

Title (en)

Electric hand tool with safety coupling

Title (de)

Elektrohandwerkzeuggerät mit Sicherheitskupplung

Title (fr)

Outil électrique à main avec accouplement de sécurité

Publication

**EP 1186383 A3 20060426 (DE)**

Application

**EP 01810778 A 20010813**

Priority

DE 10041632 A 20000824

Abstract (en)

[origin: EP1186383A2] The tool has an electric safety coupling controlled by a microcontroller (1) whose input parameter is the electric tool motor's measured input current (I), that computes (2) a torque from the current and that outputs a safety coupling separation control signal if the torque signal exceeds a threshold. The measured torque is compared with the computed torque and a control signal is output if the difference exceeds a threshold.

IPC 8 full level

**B25F 5/00** (2006.01)

CPC (source: EP US)

**B25F 5/00** (2013.01 - EP US); **Y10S 388/937** (2013.01 - EP US)

Citation (search report)

- [XA] US 4249117 A 19810203 - LEUKHARDT JILL L, et al
- [DA] EP 0659525 A2 19950628 - BLACK & DECKER INC [US]
- [DA] DE 4334933 A1 19950420 - FRAUNHOFER GES FORSCHUNG [DE]
- [DA] DE 3707052 A1 19880915 - BOSCH GMBH ROBERT [DE]

Cited by

CN102770247A; DE102013211997A1; EP1583198A3; DE102010030410A1; DE102010030410B4; CN105215953A; EP3610990A1; EP3984706A1; WO2007056255A3; WO2011100988A1; US7400106B2; US7708085B2; US7861796B2; US7926585B2; US8322456B2; US8561717B2; US7487844B2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

**EP 1186383 A2 20020313; EP 1186383 A3 20060426; EP 1186383 B1 20080402;** CN 1255248 C 20060510; CN 1340408 A 20020320; DE 10041632 A1 20020307; DE 50113809 D1 20080515; JP 2002137178 A 20020514; JP 4913294 B2 20120411; US 2002053892 A1 20020509; US 6700341 B2 20040302; ZA 200106988 B 20020304

DOCDB simple family (application)

**EP 01810778 A 20010813;** CN 01133902 A 20010817; DE 10041632 A 20000824; DE 50113809 T 20010813; JP 2001252750 A 20010823; US 93397001 A 20010821; ZA 200106988 A 20010823