

Title (en)

Power wrench for tightening screw joints.

Title (de)

Motorschraubenschlüssel zum Anziehen von Schraubverbindungen.

Title (fr)

Outil de vissage à moteur pour serrer des connexions de vissage.

Publication

EP 0403460 A1 19901219 (EN)

Application

EP 90850234 A 19900611

Priority

SE 8902101 A 19890612

Abstract (en)

A power wrench for two-step tightening of screw joints, comprising a housing (13), an electric motor (10) including a rotor (25), an output shaft (24) coupled to the rotor (25), and a power supply means including a power converter (11) with a variable frequency and voltage output and a current responsive power shut-off means. A retardation responsive inertia means (28) is coupled to the motor rotor (25) via a spring (32) and a cam means (29, 30) for corotation with the motor rotor (25) and for activation of a switch (12) as a certain predetermined retardation magnitude in the motor rotor (25) is exceeded. The latter is used for obtaining a fast torque interruption of the initial tightening step of the two-step tightening process, whereas the final tightening step is discontinued automatically as a predetermined current magnitude in the power supply is reached.

IPC 1-7

B25B 23/147

IPC 8 full level

B25B 21/00 (2006.01); **B25B 23/14** (2006.01); **B25B 23/145** (2006.01); **B25B 23/147** (2006.01); **B25B 23/151** (2006.01)

CPC (source: EP)

B25B 21/008 (2013.01); **B25B 23/147** (2013.01)

Citation (search report)

- [A] US 3696871 A 19721010 - STENBACKA JOHAN RUNAR
- [AD] US 2768546 A 19561030 - AMTSBERG LESTER A
- [A] DE 3740076 A1 19880601 - ATLAS COPCO AB [SE]

Cited by

EP0987724A3; EP0734116A3; US5754019A

Designated contracting state (EPC)

DE FR SE

DOCDB simple family (publication)

EP 0403460 A1 19901219; **EP 0403460 B1 19950816**; DE 69021647 D1 19950921; DE 69021647 T2 19960502; JP 2824125 B2 19981111; JP H04176574 A 19920624; SE 8902101 D0 19890612; SE 8902101 L 19901213

DOCDB simple family (application)

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