

Title (en)

DOPED ALLOYS FOR ELECTRICAL INTERCONNECTS, METHODS OF PRODUCTION AND USES THEREOF

Title (de)

DOTIERTE LEGIERUNGEN FÜR ELEKTRISCHE VERBINDUNGEN, HERSTELLUNGSVERFAHREN UND VERWENDUNGEN DAFÜR

Title (fr)

ALLIAGES DOPES POUR DES INTERCONNEXIONS ELECTRIQUES ET PROCEDES DE PRODUCTION ET D'UTILISATION DESDITS ALLIAGES

Publication

EP 1665337 A4 20071031 (EN)

Application

EP 04783167 A 20040907

Priority

- US 2004028837 W 20040907
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Abstract (en)

[origin: WO2005027198A2] Solder materials and dopants described herein comprise at least one solder material, at least one phosphorus-based dopant and at least one copper-based dopant. Methods of forming doped solder materials include: a) providing at least one solder material; b) providing at least one phosphorus-based dopant; c) providing at least one copper-based dopant, and d) blending the at least one solder material, the at least one phosphorus-based dopant and the at least one copper-based dopant to form a doped solder material. Layered materials are also described herein that comprise: a) a surface or substrate; b) an electrical interconnect; c) a solder material comprising at least one phosphorus-based dopant and at least one copper-based dopant, such as those described herein, and d) a semiconductor die or package. Electronic and semiconductor components that comprise solder materials and/or layered materials described herein are also contemplated.

IPC 8 full level

H01L 23/48 (2006.01); **B23K 35/24** (2006.01); **B23K 35/26** (2006.01); **H01L 21/78** (2006.01); **H01L 23/485** (2006.01); **H01L 23/488** (2006.01); **H01L 23/52** (2006.01); **H01L 29/40** (2006.01)

IPC 8 main group level

H01L (2006.01)

CPC (source: EP KR)

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DOCDB simple family (publication)

WO 2005027198 A2 20050324; **WO 2005027198 A3 20050922**; CN 1943030 A 20070404; DE 04783167 T1 20070104; EP 1665337 A2 20060607; EP 1665337 A4 20071031; JP 2007533457 A 20071122; KR 20070027485 A 20070309; TW 200513337 A 20050416; TW I272152 B 20070201

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