

Title (en)
RIVETING TOOL FOR HIGH-STRENGTH RING GROOVE RIVET

Title (de)
NIETWERKZEUG FÜR HOCHFESTE RINGNUTNIETE

Title (fr)
OUTIL DE RIVETAGE POUR RIVET À RAINURE ANNULAIRE À HAUTE RÉSISTANCE

Publication
EP 4316687 A4 20240904 (EN)

Application
EP 22921015 A 20221226

Priority
• CN 202221494563 U 20220615
• CN 2022142118 W 20221226

Abstract (en)
[origin: EP4316687A1] The utility model discloses a riveting tool for a high-strength ring groove rivet, comprising a gun head assembly, a driving mechanism, a transmission mechanism, a power source and a control module which are arranged in a riveting tool shell, wherein the transmission mechanism is a planetary roller lead screw transmission mechanism, a planetary roller lead screw shaft of the planetary roller lead screw transmission mechanism is in coaxial driving connection with the clamping jaw of the gun head assembly, and the planetary roller lead screw shaft is in driving connection with the driving shaft of the driving mechanism through gears installed on the planetary roller lead screw shaft and the driving shaft of the driving mechanism respectively. According to the riveting tool of the utility model, the planetary roller lead screw is adopted as a component for converting rotary motion into linear motion, the output tension can reach 70kN, and riveting installation of ring groove rivets with the diameter specification of 12mm can be effectively completed. The utility model is provided with a man-machine interaction interface, so that riveting installation modes can be selected according to rivets of different specifications and models. The torque of the motor can be controlled by adjusting the input current of the motor, and finally the output tension of the tool is adjusted.

IPC 8 full level
B21J 15/10 (2006.01); **B21J 15/26** (2006.01); **B21J 15/28** (2006.01)

CPC (source: EP)
B21J 15/022 (2013.01); **B21J 15/045** (2013.01); **B21J 15/105** (2013.01); **B21J 15/26** (2013.01); **B21J 15/28** (2013.01)

Citation (search report)
• [Y] US 2019314888 A1 20191017 - IKUTA HIROKI [JP], et al
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• [Y] CN 205362527 U 20160706 - SHUNDE POLYTECHNIC
• See also references of WO 2023240996A1

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 ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4316687 A1 20240207; **EP 4316687 A4 20240904**; AU 2022423921 A1 20240118; BR 212023014505 U2 20240206;
CA 3215213 A1 20231215

DOCDB simple family (application)
EP 22921015 A 20221226; AU 2022423921 A 20221226; BR 212023014505 U 20221226; CA 3215213 A 20221226