIT LUFTGEKÜHLTER REGLER-CHIP

Title (fr)

MACHINE ELECTRIQUE A PUCE DE REGLAGE A REFROIDISSEMENT PAR AIR

Publication

**EP 1368881 A1 20031210 (DE)**

Application

**EP 02714029 A 20020216**

Priority

- DE 0200576 W 20020216
- DE 10110128 A 20010302

Abstract (en)

[origin: WO02071580A1] The invention relates to an electrical machine, especially a generator for a motor vehicle comprising a housing (2), a runner (6) that is mounted in the housing (2) to be rotatable about an axis of rotation (5), at least one fan wheel (20) linked with the runner (6) to generate a cooling air flow (22, 22', 22'') of at least one intake opening (37; 37'; 37'') arranged in the housing (2) to at least one outlet opening (24) arranged in the housing (2), and at least one control chip (31) arranged on the chip support (30) for controlling power generation. The invention is further characterized in that the chip support (30) is arranged in such a manner that at least part of the cooling air flow (22, 22', 22'') flows directly around the chip support. The inventive arrangement provides a very high heat transmission coefficient due to the high flow speed of the cooling air flow (22, 22', 22'').

IPC 1-7

**H02K 11/04**; **H02K 5/14**

IPC 8 full level

**H02K 5/22** (2006.01); **H02K 9/06** (2006.01); **H02K 19/36** (2006.01); **H02K 5/14** (2006.01); **H02K 9/28** (2006.01)

CPC (source: EP US)

**H02K 19/36** (2013.01 - EP US); **H02K 19/365** (2013.01 - EP US); **H02K 5/141** (2013.01 - EP US); **H02K 9/06** (2013.01 - EP US); **H02K 9/28** (2013.01 - EP US)

Citation (search report)

See references of WO 02071580A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

**WO 02071580 A1 20020912**; BR 0204456 A 20030513; DE 10110128 A1 20020905; DE 10110128 B4 20150702; EP 1368881 A1 20031210; JP 2004519195 A 20040624; JP 4083019 B2 20080430; MX PA02010756 A 20031006; US 2003173847 A1 20030918; US 6897583 B2 20050524

DOCDB simple family (application)

**DE 0200576 W 20020216**; BR 0204456 A 20020216; DE 10110128 A 20010302; EP 02714029 A 20020216; JP 2002570380 A 20020216; MX PA02010756 A 20020216; US 25869303 A 20030304