

Title (en)

Hook fastening device - hook obtained by molding

Title (de)

Klettverschluss - klettenartiges Element hergestellt durch ein Gussverfahren

Title (fr)

Auto-agrippant crochet-crochet issu de moulage

Publication

EP 1749456 A1 20070207 (FR)

Application

EP 06291123 A 20060707

Priority

FR 0508144 A 20050729

Abstract (en)

The object has surfaces (2) from which hooks (6-8, 6'-8') project, where each hook is constituted by a head section projecting laterally from a stem section. The hooks (6-8) are arranged in a row (4) and the hooks (6'-8') are arranged in a row (5). Each row has m successive right/left hooks (6, 6') with heads projecting from the stems in a direction, and n successive hooks in another left/right direction, following the m hooks, with the heads projecting in another left/right direction opposite to the former, where m and n are integers such that m is greater than/equal to 1 and less than n.

IPC 8 full level

A44B 18/00 (2006.01)

CPC (source: EP US)

A44B 18/0053 (2013.01 - EP US); **Y10T 24/2792** (2015.01 - EP US)

Citation (search report)

- [A] EP 0574863 A1 19931222 - YOSHIDA KOGYO KK [JP]
- [A] WO 0158302 A1 20010816 - 3M INNOVATIVE PROPERTIES CO [US]
- [A] EP 0464754 A1 19920108 - YOSHIDA KOGYO KK [JP]
- [A] US RE36779 E 20000718 - TAKIZAWA TOSHIKI [JP], et al

Cited by

CN102310186A; FR2933328A1; EP3143897A4; US10369909B2; WO2018116161A1; WO2010004117A3; WO2009006614A3; US8225467B2; US8448305B2; US8061886B1; US8440912B1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1749456 A1 20070207; EP 1749456 B1 20080227; AT E387116 T1 20080315; CA 2551513 A1 20070129; CN 1903096 A 20070131; CN 1903096 B 20101006; DE 602006000586 D1 20080410; DE 602006000586 T2 20090326; ES 2302308 T3 20080701; FR 2889037 A1 20070202; FR 2889037 B1 20070914; JP 2007038002 A 20070215; US 2007022580 A1 20070201; US 7841052 B2 20101130

DOCDB simple family (application)

EP 06291123 A 20060707; AT 06291123 T 20060707; CA 2551513 A 20060707; CN 200610109082 A 20060728; DE 602006000586 T 20060707; ES 06291123 T 20060707; FR 0508144 A 20050729; JP 2006208050 A 20060731; US 49021706 A 20060720