

Title (en)  
FIDUCIAL ALIGNMENT MARKS ON MICROELECTRONIC SPRING CONTACTS

Title (de)  
JUSTIERMARKEN AUF MIKROELEKTRONISCHEN FEDERKONTAKTEN

Title (fr)  
MARQUES D'ALIGNEMENT DE REPERE SUR DES CONTACTS A RESSORT MICRO-ELECTRONIQUES

Publication  
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Application  
**EP 02752348 A 20020715**

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Abstract (en)  
[origin: WO2004015432A1] Microelectronic spring contacts with fiducial alignment marks for use on a semiconductor wafer contactor or similar apparatus, and methods for making such marks by using a sacrificial substrate, are disclosed. Each alignment mark is placed on a pad adjacent to a contact tip. The alignment mark is positioned on the pad so that it will not contact the terminal or any other part of a wafer under test. The alignment mark and the contact tip are preferably positioned on the pad in the same lithographic step. Then, the pad and like pads, selected ones of which also have similar alignment marks, are attached to the ends of an array of resilient contact elements. A plurality of alignment marks accurately positioned in relation to a plurality of contact tips on a contactor is thus disclosed. Configurations for ensuring that the alignment marks remain free of debris and easily located for essentially the entire life of the contact are disclosed, as are various different exemplary shapes of alignment marks.

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IPC 8 full level  
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**H01L 2924/0002** (2013.01 - EP)

Citation (search report)  
See references of WO 2004015432A1

Citation (examination)  
• US 6566149 B1 20030520 - KANAMARU MASATOSHI [JP], et al  
• US 2007045874 A1 20070301 - ELDRIDGE BENJAMIN N [US], et al  
• WO 0016107 A1 20000323 - HITACHI LTD [JP], et al

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EP 1523684 A1 20050420; JP 2005533263 A 20051104; KR 100880088 B1 20090123; KR 20050019870 A 20050303

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