Title (en)

DEVICE COMPRISING AT LEAST ONE HEAT SOURCE FORMED BY A FUNCTIONAL ELEMENT THAT IS TO BE COOLED, AT LEAST ONE HEAT SINK, AND AT LEAST ONE INTERMEDIATE LAYER LOCATED BETWEEN THE HEAT SOURCE AND THE HEAT SINK AND MADE OF A THERMALLY CONDUCTING MATERIAL, AND THERMALLY CONDUCTING MATERIAL, ESPECIALLY FOR USE IN SUCH A DEVICE

Title (de)

VORRICHTUNG MIT WENIGSTENS EINER VON EINEM ZU KÜHLENDEN FUNKTIONSELEMENT GEBILDETEN WÄRMEQUELLE, MIT WENIGSTENS EINER WÄRMESENKE UND MIT WENIGSTENS EINER ZWISCHENLAGE AUS EINER THERMISCHEN LEITENDEN MASSE ZWISCHEN DER WÄRMEQUELLE UND DER WÄRMESENKE SOWIE THERMISCHE LEITENDE MASSE, INSBESONDERE ZUR VERWENDUNG BEI EINER SOLCHEN VORRICHTUNG

Title (fr)

DISPOSITIF COMPRENANT AU MOINS UNE SOURCE THERMIQUE FORMEE PAR UN ELEMENT FONCTIONNEL A REFROIDIR, AU MOINS UN PUITS THERMIQUE ET AU MOINS UNE COUCHE INTERMEDIAIRE EN MATIERE THERMOCONDUCTRICE ENTRE LA SOURCE THERMIQUE ET LE PUITS THERMIQUE, AINSI QUE MATIERE THERMOCONDUCTRICE A UTILISER NOTAMMENT DANS UN TEL DISPOSITIF

Publication

EP 1652231 A1 20060503 (DE)

Application

EP 04738584 A 20040602

Priority

- DE 2004001115 W 20040602
- DE 10327530 A 20030617

Abstract (en)

[origin: WO2004114404A1] The invention relates to a novel device comprising a heat source that is formed by at least one electrical or electronic component or is provided with such a component, a heat sink, and an intermediate layer which is located between the heat source and the heat sink and is made of a thermally conducting material. Said thermally conducting material consists of an organic matrix with incorporated nanofibers.

IPC 1-7

H01L 23/373; C01B 31/02

IPC 8 full level

B62D 33/02 (2006.01); **H01L 23/373** (2006.01); H05K 3/00 (2006.01)

CPC (source: EP US)

H01L 23/373 (2013.01 - EP US); **H01L 23/3737** (2013.01 - EP US); **H01L 24/29** (2013.01 - EP US); H01L 2224/2929 (2013.01 - EP US); H01L 2224/29393 (2013.01 - EP US); H01L 2224/32245 (2013.01 - EP US); H01L 2924/1301 (2013.01 - EP US); H01L 2924/13034 (2013.01 - EP US); H01L 2924/13091 (2013.01 - EP US); H01L 2924/14 (2013.01 - EP US); H01L 2924/15787 (2013.01 - EP US); H01L 2924/3011 (2013.01 - EP US); H05K 3/0058 (2013.01 - EP US); Y10T 428/2913 (2015.01 - EP US); Y10T 428/30 (2015.01 - EP US)

Citation (search report)

See references of WO 2004114404A1

Citation (examination)

- US 2003096104 A1 20030522 - TOBITA MASAYUKI [JP], et al
- EP 1186689 A1 20020313 - POLYMATECH CO LTD [JP]

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004114404 A1 20041229; CN 1813348 A 20060802; CN 1813348 B 20110112; DE 10327530 A1 20050120; EP 1652231 A1 20060503; JP 2006527912 A 20061207; JP 4711956 B2 20110629; US 2007091572 A1 20070426; US 7800908 B2 20100921

DOCDB simple family (application)

DE 2004001115 W 20040602; CN 200480016887 A 20040602; DE 10327530 A 20030617; EP 04738584 A 20040602; JP 2006515666 A 20040602; US 56143304 A 20040602