

Title (en)
CIRCUIT-BOARD DEVICE.

Title (de)
ANORDNUNG BESTEHEND AUS EINER LEITERPLATTE.

Title (fr)
DISPOSITIF CONSTITUE D'UNE CARTE IMPRIMEE.

Publication
EP 0674827 A1 19951004 (DE)

Application
EP 94929471 A 19941014

Priority

- DE 9401216 W 19941014
- DE 4335946 A 19931021

Abstract (en)
[origin: WO9511580A1] The aim of the invention is to conduct away the heat produced by the operation of a power component (10) soldered on to a circuit board (13) via a soldering surface (12). To remove the heat, through-contacts (18) are provided which are situated outside the soldering surface (12) and are electrically insulated by a length of insulation (19). These through-contacts (18) ensure good thermal contact through the floor (23) of the circuit board (13) to the heat sink (35). The length of insulation (19) ensures that the contact surface of the power component (10), which is raised to an electrical potential, is separated electrically from the contact surface of the heat sink (35), which is normally earthed. The intermediate layers (21, 22) which will also be present in a multilayer circuit board (13) of conventional design and the use of through-contacts (18) filled with tin further enhance the conduction of heat from the power component (10) to the heat sink (35).

IPC 1-7
H05K 1/02; H05K 7/20

IPC 8 full level
H05K 1/02 (2006.01); **H05K 7/20** (2006.01); **H05K 1/00** (2006.01); **H05K 3/42** (2006.01)

CPC (source: EP)
H05K 1/0207 (2013.01); **H05K 1/0209** (2013.01); **H05K 1/0206** (2013.01); **H05K 1/0298** (2013.01); **H05K 3/429** (2013.01);
H05K 2201/09572 (2013.01); **H05K 2201/09618** (2013.01); **H05K 2201/09663** (2013.01); **H05K 2201/09781** (2013.01);
H05K 2201/10166 (2013.01); **H05K 2201/10689** (2013.01)

Citation (search report)
See references of WO 9511580A1

Designated contracting state (EPC)
DE FR GB IT SE

DOCDB simple family (publication)
DE 4335946 A1 19950427; DE 4335946 C2 19970911; EP 0674827 A1 19951004; JP H08505013 A 19960528; WO 9511580 A1 19950427

DOCDB simple family (application)
DE 4335946 A 19931021; DE 9401216 W 19941014; EP 94929471 A 19941014; JP 51117995 A 19941014