

Title (en)

APPARATUS FOR ATTACHING/DETACHING GRINDING TOOL FOR GRINDER

Title (de)

VORRICHTUNG ZUM BEFESTIGEN/LÖSEN EINES SCHLEIFWERKZEUGS FÜR EINE SCHLEIFMASCHINE

Title (fr)

APPAREIL POUR ATTACHER/DÉTACHER UN OUTIL DE MEULAGE POUR MEULEUSE

Publication

EP 3067155 B1 20200212 (EN)

Application

EP 14900065 A 20141127

Priority

- KR 20140108745 A 20140821
- KR 2014011456 W 20141127

Abstract (en)

[origin: EP3067155A1] The present invention relates to a polishing holder removing device for a grinder that allows a grinding tool to be simply coupled/decoupled to/from a coupler, which is mounted on a rotary shaft of a body of a hand grinder and is rotated at a high speed, and that can ensure anti-vibration, stability, continuity, and smooth transmission of power in grinding by more firmly coupling the grinding tool to the coupler. The present invention includes a grinding tool, a coupler, a sleeve, locking balls, a spring, and a cap nut, in which a cylindrical shank, a groove, and a rectangular shank are sequentially formed at an end portion of a body of the grinding tool; the coupler has a seating hole and a rectangular hole where the grinding tool is fitted and fixed, a threaded-hole for fastening to a grinder body, and a flange having two lines of through-holes formed around the outer side; a lower dustproof groove having a step and a seating groove are formed at a side in the sleeve, and an upper dustproof groove is formed at the other side in the sleeve; the locking balls are disposed in the ball holes formed in the coupler and moved toward/away from the cylindrical shank and the groove of the grinding tool when the sleeve moves so that the grinding tool can be fixed or released; the spring applies elasticity when the sleeve slides; and the cap nut retains the sleeve.

IPC 8 full level

B24B 45/00 (2006.01); **B24B 23/02** (2006.01); **B24B 55/05** (2006.01); **B25F 3/00** (2006.01)

CPC (source: EP KR)

B24B 23/022 (2013.01 - EP); **B24B 45/00** (2013.01 - EP KR); **B24B 45/006** (2013.01 - EP); **B24B 55/052** (2013.01 - EP); **B25F 3/00** (2013.01 - EP)

Cited by

CN109048677A; JP2018536545A; US10875147B2

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)

EP 3067155 A1 20160914; **EP 3067155 A4 20170906**; **EP 3067155 B1 20200212**; CN 106061680 A 20161026; CN 106061680 B 20171124; ES 2786188 T3 20201009; KR 101535217 B1 20150709; PT 3067155 T 20200428; WO 2016027936 A1 20160225

DOCDB simple family (application)

EP 14900065 A 20141127; CN 201480040821 A 20141127; ES 14900065 T 20141127; KR 20140108745 A 20140821; KR 2014011456 W 20141127; PT 14900065 T 20141127