

Title (en)

Method and device for tightening threaded joints.

Title (de)

Verfahren und Vorrichtung zum Anziehen von mit Gewinde versehenen Verbindungen.

Title (fr)

Procédé et moyen pour serrer des connections taraudées.

Publication

EP 0419435 A2 19910327 (EN)

Application

EP 90850316 A 19900924

Priority

SE 8903134 A 19890922

Abstract (en)

The invention concerns a method and a device for tightening threaded joints in two subsequent steps, namely a first step during which a joint is tightened to a predetermined torque snug level and a second step during which the joint is further tightened up to a final predetermined pretension level. During the second tightening step the torque delivered by the power tool (10) comprised in the device is gradually increased at a rate exceeding the highest torque rate expected from the joint to be tightened. The power tool (10) comprises an electric brushless AC-motor which is supplied with power from a variable frequency output inverter (11), and the gradual increase in output torque from the power tool (10) is accomplished by the phase lag in the AC-motor as a result of a gradually increased output frequency from the power supply means (11).

IPC 1-7

B25B 23/14; B25B 23/147

IPC 8 full level

B25B 23/14 (2006.01); **B25B 23/147** (2006.01); **B25B 23/151** (2006.01)

CPC (source: EP)

B25B 23/14 (2013.01); **B25B 23/147** (2013.01)

Cited by

EP0642891A1; US5519604A; EP1984148A4; US7058291B2; US6975050B2; US8025106B2; US6538403B2; WO03006211A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

EP 0419435 A2 19910327; EP 0419435 A3 19911204; EP 0419435 B1 19950719; DE 69020994 D1 19950824; DE 69020994 T2 19960411; JP 3505175 B2 20040308; JP H03184775 A 19910812; SE 8903134 D0 19890922; SE 8903134 L 19910323

DOCDB simple family (application)

EP 90850316 A 19900924; DE 69020994 T 19900924; JP 25204690 A 19900925; SE 8903134 A 19890922