

Title (en)

CONTACT MATERIALS FOR USE IN ON-BOARD HIGH-VOLTAGE DIRECT-CURRENT SYSTEMS

Title (de)

KONTAKTWERKSTOFFE FÜR HOCHSPANNUNGS- GLEICHSTROMBORDSYSTEME

Title (fr)

MATERIAUX DE CONTACT POUR UTILISATION DANS DES SYSTEMES DE HAUTE TENSION ET COURANT CONTINUE EMBARQUÉS

Publication

**EP 2849185 B1 20161207 (DE)**

Application

**EP 14002972 A 20140828**

Priority

DE 102013014915 A 20130911

Abstract (en)

[origin: US2015069020A1] A contact element for high voltage direct current switches includes a matrix made of a first material selected from the group comprising copper, silver, palladium, platinum, tungsten, molybdenum, rhenium, nickel, gold, and alloys thereof. The contact element also includes a foreign phase, which is dispersed in the matrix and is made of a second material selected from the group comprising carbon, tin(II) oxide, tin(IV) oxide, zinc(II) oxide, tungsten, nickel and mixtures thereof. The contact element has a porosity of  $\leq 1.0\%$  by volume, based on a total volume of the contact element.

IPC 8 full level

**H01B 1/02** (2006.01); **C23C 4/08** (2006.01); **H01H 1/02** (2006.01); **H01H 1/0237** (2006.01); **H01H 1/025** (2006.01); **H01H 11/04** (2006.01); **H01H 33/59** (2006.01); **H05H 1/36** (2006.01)

CPC (source: EP US)

**H01B 1/02** (2013.01 - EP US); **H01H 1/02372** (2013.01 - EP US); **H01H 1/025** (2013.01 - EP US); **H01H 11/048** (2013.01 - EP US); **H01H 33/10** (2013.01 - US); **C23C 4/08** (2013.01 - US); **H01H 2001/0208** (2013.01 - EP US); **H01H 2201/024** (2013.01 - US); **H01H 2201/026** (2013.01 - US); **H01H 2201/03** (2013.01 - US); **H01H 2239/044** (2013.01 - US); **H01H 2300/036** (2013.01 - EP US)

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