

Title (en)  
Erroneous insertion prevention structure of electric connectors

Title (de)  
Struktur zur Verhinderung fehlerhaften Einföhrens von elektrischen Steckverbindern

Title (fr)  
Structure de prévention d'insertion erronée de connecteurs électriques

Publication  
**EP 2637263 A1 20130911 (EN)**

Application  
**EP 13155577 A 20130218**

Priority  
JP 2012050359 A 20120307

Abstract (en)  
In an erroneous insertion prevention structure of electric connectors in a fitting structure between a plug (3, 5, 12 or 14) and a receptacle (2, 4, 11 or 13) of each of the electric connectors provided with insulating housings (3a, 5a, 12a or 14a, and 2a, 4a, 11 a or 13a) and a plurality of contacts (6, 7, 8, 6a, 7a, 8a, 16, 16a) to be fixedly positioned on the insulating housings in a case where a plurality of the electric connectors at least having the same number of contacts and substantially the same shape and dimensions are mounted on an apparatus, the insulating housings of the plug and the receptacle are provided with a fitting portion including a key projection (3b, 5b, 12b or 14b) and a key groove (2b, 4b, 11 b or 13b) which allows the key projection to be fitted thereto respectively, and groups of the contacts of the connectors include combinations of the contacts having pitches in the vertical direction or in the lateral direction different from each other.

IPC 8 full level  
**H01R 13/642** (2006.01)

CPC (source: EP)  
**H01R 13/642** (2013.01)

Citation (applicant)  
JP 2010165624 A 20100729 - DAIICHI DENSHI KOGYO

Citation (search report)  
• [XY] WO 2006083920 A1 20060810 - TYCO ELECTRONICS CORP [US]  
• [XI] GB 2224890 A 19900516 - THYSSEN INDUSTRIE [DE]  
• [XI] WO 2004095647 A1 20041104 - TWINSAYER CO LTD [KR], et al  
• [Y] US 4764129 A 19880816 - JONES BRIAN [GB], et al  
• [AD] EP 2209171 A2 20100721 - DDK LTD [JP]

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CN108389746A; CN114171989A; US10923855B2; US11063393B2; WO2020010095A1

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)  
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**EP 2637263 A1 20130911**; CN 103311744 A 20130918; JP 2013187006 A 20130919

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**EP 13155577 A 20130218**; CN 201310032549 A 20130129; JP 2012050359 A 20120307