

Title (en)

ELECTRICALLY CONDUCTING SCREW CONNECTION AND SPECIAL SCREW FOR SUCH A SCREW CONNECTION

Title (de)

ELEKTRISCH LEITENDE SCHRAUBVERBINDUNG UND SPEZIALSCHRAUBE FÜR EINE SOLCHE SCHRAUBVERBINDUNG

Title (fr)

LIAISON VISSÉE ÉLECTROCONDUCTRICE ET VIS SPÉCIALE POUR UNE TELLE LIAISON VISSÉE

Publication

EP 2580487 A1 20130417 (DE)

Application

EP 11782538 A 20110607

Priority

- DE 202010007769 U 20100609
- DE 2011050018 W 20110607

Abstract (en)

[origin: CA2799768A1] The invention relates to an electrically conducting screw connection between two parts (10, 12) which are fastened to each other by a screw (16) having a screw head (18) and a shaft (22) and by a nut (28), wherein the screw (16) extends through a hole (14) in one of the parts (10), wherein the electrical contact between the other part (12) and the screw (16) is established by teeth (27) on the workpiece-side surface of the screw head (18) and/or of the nut (28) or of a washer (30) arranged between the nut (28) and the outer part (12), while the contact between the screw (16) and the one part (10) is established by elevations (26) on the shaft (22) of the screw (16), the outer diameter of the elevations being slightly greater than the inner diameter of the hole (14) and the elevations being arranged between the external thread (24) and the screw head (18), wherein the elevations (26) have flanks (42, 44) that extend at an angle and that meet each other at an angle of approximately 60° and that are connected to each other by circular arc sections (46, 48).

IPC 8 full level

F16B 35/04 (2006.01); **F16B 35/06** (2006.01)

CPC (source: EP KR US)

F16B 35/04 (2013.01 - KR); **F16B 35/041** (2013.01 - EP US); **F16B 35/06** (2013.01 - KR); **H01R 4/304** (2013.01 - EP US); **H01R 4/307** (2013.01 - US); **F16B 35/065** (2013.01 - EP US); **F16B 2200/93** (2023.08 - EP US); **H01R 4/64** (2013.01 - EP US); **H01R 2201/26** (2013.01 - EP US)

Citation (search report)

See references of WO 2012019600A1

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

DOCDB simple family (publication)

DE 202010007769 U1 20100819; AU 2011288685 A1 20121220; AU 2011288685 B2 20140220; BR 112012030683 A2 20160913; CA 2799768 A1 20120216; CN 103080571 A 20130501; DE 112011104207 A5 20130926; EP 2580487 A1 20130417; JP 2013529278 A 20130718; KR 20130043639 A 20130430; MX 2012014377 A 20130129; US 2013130563 A1 20130523; WO 2012019600 A1 20120216

DOCDB simple family (application)

DE 202010007769 U 20100609; AU 2011288685 A 20110607; BR 112012030683 A 20110607; CA 2799768 A 20110607; CN 201180028651 A 20110607; DE 112011104207 T 20110607; DE 2011050018 W 20110607; EP 11782538 A 20110607; JP 2013513557 A 20110607; KR 20127033318 A 20110607; MX 2012014377 A 20110607; US 201113702354 A 20110607