

Title (en)
Flat key

Title (de)
Flachschlüssel

Title (fr)
Clé plate

Publication
EP 1106754 A3 20030115 (DE)

Application
EP 00403191 A 20001116

Priority
DE 19958819 A 19991207

Abstract (en)
[origin: DE19958819C1] The key (1) has a handle part (2) comprising a casing (4) and a key bit (3) that slides axially into and out of the casing. The handle part casing has a spring (7) with spiral ends (8,9) wound around two holders (10,11). The middle area of the spring has a support part (13) for the inner part of the key bit, so that when the key bit is pushed into the casing, the spring is coiled up and tensioned.

IPC 1-7
E05B 19/00; **A45C 11/32**; **E05B 19/04**

IPC 8 full level
A45C 11/32 (2006.01); **E05B 19/00** (2006.01); **E05B 19/04** (2006.01)

CPC (source: EP US)
A45C 11/328 (2013.01 - EP US); **E05B 19/046** (2013.01 - EP US); **Y10T 70/7876** (2015.04 - EP US); **Y10T 70/8676** (2015.04 - EP US)

Citation (search report)
• [A] US 2567816 A 19510911 - LOWELL KNIEBES
• [A] GB 2084004 A 19820407 - ADAMS DAVID JOHN
• [A] US 3328986 A 19670704 - THEODORE RALTON
• [A] FR 2595555 A1 19870918 - COLLIOT GEORGES [FR]

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)
DE 19958819 C1 20010510; DE 50007279 D1 20040909; EP 1106754 A2 20010613; EP 1106754 A3 20030115; EP 1106754 B1 20040804; US 2001002544 A1 20010607; US 6314775 B2 20011113

DOCDB simple family (application)
DE 19958819 A 19991207; DE 50007279 T 20001116; EP 00403191 A 20001116; US 72970600 A 20001206