

Title (en)

Electric hand tool with idle running switch off

Title (de)

Elektrohandwerkzeuggerät mit Leerschlagabschaltung

Title (fr)

Outil électrique à main avec coupure de la percussion

Publication

EP 1147861 A3 20031112 (DE)

Application

EP 01810350 A 20010409

Priority

DE 10019071 A 20000418

Abstract (en)

[origin: EP1147861A2] The tool performs at least one hammer movement and has a no-load stroke cut-off for a pneumatic hammer mechanism with a stimulation piston movable in a fixed pipe that imparts a blow to a free piston via a gas spring. Valve openings leading to the gas spring are opened by an axially movable control sleeve biased by a restoring spring for no-load cut-off. The control sleeve bounds on an adjacent tool holder with limited axial movement. The tool performs at least one hammer movement and has a no-load stroke cut-off for a pneumatic hammer mechanism (1) with a stimulation piston (3) movable in a fixed pipe (2) that imparts a blow to a free piston (5) via a gas spring (4). Valve openings (10) leading to the gas spring are opened by an axially movable control sleeve (11) biased by a restoring spring (7) for no-load stroke cut-off. The tool holder (6) is mounted for limited axial movement and the control sleeve bounds on the adjacent tool holder.

IPC 1-7

B25D 9/26; B25D 16/00

IPC 8 full level

B25D 17/10 (2006.01); **B23B 45/16** (2006.01); **B25D 11/00** (2006.01); **B25D 11/12** (2006.01); **B25D 16/00** (2006.01); **B25F 5/00** (2006.01); **F15B 15/14** (2006.01)

CPC (source: EP US)

B25D 11/005 (2013.01 - EP US); **B25D 16/00** (2013.01 - EP US); **B25D 2211/003** (2013.01 - EP US); **B25D 2211/068** (2013.01 - EP US); **B25D 2250/035** (2013.01 - EP US); **B25D 2250/131** (2013.01 - EP US)

Citation (search report)

- [DA] EP 0759341 A2 19970226 - MAKITA CORP [JP]
- [A] DE 3732288 A1 19890406 - LICENTIA GMBH [DE]
- [DA] DE 19724531 A1 19981217 - BOSCH GMBH ROBERT [DE]
- [A] DE 2641070 A1 19780316 - BOSCH GMBH ROBERT
- [A] DE 19714287 A1 19981008 - HILTI AG [LI]
- [A] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 11 30 September 1999 (1999-09-30)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 08 30 June 1999 (1999-06-30)

Cited by

EP1886767A3; EP1754575A3; US7383895B2; DE102007042045A1; EP2033743A2

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 1147861 A2 20011024; EP 1147861 A3 20031112; EP 1147861 B1 20061011; CN 1186173 C 20050126; CN 1318446 A 20011024; DE 10019071 A1 20011025; DE 50111177 D1 20061123; JP 2001353670 A 20011225; JP 4758559 B2 20110831; US 2002050191 A1 20020502; US 6431290 B1 20020813

DOCDB simple family (application)

EP 01810350 A 20010409; CN 01116357 A 20010410; DE 10019071 A 20000418; DE 50111177 T 20010409; JP 2001119382 A 20010418; US 83543401 A 20010416