

Title (en)  
PROTECTION ELEMENT AGAINST WEAR

Title (de)  
VERSCHLEIßSCHUTZELEMENT

Title (fr)  
ÉLÉMENT DE PROTECTION CONTRE L'USURE

Publication  
**EP 2855068 A1 20150408 (DE)**

Application  
**EP 13722757 A 20130515**

Priority  
• DE 102012104652 A 20120530  
• EP 2013060038 W 20130515

Abstract (en)  
[origin: WO2013178467A1] The invention relates to a protection element against wear, in particular a knob bolt, comprising a head part (10) from a hard material and a connecting part (20). In order to achieve a protection element against wear that has a material-optimized design, it is provided that the head part (10) is designed as an electrode in an electrically conductive manner or comprises an electrode.

IPC 8 full level  
**B23K 9/20** (2006.01); **B23K 35/02** (2006.01)

CPC (source: CN EP)  
**B23K 9/207** (2013.01 - CN EP); **B23K 35/0288** (2013.01 - CN EP)

Citation (search report)  
See references of WO 2013178467A1

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)  
BA ME

DOCDB simple family (publication)  
**WO 2013178467 A1 20131205**; CN 104349862 A 20150211; DE 102012104652 A1 20131205; EP 2855068 A1 20150408

DOCDB simple family (application)  
**EP 2013060038 W 20130515**; CN 201380027207 A 20130515; DE 102012104652 A 20120530; EP 13722757 A 20130515