

Title (en)

UNDERFILLING MATERIAL FOR FLIP-CHIP FITTED PRINTED CIRCUIT BOARDS, A PRINTED CIRCUIT BOARD EQUIPPED THEREWITH, AND A METHOD FOR FILLING RATIO VERIFICATION OF CHIPS WHICH ARE UNDERFILLED THEREWITH

Title (de)

UNTERFÜLLMATERIAL FÜR FLIP-CHIP-BESTÜCKTE LEITERPLATTEN, DAMIT AUSGERÜSTETE LEITERPLATTE SOWIE VERFAHREN ZUR FÜLLGRADÜBERPRÜFUNG VON DAMIT UNTERFÜLLTEN CHIPS

Title (fr)

MATERIAU D'APPOINT EN CAS DE REMPLISSAGE INSUFFISANT POUR CARTES DE CIRCUITS MUNIES DE PUCES A BOSSES, CARTE DE CIRCUIT AINSI POURVUE ET PROCEDE DE SURVEILLANCE DU NIVEAU DE REMPLISSAGE DE PUCES MUNIES DUDIT MATERIAU D'APPOINT

Publication

EP 1060508 A1 20001220 (DE)

Application

EP 99915538 A 19990226

Priority

- DE 19808516 A 19980227
- EP 9901239 W 19990226

Abstract (en)

[origin: DE19808516A1] The invention relates to a method for verifying the distribution and the filling ratio of underfilling materials by means of X-ray inspection, for example, to detect how they are mounted between the chip and the substrate during or after the soldering of chips on a substrate. Said substrate is provided for mechanical support and for supporting the solder bumps. According to the invention, an auxiliary substance or filling substance which absorbs X-rays is incorporated in the underfilling material. The invention makes it possible to reliably test such underfilling stabilizations also during a running production process for fitted printed circuit boards.

IPC 1-7

H01L 21/66

IPC 8 full level

H01L 21/66 (2006.01); **G01R 31/303** (2006.01)

CPC (source: EP)

H01L 22/24 (2013.01); **G01R 31/303** (2013.01); **H01L 2924/0002** (2013.01)

Citation (search report)

See references of WO 9944230A1

Designated contracting state (EPC)

FI FR GB IT NL SE

DOCDB simple family (publication)

DE 19808516 A1 19990909; EP 1060508 A1 20001220; WO 9944230 A1 19990902

DOCDB simple family (application)

DE 19808516 A 19980227; EP 9901239 W 19990226; EP 99915538 A 19990226