

Title (en)

Fastening element

Title (de)

Befestigungselement

Title (fr)

Élément de fixation

Publication

EP 2228504 A3 20120627 (DE)

Application

EP 10002251 A 20100304

Priority

DE 202009003138 U 20090309

Abstract (en)

[origin: EP2228504A2] The element (1) has a base fastened to a substructure (2), where the base has a base unit (10). Distance elements (11, 12) are arranged at the base unit. Clamping elements (15-17) are arranged at the base. The base unit and the distance elements together with the substructure form a hollow space in an installed condition of the element, where distance of the base unit from the substructure corresponds to height of projections (31, 32) of profile elements (3). The distance elements are axially arranged at a distance from each other by the clamping elements. The base unit and/or the clamping elements and/or the distance elements are made of a metallic and non-metallic material.

IPC 8 full level

E04F 15/10 (2006.01); **E04F 15/02** (2006.01)

CPC (source: EP)

E04F 15/02044 (2013.01); **E04F 15/02161** (2013.01); **E04F 15/102** (2013.01); **E04F 2015/02094** (2013.01); **E04F 2203/04** (2013.01)

Citation (search report)

- [XYI] US 2004182034 A1 20040923 - EBERLE HARRY W [LB]
- [X] DE 202007002282 U1 20080619 - MOELLER GMBH & CO KG [DE]
- [Y] FR 2866912 A1 20050902 - CERLAND [FR]

Cited by

EP3453814A1; EP2906758A4; AU2013329327B2; US11111679B2; US11603670B2; US10494821B2; US11840848B2; US9822809B2; USD1019365S; US11920618B2; US11149445B2; US11898357B2; US11731252B2; US11969863B2

Designated contracting state (EPC)

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 SE SI SK SM TR

Designated extension state (EPC)

AL BA ME RS

DOCDB simple family (publication)

DE 202009003138 U1 20100729; EP 2228504 A2 20100915; EP 2228504 A3 20120627; EP 2228504 B1 20170503; ES 2635189 T3 20171002; HR P20171169 T1 20171006; PL 2228504 T3 20171031

DOCDB simple family (application)

DE 202009003138 U 20090309; EP 10002251 A 20100304; ES 10002251 T 20100304; HR P20171169 T 20170731; PL 10002251 T 20100304