

Title (en)

COMPOSITE PLATE AND METHOD FOR PRODUCING AND USING SUCH A COMPOSITE PLATE

Title (de)

KOMPOSITPLATTE SOWIE VERFAHREN ZUR HERSTELLUNG UND ANWENDUNG EINER SOLCHEN KOMPOSITPLATTE

Title (fr)

PLAQUE COMPOSITE, SON PROCEDE DE PRODUCTION, ET UTILISATION D'UNE TELLE PLAQUE COMPOSITE

Publication

EP 1129048 A1 20010905 (DE)

Application

EP 99945833 A 19991007

Priority

- CH 9900474 W 19991007
- DE 19846638 A 19981009

Abstract (en)

[origin: DE19846638A1] A composite board (14) comprises a ceramic board (10) directly eutectic bonded to a silver sheet (11). A composite board (14) comprises a ceramic board (10) directly bonded to a metal sheet (11) by a thin reaction zone (13) of a solidified eutectic melt of the metal, the novelty being that the metal sheet (11) is a silver sheet. An Independent claim is also included for production of the above composite board using a CuO-containing or CuO-forming auxiliary layer. Preferred Features: The ceramic board consists of an electrically insulating ceramic, especially Al₂O₃, ZrO₂, ZnO, MgO, MgAlO₂, BaTiO₃ or AlN ceramic, or an electrically conductive ceramic, especially LaNiO₃ ceramic. The reaction zone (13) consists of 99 mol% Ag and 1 mol% CuO.

IPC 1-7

C04B 37/02; **H01L 23/373**

IPC 8 full level

C04B 37/02 (2006.01); **H01L 23/373** (2006.01); **H05K 3/38** (2006.01); **H05K 1/03** (2006.01)

CPC (source: EP)

C04B 37/025 (2013.01); **C04B 37/026** (2013.01); **H01L 23/3735** (2013.01); **H05K 3/38** (2013.01); **C04B 2237/124** (2013.01); **C04B 2237/125** (2013.01); **C04B 2237/126** (2013.01); **C04B 2237/34** (2013.01); **C04B 2237/343** (2013.01); **C04B 2237/346** (2013.01); **C04B 2237/348** (2013.01); **C04B 2237/366** (2013.01); **C04B 2237/408** (2013.01); **C04B 2237/562** (2013.01); **C04B 2237/60** (2013.01); **H01L 2924/0002** (2013.01); **H05K 1/0306** (2013.01)

C-Set (source: EP)

H01L 2924/0002 + **H01L 2924/00**

Citation (search report)

See references of WO 0021904A1

Cited by

CN102150259A; US8946885B2

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)

DE 19846638 A1 20000420; **DE 19846638 C2 20020808**; AU 5847199 A 20000501; EP 1129048 A1 20010905; WO 0021904 A1 20000420

DOCDB simple family (application)

DE 19846638 A 19981009; AU 5847199 A 19991007; CH 9900474 W 19991007; EP 99945833 A 19991007