

Title (en)  
TOOL FOR STRIKING FASTENER

Title (de)  
WERKZEUG FÜR SCHLAGSCHRAUBER

Title (fr)  
OUTIL DE FRAPPE D'ÉLÉMENT DE FIXATION

Publication  
**EP 3984703 A4 20220907 (EN)**

Application  
**EP 19932313 A 20191129**

Priority  
• CN 201910499998 A 20190611  
• CN 2019122035 W 20191129

Abstract (en)  
[origin: EP3984703A1] Disclosed is a tool for striking a fastener, belonging to the technical field of electric tools, the tool comprising an energy storage mechanism (2), composed of a cylinder (2-2) and a piston (2-1), in a housing (1), wherein the piston (2-1) is connected to a striker (4) extending to a gun nozzle (3), a holding handle (5) is provided on one side of the cylinder (2-2), a nail box (6) is provided on one side of the gun nozzle (3), and a lifting mechanism (7) is provided between the holding handle (5) and the nail box (6); the lifting mechanism (7) includes the striker (4) having meshing teeth distributed at intervals, and a driving wheel (9) having meshing cylinders circumferentially distributed at intervals, with the driving wheel (9) being in transmission connection with an electric motor (8); gear shifting fingers (9-3) radially extend out of opposite sides of the driving wheel (9) at a preset arc length; and a side surface, opposite the meshing teeth, of the striker (4) is provided with an advance convex pin (4-1) capable of meshing with the gear shifting fingers (9-3). Before the meshing cylinder is in lifting engagement with the meshing teeth, the gear shifting fingers (9-3) turn to a meshing and gear shifting position in front of the advance convex pin (4-1); and when the meshing cylinder is in lifting engagement with the meshing teeth, the gear shifting fingers (9-3) turn to shift the advance convex pin (4-1) in order to enable the meshing teeth to be located at a position meshing with the meshing cylinder. The tool has a simple structure, and effectively prevents interference between the re-lifting meshing of the driving wheel and the meshing of the striker.

IPC 8 full level  
**B25C 1/04** (2006.01); **B25C 1/06** (2006.01)

CPC (source: CN EP)  
**B25C 1/047** (2013.01 - EP); **B25C 1/06** (2013.01 - CN EP)

Citation (search report)  
• [AD] US 8011441 B2 20110906 - LEIMBACH RICHARD L [US], et al  
• [A] CN 206154233 U 20170510 - DONGGUAN YOUCHEN ELECTROMECHANICAL TECH CO LTD

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)  
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DOCDB simple family (publication)  
**EP 3984703 A1 20220420; EP 3984703 A4 20220907**; CN 110253503 A 20190920; CN 110253503 B 20220322; JP 2022535984 A 20220810; JP 7366158 B2 20231020; WO 2020248531 A1 20201217

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**EP 19932313 A 20191129**; CN 201910499998 A 20190611; CN 2019122035 W 20191129; JP 2021573745 A 20191129