

Title (en)  
FASTENER CHAIN, SLIDE FASTENER, AND FASTENER ELEMENT MANUFACTURING METHOD

Title (de)  
REISSVERSCHLUSSKETTE, REISSVERSCHLUSS UND BEFESTIGUNGSELEMENTHERSTELLUNGSVERFAHREN

Title (fr)  
CHAÎNE D'ÉLÉMENTS DE FERMETURE, FERMETURE À GLISSIÈRE ET PROCÉDÉ DE FABRICATION D'ÉLÉMENT DE FERMETURE

Publication  
[EP 3045068 A1 20160720 \(EN\)](#)

Application  
[EP 13892872 A 20130909](#)

Priority  
JP 2013074282 W 20130909

Abstract (en)  
This slide fastener (1) is characterized in that the first and second main surfaces of the main body (21a, 51 a) of the engaging head (21, 51) of the fastener elements (20, 50) are flat surfaces that are orthogonal to the longitudinal tape direction and the pair of legs (23, 53) of the fastener element (20, 50) curve in a diagonal direction or extend at a slant with respect to the first and second main surfaces of the main body of the head (21a, 51 a). As a result, this slide fastener (1) has a different external appearance from previous slide fasteners and is able to stably achieve strength with respect to transverse pulling and strength with respect to thrusts that are equivalent to or greater than previous slide fasteners.

IPC 8 full level  
[A44B 19/02](#) (2006.01); [A44B 19/06](#) (2006.01); [A44B 19/08](#) (2006.01); [A44B 19/14](#) (2006.01); [A44B 19/24](#) (2006.01); [A44B 19/46](#) (2006.01); [B21D 53/52](#) (2006.01); [B21F 45/18](#) (2006.01)

CPC (source: EP)  
[A44B 19/02](#) (2013.01); [A44B 19/06](#) (2013.01); [A44B 19/08](#) (2013.01); [A44B 19/24](#) (2013.01); [A44B 19/46](#) (2013.01); [B21F 45/18](#) (2013.01)

Cited by  
EP3626099A4; US11363859B2

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)  
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[EP 13892872 A 20130909](#); CN 201380079476 A 20130909; JP 2013074282 W 20130909; JP 2015535277 A 20130909