Title (en)

METHOD FOR PRODUCING MOTOR VEHICLE LOCKS BY TARGETED OBLIQUE STAMPING OF THE LOCKING PART LATCH SURFACES

Title (de)

VERFAHREN ZUM HERSTELLEN VON KRAFTFAHRZEUGSCHLÖSSERN DURCH GEZIELT SCHRÄGES STANZEN DER GESPERRETEIL-RASTFLÄCHEN

Title (fr)

PROCÉDÉ DE FABRICATION DE SERRURES DE VÉHICULES À MOTEUR PAR ESTAMPAGE OBLIQUE CIBLÉ DES SURFACES D'ENCASTREMENT DES PARTIES D'ENCLIQUETAGE

Publication

EP 2931999 A2 20151021 (DE)

Application

EP 13840157 A 20131211

Priority

- DE 102012024210 A 20121211
- DE 2013000768 W 20131211

Abstract (en)

[origin: CA2897845A1] In order to minimize noises occurring between the individual locking parts (30, 31) of a motor vehicle lock (1), the grooves extending at a defined angle with respect to each other are produced on the locking parts (30, 31) or on the latch surfaces (12, 13) during the production process. The generated grooves (17, 18, 19) then slightly overlap (25) which considerably reduces the sliding friction and the disturbing noises.

IPC 8 full level

E05B 85/26 (2014.01); **B21D 28/36** (2006.01); **E05B 77/40** (2014.01)

CPC (source: EP US)

E05B 17/0004 (2013.01 - EP US); **E05B 79/10** (2013.01 - US); **E05B 85/243** (2013.01 - US); **E05B 85/26** (2013.01 - EP US); B21D 28/16 (2013.01 - EP US); Y10T 29/49828 (2015.01 - EP US); Y10T 292/1075 (2015.04 - EP US)

Citation (search report)

See references of WO 2014090213A2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102012024210 A1 20140612; CA 2897845 A1 20140619; CN 104981578 A 20151014; CN 104981578 B 20170609; EP 2931999 A2 20151021; JP 2015537135 A 20151224; KR 20150093740 A 20150818; MX 2015007353 A 20150910; RU 2015127193 A 20170112; US 2015315829 A1 20151105; WO 2014090213 A2 20140619; WO 2014090213 A3 20141106

DOCDB simple family (application)

DE 102012024210 A 20121211; CA 2897845 A 20131211; CN 201380072614 A 20131211; DE 2013000768 W 20131211; EP 13840157 A 20131211; JP 2015546848 A 20131211; KR 20157017694 A 20131211; MX 2015007353 A 20131211; RU 2015127193 A 20131211; US 201314650616 A 20131211