

Title (en)
One-Way Torque Tool

Title (de)
In einer Richtung wirkender Ratschenschlüssel

Title (fr)
Outil de couple unidirectionnel

Publication
EP 2737977 A1 20140604 (EN)

Application
EP 12195169 A 20121130

Priority
EP 12195169 A 20121130

Abstract (en)
A one-way torque tool includes a head (21), a rotor (30) placed in the head, a number of ratchets (51) formed on the head, two pawls (60) pivotally connected to the rotor and detachably engaged with the ratchets. The ratchets are separated from one another by a first angle (\pm) identical to 360 degrees divided by the number of the ratchets. The pawls are separated from each other by a second angle ($^{\circ}$) identical to a multiple of the first angle plus a third angle ($_{\circ}$) that is smaller than the first angle (\pm).

IPC 8 full level
B25B 13/46 (2006.01)

CPC (source: EP)
B25B 13/465 (2013.01)

Citation (applicant)

- US 6655238 B1 20031202 - HSIEN CHIH-CHING [TW]
- US 4147076 A 19790403 - WRIGHT RICHARD B, et al
- US 4261233 A 19810414 - KONECNY JAMES W
- US 5074174 A 19911224 - KIM KWANG M [KR]
- US 6666111 B1 20031223 - HSIEN CHIH-CHING [TW]

Citation (search report)

- [X] DE 2365124 A1 19750710 - ELORA WERKZEUGFABRIK ERICH RAU
- [X] US 2004089108 A1 20040513 - CHANG CHUCK [TW]
- [X] US 2112693 A 19380329 - DOUGLASS CECIL N
- [X] US 2010162857 A1 20100701 - CHANG CHUCK [TW]
- [X] DE 3818470 A1 19890302 - MUELLER HANS JOACHIM [DE]

Cited by
EP3056313A1; CN108032246A; EP3002083A1; TWI505916B; TWI505918B

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 2737977 A1 20140604; EP 2737977 B1 20160106; ES 2565854 T3 20160407; PL 2737977 T3 20160630; SI 2737977 T1 20160429

DOCDB simple family (application)
EP 12195169 A 20121130; ES 12195169 T 20121130; PL 12195169 T 20121130; SI 201230478 T 20121130