

Title (en)
CONNECTION STRUCTURE OF ELECTRICAL EQUIPMENT

Title (de)
VERBINDUNGSSTRUKTUR EINER ELEKTRISCHEN AUSRÜSTUNG

Title (fr)
STRUCTURE DE CONNEXION D'UN ÉQUIPEMENT ÉLECTRIQUE

Publication
EP 3627624 A1 20200325 (EN)

Application
EP 19158747 A 20190222

Priority
JP 2018174760 A 20180919

Abstract (en)
Provided is a connection structure of electrical equipment configured to enable improvement in durability of a plate spring while reducing manufacturing cost by reducing the number of components and reducing the number of assembly steps. A plate spring 21 includes a fixed portion 22, an electrical wire retaining portion 26 continuing from a circular arc-shaped circular arc bent portion 25 provided between the fixed portion and the electrical wire retaining portion, and plastic deformation preventing portions 27 extending from the fixed portion toward the electrical wire retaining portion. The plate spring is arranged in an electrical wire insertion space 10a such that the fixed portion is fixed to a fixed contact 15 at a position facing a contact point portion 15d, the circular arc bent portion is arranged to protrude in a direction away from the contact point portion, and the electrical wire retaining portion traverses near an opening portion of an electrical wire insertion inlet 12a to allow a leading end of the electrical wire retaining portion to extend toward the contact point portion. When the electrical wire retaining portion is moved in the direction away from the contact point portion by a tool S inserted from a tool insertion hole 13, the electrical wire retaining portion abuts with the plastic deformation preventing portion to prevent plastic deformation of the circular arc bent portion.

IPC 8 full level
H01R 4/48 (2006.01); **H01R 9/24** (2006.01)

CPC (source: CN EP US)
H01H 50/14 (2013.01 - CN); **H01R 4/48** (2013.01 - CN); **H01R 4/4821** (2023.08 - CN EP US); **H01R 4/4842** (2023.08 - CN EP US); **H01R 13/187** (2013.01 - CN); **H01R 4/485** (2023.08 - CN EP US); **H01R 9/24** (2013.01 - EP)

Citation (applicant)
JP 2018056077 A 20180405 - OMRON TATEISI ELECTRONICS CO, et al

Citation (search report)
• [XY] EP 3343702 A1 20180704 - OMRON TATEISI ELECTRONICS CO [JP]
• [YA] GB 1412437 A 19751105 - AMP INC
• [YA] US 5860837 A 19990119 - BOECK WERNER [DE], et al

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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DOCDB simple family (publication)
EP 3627624 A1 20200325; CN 110931990 A 20200327; CN 110931990 B 20211119; JP 2020047464 A 20200326

DOCDB simple family (application)
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