

Title (en)

METHOD FOR CONNECTING CROSS-COMPONENTS AT OPTIMISED DENSITY

Title (de)

VERFAHREN ZUM VERBINDEN VON ÜBERGREIFENDEN KOMPONENTEN MIT OPTIMIERTER DICHTE

Title (fr)

PROCÉDÉ DE CONNECTION INTERCOMPOSANTS À DENSITÉ OPTIMISÉE

Publication

EP 3501042 A1 20190626 (FR)

Application

EP 17764883 A 20170818

Priority

- FR 1601237 A 20160818
- FR 2017052247 W 20170818

Abstract (en)

[origin: WO2018033689A1] The invention relates to a method for electrical connection by hybridisation of a first component (100) with a second component (200). The method comprises the following steps: forming pads of ductile material (111, 121) in contact respectively with connection zones (110, 120) of the first component (100); forming inserts (211, 221) of conductive material in contact with the connection zones (210, 220) of the second component (200); forming hybridisation barriers (212, 222) arranged between the inserts (211, 221) and electrically insulated from each other, said first and second hybridisation barriers (212, 222) serving as a barrier by containing the deformation of the pads of ductile material (111, 121) during the connection of the connection zones (210, 220) of the first component (100) with those of the second component (200). The invention also relates to an assembly (1) of two connected components (100, 200).

IPC 8 full level

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

CPC (source: EP US)

H01L 24/11 (2013.01 - EP); **H01L 24/13** (2013.01 - EP); **H01L 24/16** (2013.01 - EP); **H01L 24/81** (2013.01 - EP); **H01L 25/0657** (2013.01 - EP);
H01L 25/50 (2013.01 - EP); **H01L 27/14634** (2013.01 - US); **H01L 27/14636** (2013.01 - US); **H01L 27/1469** (2013.01 - US);
H01L 2224/0401 (2013.01 - EP); **H01L 2224/05554** (2013.01 - EP); **H01L 2224/05555** (2013.01 - EP); **H01L 2224/05568** (2013.01 - EP);
H01L 2224/05573 (2013.01 - EP); **H01L 2224/05582** (2013.01 - EP); **H01L 2224/05639** (2013.01 - EP); **H01L 2224/05644** (2013.01 - EP);
H01L 2224/05655 (2013.01 - EP); **H01L 2224/05664** (2013.01 - EP); **H01L 2224/05669** (2013.01 - EP); **H01L 2224/10145** (2013.01 - EP);
H01L 2224/11472 (2013.01 - EP); **H01L 2224/1148** (2013.01 - EP); **H01L 2224/11602** (2013.01 - EP); **H01L 2224/1182** (2013.01 - EP);
H01L 2224/13007 (2013.01 - EP); **H01L 2224/13011** (2013.01 - EP); **H01L 2224/13012** (2013.01 - EP); **H01L 2224/13014** (2013.01 - EP);
H01L 2224/13019 (2013.01 - EP); **H01L 2224/13023** (2013.01 - EP); **H01L 2224/13078** (2013.01 - EP); **H01L 2224/13147** (2013.01 - EP);
H01L 2224/13164 (2013.01 - EP); **H01L 2224/13166** (2013.01 - EP); **H01L 2224/13169** (2013.01 - EP); **H01L 2224/13171** (2013.01 - EP);
H01L 2224/13184 (2013.01 - EP); **H01L 2224/13186** (2013.01 - EP); **H01L 2224/13562** (2013.01 - EP); **H01L 2224/1357** (2013.01 - EP);
H01L 2224/13644 (2013.01 - EP); **H01L 2224/1601** (2013.01 - EP); **H01L 2224/81099** (2013.01 - EP); **H01L 2224/81193** (2013.01 - EP);
H01L 2224/81201 (2013.01 - EP); **H01L 2224/81345** (2013.01 - EP); **H01L 2224/81898** (2013.01 - EP); **H01L 2225/06513** (2013.01 - EP);
H01L 2924/3841 (2013.01 - EP)

C-Set (source: EP)

1. **H01L 2224/05644 + H01L 2924/00014**
2. **H01L 2224/13166 + H01L 2924/00014**
3. **H01L 2224/13184 + H01L 2924/01014**
4. **H01L 2224/13184 + H01L 2924/049**
5. **H01L 2224/13186 + H01L 2924/01074**
6. **H01L 2224/13186 + H01L 2924/04941**
7. **H01L 2224/13171 + H01L 2924/00014**
8. **H01L 2224/13169 + H01L 2924/00014**
9. **H01L 2224/13164 + H01L 2924/00014**
10. **H01L 2224/13644 + H01L 2924/00014**
11. **H01L 2224/1601 + H01L 2924/00012**
12. **H01L 2224/05639 + H01L 2924/00014**
13. **H01L 2224/81201 + H01L 2924/00012**
14. **H01L 2224/05655 + H01L 2924/00014**
15. **H01L 2224/05664 + H01L 2924/00014**
16. **H01L 2224/05669 + H01L 2924/00014**
17. **H01L 2224/05555 + H01L 2924/00014**
18. **H01L 2224/1182 + H01L 2924/00014**
19. **H01L 2224/13012 + H01L 2924/00012**
20. **H01L 2224/13147 + H01L 2924/00014**

Citation (search report)

See references of WO 2018033689A1

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)

WO 2018033689 A1 20180222; CN 109791920 A 20190521; EP 3501042 A1 20190626; FR 3055166 A1 20180223; FR 3055166 B1 20201225;
US 2021280628 A1 20210909

DOCDB simple family (application)

**FR 2017052247 W 20170818; CN 201780058209 A 20170818; EP 17764883 A 20170818; FR 1601237 A 20160818;
US 201716325095 A 20170818**