

Title (en)

METHOD FOR DETECTING A SLIP CLUTCH TRIGGER EVENT, AND MACHINE TOOL

Title (de)

VERFAHREN ZUR ERKENNUNG EINES RUTSCHKUPPLUNGS-AUSLÖSEEREIGNISSES, SOWIE WERKZEUGMASCHINE

Title (fr)

PROCÉDÉ POUR REPÉRER UN ÉVÉNEMENT DE DÉCLENCHEMENT DE LIMITEUR DE COUPLE À FRICTION, AINSI QUE MACHINE-OUTIL

Publication

EP 3990216 A1 20220504 (DE)

Application

EP 20733940 A 20200617

Priority

- EP 19182950 A 20190627
- EP 2020066781 W 20200617

Abstract (en)

[origin: WO2020260093A1] The invention relates to a method for detecting whether a slip clutch has been triggered in a machine tool and to a machine tool which is designed to carry out the proposed method. For this purpose, the machine tool comprises in particular a motor as a drive for the machine tool, a controller, a transmission device, a first sensor for detecting a first speed of the transmission device, a second sensor for detecting a speed of the motor, a third sensor for detecting current values, and a slip clutch. According to the proposed method, speed and current values are used in particular in order to detect a slip clutch trigger event.

IPC 8 full level

B23Q 11/04 (2006.01); **B23B 49/00** (2006.01); **B23Q 17/09** (2006.01); **B23Q 17/10** (2006.01); **B25F 5/00** (2006.01); **B28D 1/04** (2006.01); **B28D 7/00** (2006.01)

CPC (source: CN EP US)

B23B 49/00 (2013.01 - US); **B23Q 11/04** (2013.01 - EP); **B23Q 17/0961** (2013.01 - EP US); **B23Q 17/10** (2013.01 - EP US); **B25F 5/00** (2013.01 - CN EP); **B25F 5/001** (2013.01 - CN US); **G01M 13/022** (2013.01 - CN US); **B23B 49/00** (2013.01 - EP); **B23B 2226/75** (2013.01 - US); **B23B 2260/07** (2013.01 - US); **B23B 2260/128** (2013.01 - US); **B23B 2270/486** (2013.01 - US)

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3756823 A1 20201230; CN 113825596 A 20211221; EP 3990216 A1 20220504; JP 2022536154 A 20220812; JP 7450643 B2 20240315; US 2022274244 A1 20220901; WO 2020260093 A1 20201230

DOCDB simple family (application)

EP 19182950 A 20190627; CN 202080033764 A 20200617; EP 2020066781 W 20200617; EP 20733940 A 20200617; JP 2021573257 A 20200617; US 202017621920 A 20200617