

Title (en)
WRENCH

Title (de)
SCHRAUBENSCHLÜSSEL

Title (fr)
CLÉ

Publication
EP 3980219 A4 20230118 (EN)

Application
EP 20818524 A 20200422

Priority
• US 201916433203 A 20190606
• US 202016803673 A 20200227
• US 2020029281 W 20200422

Abstract (en)
[origin: WO2020247099A1] A wrench (10) has a roller motion transmission mechanism that changes reciprocating motion of a driving member to unidirectional rotational motion of a driven member. The wrench (10) has a head (17) with a cylindrical inside wall (24) surrounding a body (18) with a plurality of ramps (48) inclined toward the cylindrical inside wall (24). A wedging member (53,54,55,56,57,58,59,60,61) comprising a cylindrical roller engages each ramp (48) and the cylindrical inside wall (24) of the head (17). A cage (52) anchored to the body (18) retains the wedging members (53,54,55,56,57,58,59,60,61) in contiguous locations relative to the ramps (48) and the cylindrical inside wall (24) of the head (17). Retainers (113,114,115,116,117,118,119,120) connected to the cage (52) bias all of the wedging members (53,54,55,56,57,58,59,60,61) into engagement with the ramps (48) and the cylindrical inside wall (24) of the head (17).

IPC 8 full level
B25B 13/56 (2006.01); **B25B 13/00** (2006.01); **B25B 13/46** (2006.01)

CPC (source: EP)
B25B 13/462 (2013.01)

Citation (search report)
• [XAY] US 2015306745 A1 20151029 - ROSS DAVID [US]
• [Y] WO 2005051603 A1 20050609 - MEYER ALLAN [AU]
• [A] US 2018079055 A1 20180322 - WANG MIN [CN]
• [A] US 2005076746 A1 20050414 - HSIEN CHIH-CHING [TW]
• [A] US 2016129562 A1 20160512 - DOUGLASS EARL STUART [US]
• [A] US 5697267 A 19971216 - TSAI CHEN-CHANG [TW]
• See references of WO 2020247099A1

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)
WO 2020247099 A1 20201210; EP 3980219 A1 20220413; EP 3980219 A4 20230118

DOCDB simple family (application)
US 2020029281 W 20200422; EP 20818524 A 20200422