

Title (en)  
PB FREE SOLDER ALLOY

Title (de)  
BLEIFREIE LOTLEGIERUNG

Title (fr)  
ALLIAGE DE SOUDURE SANS PLOMB

Publication  
**EP 1824638 A4 20090708 (EN)**

Application  
**EP 05726536 A 20050202**

Priority  
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Abstract (en)  
[origin: WO2006052049A1] The present invention relates to a solder alloy used for mounting or plating electronic components on a printed circuit board (PCB) and the like, and, more particularly, to a Pb-free Sn-Ag based solder alloy which comprises 0.1 ~ 3.0 wt% of Cu, 0.01 ~ 0.5 wt% of Ni, 0.01 ~ 5.0 wt% of Ag, and the balance of Sn. The Pb-free Sn-Ag based solder alloy of the invention has a lower melting point, and highly enhanced wettability and joining strength, compared with the conventional Pb-free solder alloy, thereby preventing generation of bridges.

IPC 8 full level  
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Citation (search report)  
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• [X] WO 9834755 A1 19980813 - UNIV IOWA STATE RES FOUND INC [US]  
• [X] EP 0847829 A1 19980617 - FORD MOTOR CO [US]  
• [X] KIM K S ET AL: "Effects of fourth alloying additive on microstructures and tensile properties of Sn-Ag-Cu alloy and joints with Cu", MICROELECTRONICS AND RELIABILITY, ELSEVIER SCIENCE LTD, GB, vol. 43, no. 2, 1 January 2003 (2003-01-01), pages 259 - 267, XP008067189, ISSN: 0026-2714  
• See references of WO 2006052049A1

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**KR 2005000305 W 20050202**; CN 200580037289 A 20050202; EP 05726536 A 20050202; JP 2007540243 A 20050202; KR 20040092857 A 20041113; US 57792707 A 20070425