

Title (en)  
SOLDER ALLOY OR TIN CONTACT BUMP STRUCTURE FOR UNENCAPSULATED MICROCIRCUITS AS WELL AS A PROCESS FOR THE PRODUCTION THEREOF

Title (de)  
STRUKTUR EINES HÖCKERKONTAKTES AUS EINER LOTLEGIERUNG ODER AUS ZINN FÜR NICHT EINGEKAPSELTE MIKROSCHALTUNGEN UND HERSTELLUNGSVERFAHREN

Title (fr)  
BOSSE DE CONTACT EN ETAIN OU EN ALLIAGE DE SOUDAGE POUR MICROCIRCUITS NON ENCAPSULES, ET PROCEDE DE REALISATION D'UNE TELLE BOSSE

Publication  
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Application  
**EP 97924046 A 19970530**

Priority  
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• FI 962277 A 19960531

Abstract (en)  
[origin: WO9745871A1] The invention relates to a solder or tin contact bump structure and a method for the production thereof for unencapsulated microcircuits (15) comprising a substrate (15), contact pad areas (3) of aluminium formed on said substrate (15), a composite metal structure formed on the contact pad areas (3), formed of a TiW layer (7), an Au layer (4) formed thereon, and an Ni layer (5) formed on said Au layer, and a solder contact bump (6) formed on the composite metal structure (7, 4, 5). According to the invention the TiW layer (7) is sputtered in the presence of nitrogen and argon in connection with the layering, whereafter it is subject to oxygen treatment, and the Au layer (4) is formed by one deposition process only.

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IPC 8 full level  
**H01L 21/60** (2006.01)

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C-Set (source: EP)  
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2. **H01L 2224/13155 + H01L 2924/00014**  
3. **H01L 2224/1308 + H01L 2224/13111**  
4. **H01L 2924/00013 + H01L 2224/13099**  
5. **H01L 2224/05655 + H01L 2924/00014**  
6. **H01L 2224/05124 + H01L 2924/00014**  
7. **H01L 2224/05144 + H01L 2924/00014**  
8. **H01L 2224/05166 + H01L 2924/00014**  
9. **H01L 2224/05166 + H01L 2924/01074 + H01L 2924/013**

Citation (search report)  
See references of WO 9745871A1

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DE DK FI FR GB IE IT NL SE

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