

Title (en)  
Flat key for cylinder lock

Title (de)  
Flachschlüssel für Zylinderschloss

Title (fr)  
Clef plate pour serrure cylindrique

Publication  
**EP 0725197 B1 19990707 (DE)**

Application  
**EP 96101033 A 19960125**

Priority  
AT 17795 A 19950201

Abstract (en)  
[origin: US5797287A] A key has a flat key body having a blade extending along a longitudinal insert axis and having a front edge formed with transversely directed bitting, an opposite longitudinally extending back edge, and a pair of oppositely directed faces. Each face is formed with at least two longitudinally extending front grooves extending adjacent the front edge a full length of the blade and having depths equal to more than half of a transverse thickness of the blade, a longitudinally extending back groove having a floor at a depth equal to less than half of the blade thickness, and an elongated angled groove extending at an acute angle to and across the respective back groove at an intersection and having a part-cylindrical floor aligned with and forming a smooth continuation of the floor of the respective back groove at the intersection. The angled groove of the one face extends nonparallel to the angled groove of the other face, that is axes of the angled grooves on one face are all parallel to each other and cross similar axes of the grooves on the other face.

IPC 1-7  
**E05B 27/00; E05B 19/00**

IPC 8 full level  
**E05B 19/00** (2006.01); **E05B 19/06** (2006.01); **E05B 19/02** (2006.01); **E05B 27/00** (2006.01); **E05B 31/00** (2006.01)

CPC (source: EP US)  
**E05B 27/0042** (2013.01 - EP US); **E05B 19/0058** (2013.01 - EP US); **E05B 27/0064** (2013.01 - EP US); **Y10T 70/7565** (2015.04 - EP US);  
**Y10T 70/7864** (2015.04 - EP US); **Y10T 70/7881** (2015.04 - EP US)

Cited by  
EP0984122A1; EP2031160A3; EP2765260A3; WO0114667A1

Designated contracting state (EPC)  
AT BE CH DE DK ES FR GB IT LI LU NL

DOCDB simple family (publication)  
**US 597287 A 19980825**; AT 405668 B 19991025; AT A17795 A 19990215; AT E181980 T1 19990715; CH 687630 A5 19970115;  
CZ 21496 A3 19990217; CZ 284981 B6 19990414; DE 29503514 U1 19950413; DE 59602352 D1 19990812; DK 0725197 T3 19991122;  
EP 0725197 A1 19960807; EP 0725197 B1 19990707; ES 2133847 T3 19990916; FR 2729997 A3 19960802; FR 2729997 B3 19970117;  
GB 2292415 A 19960221; GB 2292415 B 19981216; GB 9505034 D0 19950503; HU 216820 B 19990928; HU P9600174 A2 19961230;  
HU P9600174 A3 19981028; NL 1002222 C1 19960801; NO 960384 D0 19960130; NO 960384 L 19960802; SI 0725197 T1 19991031;  
SK 10096 A3 19960904; SK 284385 B6 20050204

DOCDB simple family (application)  
**US 59312096 A 19960201**; AT 17795 A 19950201; AT 96101033 T 19960125; CH 20496 A 19960126; CZ 21496 A 19960124;  
DE 29503514 U 19950302; DE 59602352 T 19960125; DK 96101033 T 19960125; EP 96101033 A 19960125; ES 96101033 T 19960125;  
FR 9601050 A 19960130; GB 9505034 A 19950313; HU P9600174 A 19960126; NL 1002222 A 19960131; NO 960384 A 19960130;  
SI 9630080 T 19960125; SK 10096 A 19960124