

Title (en)  
POWER SEMICONDUCTOR MODULE

Title (de)  
LEISTUNGSHALBLEITERMODUL

Title (fr)  
MODULE DE SEMI-CONDUCTEURS DE PUISSANCE

Publication  
**EP 1784863 A1 20070516 (DE)**

Application  
**EP 05754424 A 20050520**

Priority  
• EP 2005005505 W 20050520  
• DE 102004042367 A 20040901

Abstract (en)  
[origin: WO2006024330A1] The power semiconductor module (1) comprises a heat-conducting base plate (11) on which at least three substrates (2, 3, 4, 5, 6, 7) are placed, each substrate supporting at least one power semiconductor component (8, 9) that gives off heat generated during operation. In order to optimize a power semiconductor module of this type with regard to mechanical load and heat dissipation, the substrates (2, 3, 4, 5, 6, 7) are placed on the base plate (11) while being arranged in a single row (12), and pressing devices (15, 16), which are situated close to the substrate, are provided on both longitudinal sides (11a, 11b) of the base plate (11) while being arranged parallel to the row (12). The base plate can be pressed against a cooling surface by means of said pressing devices.

IPC 8 full level  
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CPC (source: EP US)  
**H01L 25/072** (2013.01 - EP US); **H01L 25/162** (2013.01 - EP US); **H01L 2224/0603** (2013.01 - EP); **H01L 2924/0002** (2013.01 - EP US)

Citation (search report)  
See references of WO 2006024330A1

Citation (examination)  
• WO 03021680 A2 20030313 - EUPEC GMBH [DE], et al  
• EP 1104025 A1 20010530 - MITSUBISHI ELECTRIC CORP [JP]

Designated contracting state (EPC)  
DE

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**DE 102004042367 A1 20060309**; **DE 102004042367 B4 20080710**; EP 1784863 A1 20070516; JP 2008511974 A 20080417; JP 4759716 B2 20110831; US 2007205500 A1 20070906; US 7968988 B2 20110628; WO 2006024330 A1 20060309

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