

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**

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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  
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Citation (search report)  
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• [Y] US 2021394253 A1 20211223 - YABUNAKA TOSHIHITO [JP], et al  
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• [Y] CN 205362527 U 20160706 - SHUNDE POLYTECHNIC  
• See also references of WO 2023240996A1

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