

Title (en)

APPARATUS FOR FASTENING GUTTERS TO STRUCTURES

Title (de)

VORRICHTUNG ZUR BEFESTIGUNG VON ENTWÄSSERUNGSRINNEN AN STRUKTUREN

Title (fr)

DISPOSITIF DE FIXATION DE GOUTTIERES SUR DES STRUCTURES

Publication

**EP 1029139 A1 20000823 (EN)**

Application

**EP 98956252 A 19981027**

Priority

- US 9822776 W 19981027
- US 96068697 A 19971030

Abstract (en)

[origin: WO9923326A1] A gutter fastener (10) having a first shank portion (14) with a head (12a) integrally formed on one end and a second shank portion (16) integrally formed with the opposite end. The first shank portion has a length (L1) substantially equal to the water collecting opening in a gutter (20), while the second shank portion has a length (L2) substantially equal to one half the length of the first shank portion. The second shank portion includes screw-like threads (50) for engaging the facial panel (24) behind a gutter and enabling a more secure connection between the two.

IPC 1-7

**E04D 13/072**; F16B 35/00; B21H 3/02

IPC 8 full level

**F16B 25/10** (2006.01); **E04D 13/072** (2006.01); **F16B 35/04** (2006.01)

CPC (source: EP)

**E04D 13/0725** (2013.01)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**WO 9923326 A1 19990514**; AT E275681 T1 20040915; AU 1281999 A 19990524; AU 736853 B2 20010802; CA 2307587 A1 19990514; CA 2307587 C 20080115; CN 1143933 C 20040331; CN 1299431 A 20010613; DE 69826143 D1 20041014; EP 1029139 A1 20000823; EP 1029139 A4 20030122; EP 1029139 B1 20040908; RU 2217631 C2 20031127

DOCDB simple family (application)

**US 9822776 W 19981027**; AT 98956252 T 19981027; AU 1281999 A 19981027; CA 2307587 A 19981027; CN 98812672 A 19981027; DE 69826143 T 19981027; EP 98956252 A 19981027; RU 2000113734 A 19981027