

Title (en)

SCREWING DEVICE, DRIVING TORQUE GENERATING MEANS, SCREWING SYSTEM AND TORQUE CONTROL METHOD

Title (de)

SCHRAUBVORRICHTUNG, ANTRIEBSDREHMOMENTERZEUGUNGSMITTEL, VERSCHRAUBSYSTEM SOWIE VERFAHREN ZUR DREHMOMENTSTEUERUNG

Title (fr)

DISPOSITIF DE VISSAGE, MOYEN DE GÉNÉRATION DE COUPLE D'ENTRAÎNEMENT, SYSTÈME DE VISSAGE ET PROCÉDÉ DE CONTRÔLE DU COUPLE

Publication

EP 3829817 B1 20230830 (DE)

Application

EP 19753256 A 20190723

Priority

- DE 102018118853 A 20180802
- EP 2019069841 W 20190723

Abstract (en)

[origin: WO2020025402A1] The invention relates to a screwing device for applying and/or transmitting a torque to a screw partner and for interacting with a drive torque generating means, comprising flat output means (6) which have an output that can be detachably connected to the screw partner and a drive, to which a drive torque can be manually or mechanically applied, an output gearwheel (8) that can be driven by the flat output means (6), a mechanical interface (46) for selective direct or indirect connection to the drive torque generating means for initiating the torque, a compensation unit (30) which is designed to store and process compensation data and which comprises an output gearwheel-specific torque curve and/or an output gearwheel-specific efficiency curve for calculating it with a value of an actual output torque in order to generate a value of a compensated output torque, and a data interface (36) which is designed to transmit compensation data to a drive torque generating means.

IPC 8 full level

B25B 13/04 (2006.01); **B25B 13/08** (2006.01); **B25B 13/48** (2006.01); **B25B 17/00** (2006.01); **B25B 17/02** (2006.01); **B25B 23/147** (2006.01)

CPC (source: EP KR US)

B25B 13/04 (2013.01 - EP); **B25B 13/08** (2013.01 - EP KR); **B25B 13/481** (2013.01 - EP KR); **B25B 17/00** (2013.01 - EP); **B25B 17/02** (2013.01 - EP KR); **B25B 21/002** (2013.01 - US); **B25B 23/147** (2013.01 - EP KR US)

Citation (examination)

WO 2018188829 A1 20181018 - JOHANNES LUEBBERING GMBH [DE]

Citation (opposition)

- Opponent : Atlas Copco Industrial Technique AB
- WO 2016156388 A1 20161006 - ATLAS COPCO IND TECHNIQUE AB [SE]
 - JP S6399180 A 19880430 - MAZDA MOTOR
 - US 4106570 A 19780815 - ESHGHY SIAVASH, et al
 - EP 2177322 B1 20140507 - CEKA ELEKTROWERKZEUGE AG & CO [CH]
 - WO 2019027788 A2 20190207 - TYM LABS L L C [US]
 - IE 20120251 A1 20131204 - ECLATORQ TECHNOLOGY CO LTD [TW]
 - US 2010265097 A1 20101021 - OBATAKE TAKAYOSHI [JP], et al
 - US 2014331828 A1 20141113 - KING JERRY A [US], et al

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 2020025402 A1 20200206; BR 112020026832 A2 20210406; CA 3107554 A1 20200206; CN 112533731 A 20210319; CN 112533731 B 20230627; DE 102018118853 A1 20200206; EP 3829817 A1 20210609; EP 3829817 B1 20230830; ES 2962693 T3 20240320; JP 2022510535 A 20220127; JP 2024010225 A 20240123; KR 102612187 B1 20231208; KR 20210035266 A 20210331; MX 2021000844 A 20210615; US 2021316427 A1 20211014

DOCDB simple family (application)

EP 2019069841 W 20190723; BR 112020026832 A 20190723; CA 3107554 A 20190723; CN 201980051479 A 20190723; DE 102018118853 A 20180802; EP 19753256 A 20190723; ES 19753256 T 20190723; JP 2021505771 A 20190723; JP 2023191960 A 20231110; KR 20217005530 A 20190723; MX 2021000844 A 20190723; US 201917264473 A 20190723