

Title (en)

Overload protection for rotary machine tool

Title (de)

Überlastschutz für drehende Werkzeugmaschine

Title (fr)

Protection contre les surcharges pour machine-outil tournant

Publication

EP 1358969 B1 20080416 (DE)

Application

EP 03405287 A 20030423

Priority

DE 10219755 A 20020502

Abstract (en)

[origin: EP1358969A2] A control circuit (6) receives signals from a contactless sensor (8) near the driven member (7b) of the sawtooth clutch (7) and controls the current to the drive motor (1) and an electromagnetic coil (9) surrounding a magnetic clutch (5). This clutch drives the driving portion (7a) of the sawtooth clutch. The angle (alpha) of the drive surfaces (10) of the clutch is chosen so that the driven member is pushed away (X) from the drive member when a torque (M) is applied to the clutch. The magnetic clutch exerts a force (F) which resists disengagement of the clutch up to a given torque value. The clutch drives a reduction gear (2), a chuck (3) and a boring tool (4).

IPC 8 full level

B25F 5/00 (2006.01)

CPC (source: EP US)

B25F 5/001 (2013.01 - EP US)

Cited by

EP2096330A4; EP2447010A1; CN102528770A; EP2777880A3; EP2517839A3; US9126321B2; US8833484B2; WO2007101686A1; US9452520B2

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DOCDB simple family (publication)

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