

Title (en)

COMPONENT AND METHOD FOR THE PRODUCTION THEREOF

Title (de)

BAUTEIL UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)

COMPOSANT ET SON PROCEDE DE REALISATION

Publication

EP 1190446 A1 20020327 (DE)

Application

EP 00934843 A 20000622

Priority

- CH 0000339 W 20000622
- CH 119799 A 19990628

Abstract (en)

[origin: WO0101478A1] A substrate (1) is provided with a mainly copper layer (2). A wire (3) is joined to the copper layer (2) by means of bonding and by formation of an intermetallic compound, whereby a hard layer (5) which is applied to the mainly copper layer (2) is broken up in the bond area. The hard layer is stable at a temperature of at least 80 DEG C. At this temperature said layer acts as an oxygen diffusion barrier, acting upon aluminium in a manner similar to an aluminium oxide layer which is formed in a normal environment.

IPC 1-7

H01L 21/60; H01L 23/485

IPC 8 full level

H01L 21/3205 (2006.01); **H01L 21/60** (2006.01); **H01L 23/485** (2006.01); **H01L 23/52** (2006.01)

CPC (source: EP KR US)

H01L 23/485 (2013.01 - KR); **H01L 24/03** (2013.01 - EP US); **H01L 24/05** (2013.01 - EP US); **H01L 24/48** (2013.01 - EP US);
H01L 24/85 (2013.01 - EP US); **H01L 24/45** (2013.01 - EP US); **H01L 2224/04042** (2013.01 - EP US); **H01L 2224/05556** (2013.01 - EP US);
H01L 2224/05647 (2013.01 - EP US); **H01L 2224/45** (2013.01 - EP); **H01L 2224/45015** (2013.01 - EP US); **H01L 2224/45124** (2013.01 - EP US);
H01L 2224/45144 (2013.01 - EP US); **H01L 2224/45147** (2013.01 - EP US); **H01L 2224/48** (2013.01 - EP); **H01L 2224/48091** (2013.01 - EP);
H01L 2224/4847 (2013.01 - EP US); **H01L 2224/48647** (2013.01 - EP US); **H01L 2224/48747** (2013.01 - EP US);
H01L 2224/48847 (2013.01 - EP US); **H01L 2224/85** (2013.01 - EP); **H01L 2224/85205** (2013.01 - EP US); **H01L 2224/85375** (2013.01 - EP US);
H01L 2224/85948 (2013.01 - EP US); **H01L 2924/01005** (2013.01 - EP US); **H01L 2924/01006** (2013.01 - EP US);
H01L 2924/01007 (2013.01 - EP US); **H01L 2924/01013** (2013.01 - EP US); **H01L 2924/01014** (2013.01 - EP US);
H01L 2924/01015 (2013.01 - EP US); **H01L 2924/01018** (2013.01 - EP US); **H01L 2924/01019** (2013.01 - EP US);
H01L 2924/01022 (2013.01 - EP US); **H01L 2924/01023** (2013.01 - EP US); **H01L 2924/01024** (2013.01 - EP US);
H01L 2924/01025 (2013.01 - US); **H01L 2924/01028** (2013.01 - EP US); **H01L 2924/01029** (2013.01 - EP US); **H01L 2924/01033** (2013.01 - EP);
H01L 2924/01039 (2013.01 - EP US); **H01L 2924/01041** (2013.01 - EP US); **H01L 2924/0105** (2013.01 - EP US);
H01L 2924/01057 (2013.01 - EP US); **H01L 2924/01068** (2013.01 - EP US); **H01L 2924/01073** (2013.01 - EP US);
H01L 2924/01078 (2013.01 - EP US); **H01L 2924/01079** (2013.01 - EP US); **H01L 2924/01327** (2013.01 - EP US);
H01L 2924/014 (2013.01 - EP US); **H01L 2924/04953** (2013.01 - EP US); **H01L 2924/05042** (2013.01 - EP US); **H01L 2924/14** (2013.01 - EP US);
H01L 2924/19043 (2013.01 - EP US); **H01L 2924/20752** (2013.01 - EP US)

Citation (search report)

See references of WO 0101478A1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 0101478 A1 20010104; AU 5057600 A 20010131; CA 2377628 A1 20010104; CN 1199254 C 20050427; CN 1365517 A 20020821;
EP 1190446 A1 20020327; HK 1048889 A1 20030417; JP 2003503852 A 20030128; KR 100863388 B1 20081013; KR 20020019479 A 20020312;
TW 469550 B 20011221; US 2004087150 A1 20040506; US 6916739 B2 20050712

DOCDB simple family (application)

CH 0000339 W 20000622; AU 5057600 A 20000622; CA 2377628 A 20000622; CN 00809564 A 20000622; EP 00934843 A 20000622;
HK 03100967 A 20030210; JP 2001506605 A 20000622; KR 20017016872 A 20011228; TW 89112547 A 20000626; US 62101103 A 20030716