

Title (en)
Power tool

Title (de)
Kraftgetriebenes Handwerkzeug

Title (fr)
Outil électrique

Publication
EP 2724821 B1 20171004 (EN)

Application
EP 13180623 A 20130816

Priority
JP 2012197102 A 20120907

Abstract (en)
[origin: EP2724821A1] A power tool (10) includes a motor (21), an output shaft (25), and a power transmission unit (22) that transmits rotational power of the motor to the output shaft. The power transmission unit decreases a rotation speed in accordance with a speed reduction ratio that can be changed. A gear shift actuator (27) changes the speed reduction ratio. A torque detector (41) detects the load torque applied to the output shaft. A control unit (23) controls the gear shift actuator to change the speed reduction ratio of the power transmission unit in accordance with the detected load torque. The control unit stops driving the motor if the detected torque reaches a threshold during a predetermined period from when the power transmission unit increases the speed reduction ratio. The control unit continues driving the motor when the detected load torque does not reach the threshold during the predetermined period.

IPC 8 full level
B25F 5/00 (2006.01)

CPC (source: CN EP)
B25B 21/00 (2013.01 - CN); **B25B 21/008** (2013.01 - EP); **B25B 23/147** (2013.01 - CN EP); **B25F 5/001** (2013.01 - EP)

Cited by
IT202100010217A1; CN110880903A; EP3960371A1; IT202100010208A1; EP3078458A1; IT202100010190A1; US10486281B2; US10637379B2; WO2022049030A1; US11904440B2

Designated contracting state (EPC)
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DOCDB simple family (publication)
EP 2724821 A1 20140430; **EP 2724821 B1 20171004**; CN 103659700 A 20140326; CN 103659700 B 20160427; JP 2014050923 A 20140320; JP 5914841 B2 20160511

DOCDB simple family (application)
EP 13180623 A 20130816; CN 201310395175 A 20130903; JP 2012197102 A 20120907