

Title (en)

CARRIER AND CLIP EACH HAVING SINTERABLE, SOLIDIFIED PASTE FOR CONNECTION TO A SEMICONDUCTOR ELEMENT, CORRESPONDING SINTERING PASTE, AND CORRESPONDING PRODUCTION METHOD AND USE

Title (de)

TRÄGER UND CLIP JEWEILS MIT SINTERBARER, VERFESTIGTER PASTE ZUR VERBINDUNG MIT EINEM HALBLEITERELEMENT, ENTSPRECHENDE SINTERPASTE UND ENTSPRECHENDES HERSTELLUNGSVERFAHREN UND VERWENDUNG

Title (fr)

SUPPORT ET CLIP COMPRENANT CHACUN UNE PÂTE FRITTABLE SOLIDIFIÉE POUR L'ASSEMBLAGE AVEC UN COMPOSANT SEMI-CONDUCTEUR, PÂTE À FRITTER CORRESPONDANTE, PROCÉDÉ DE FABRICATION CORRESPONDANT ET UTILISATION

Publication

EP 3123500 A1 20170201 (DE)

Application

EP 15713177 A 20150326

Priority

- DE 102014104272 A 20140326
- EP 2015056596 W 20150326

Abstract (en)

[origin: WO2015144833A1] The invention relates to a carrier (such as a lead frame) and to a clip for at least one semiconductor element which has at least one functional surface (10) for connection to the semiconductor element and a plurality of connections (11). The invention is characterized in that the material of the carrier or of the clip comprises a metal and a layer (12) made of a solidified (dried) sintering paste, in particular a sintering paste containing silver and/or a silver compound, and is arranged on the functional surface (10), wherein the carrier or clip and the layer (12) made of sintering paste form an intermediate product which can be connected to the semiconductor element. The carrier and the clip are used to produce a packaging having a lead frame (lead frame package) by connection to the chip by means of sintering of the solidified sintering pastes in one work step.

IPC 8 full level

H01L 21/60 (2006.01); **H01L 23/488** (2006.01); **H01L 23/495** (2006.01)

CPC (source: CN EP KR US)

H01L 21/4821 (2013.01 - US); **H01L 23/49513** (2013.01 - CN EP KR US); **H01L 23/49524** (2013.01 - CN EP KR US); **H01L 23/49548** (2013.01 - CN EP KR US); **H01L 23/49551** (2013.01 - CN EP KR US); **H01L 24/27** (2013.01 - CN EP US); **H01L 24/29** (2013.01 - CN EP KR US); **H01L 24/40** (2013.01 - EP US); **H01L 24/83** (2013.01 - CN EP KR US); **H01L 24/84** (2013.01 - CN EP KR US); **H01L 24/92** (2013.01 - CN EP US); **H01L 24/32** (2013.01 - CN EP US); **H01L 24/33** (2013.01 - CN EP US); **H01L 24/37** (2013.01 - CN EP US); **H01L 24/40** (2013.01 - CN); **H01L 2224/27318** (2013.01 - CN EP KR US); **H01L 2224/2732** (2013.01 - CN EP KR US); **H01L 2224/27418** (2013.01 - CN EP US); **H01L 2224/27505** (2013.01 - CN EP US); **H01L 2224/27848** (2013.01 - CN EP US); **H01L 2224/29294** (2013.01 - CN EP US); **H01L 2224/29295** (2013.01 - CN EP US); **H01L 2224/29339** (2013.01 - CN EP US); **H01L 2224/2939** (2013.01 - CN EP US); **H01L 2224/32245** (2013.01 - CN EP US); **H01L 2224/33181** (2013.01 - CN EP US); **H01L 2224/352** (2013.01 - CN EP US); **H01L 2224/371** (2013.01 - CN EP US); **H01L 2224/37639** (2013.01 - CN EP US); **H01L 2224/4005** (2013.01 - US); **H01L 2224/40095** (2013.01 - CN EP US); **H01L 2224/40245** (2013.01 - CN EP US); **H01L 2224/40499** (2013.01 - CN EP US); **H01L 2224/73263** (2013.01 - CN EP US); **H01L 2224/83192** (2013.01 - CN EP US); **H01L 2224/83439** (2013.01 - CN EP US); **H01L 2224/8384** (2013.01 - CN EP KR US); **H01L 2224/8385** (2013.01 - EP US); **H01L 2224/8484** (2013.01 - CN EP KR US); **H01L 2224/8485** (2013.01 - EP US); **H01L 2224/9221** (2013.01 - CN EP US); **H01L 2924/181** (2013.01 - CN EP US)

Citation (search report)

See references of WO 2015144833A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102014104272 A1 20151001; CN 106170856 A 20161130; EP 3123500 A1 20170201; JP 2017511601 A 20170420; JP 6445584 B2 20181226; KR 102025212 B1 20190925; KR 20160139006 A 20161206; US 10347566 B2 20190709; US 2017117209 A1 20170427; WO 2015144833 A1 20151001

DOCDB simple family (application)

DE 102014104272 A 20140326; CN 201580014541 A 20150326; EP 15713177 A 20150326; EP 2015056596 W 20150326; JP 2016558344 A 20150326; KR 20167029739 A 20150326; US 201515129250 A 20150326