

Title (en)

EASILY REMOVABLE RECIPROCATING IMPACT HEAD WITH ANTI-ROTATION SLOT FOR MINING MACHINE

Title (de)

LEICHT ENTFERNBARER HUBKOLBENKOPF MIT ANTI-DREHSCHLITZ FÜR EINE BERGBAUMASCHINE

Title (fr)

TÊTE À IMPACT À MOUVEMENT EN VA-ET-VIENT FACILE À DÉPOSER COMPORTANT UNE FENTE ANTI-ROTATION POUR HAVEUSE

Publication

EP 2942478 A1 20151111 (EN)

Application

EP 14735436 A 20140106

Priority

- CN 201320023824 U 20130104
- CN 201310100163 A 20130313
- CN 201310096331 A 20130315
- CN 201310384442 A 20130823
- CN 201310561729 A 20131107
- CN 201310561655 A 20131107
- CN 201310716478 A 20131224
- CN 201410002136 A 20140103
- CN 2014000009 W 20140106

Abstract (en)

An easily removable reciprocating impact head with an anti-rotation slot for a mining machine comprises a reciprocating impact head device (2), wherein the reciprocating impact head device (2) comprises a reciprocating impact head (4), the reciprocating impact head (4) comprising reciprocating impact teeth (5) and a fixed seat (6), and also comprising a snap spring (7) or an elastic pin (8) or a locking pin (9). The reciprocating impact tooth (5) further comprises an impact tooth (16) and an impact tooth shoulder (17). The impact tooth (16) is arranged on an impact tooth insertion post (14) or an impact tooth insert (15), and the impact tooth shoulder (17) is arranged at the lower part of the impact tooth (16) or arranged at the end of the impact tooth insert (15). The reciprocating impact tooth (5) and the fixed seat (6) comprise a groove for arranging the snap spring (7) or the elastic pin (8) or the locking pin (9), and the snap spring (7) or the elastic pin (8) or the locking pin (9) is arranged in the groove so as to connect the fixed seat (6) and the reciprocating impact tooth (5). The snap spring (7) or the elastic pin (8) or the locking pin (9) is subjected to a rearward pulling force of the reciprocating impact motion. The impact tooth insertion post (14) is inserted into a tooth seat insert (11) or a tooth seat insertion post (12) is inserted into the impact tooth insert (15), the impact tooth shoulder (17) closely mates with a tooth seat shoulder (13) to withstand the counterforce of reciprocating impact, and a slot-type anti-rotation structure is snap-fitted with a post-type anti-rotation structure to prevent the reciprocating impact teeth (5) from rotating.

IPC 8 full level

E21C 27/12 (2006.01); **E21C 35/19** (2006.01); **E21C 35/193** (2006.01)

CPC (source: EP US)

E21C 27/12 (2013.01 - EP US); **E21C 35/19** (2013.01 - EP US); **E21C 35/1936** (2013.01 - EP US)

Cited by

CN108652419A

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)

EP 2942478 A1 20151111; **EP 2942478 A4 20160817**; AP 2015008627 A0 20150831; AU 2014204385 A1 20150820; AU 2014204385 A2 20151008; CA 2897515 A1 20140710; CN 103912273 A 20140709; CN 103912273 B 20180522; CN 203716962 U 20140716; EA 201591272 A1 20160429; MX 2015008674 A 20160304; US 2015337657 A1 20151126; WO 2014106458 A1 20140710; ZA 201505518 B 20191127

DOCDB simple family (application)

EP 14735436 A 20140106; AP 2015008627 A 20140106; AU 2014204385 A 20140106; CA 2897515 A 20140106; CN 2014000009 W 20140106; CN 201410008658 A 20140106; CN 201420006360 U 20140106; EA 201591272 A 20140106; MX 2015008674 A 20140106; US 201414759231 A 20140106; ZA 201505518 A 20150731