

Title (en)

FASTENING ELEMENT AND METHOD FOR FASTENING GUARD ELEMENTS ON A SUBSTRUCTURE

Title (de)

BEFESTIGUNGSELEMENT UND VERFAHREN ZUM BEFESTIGEN VON FANGSCHUTZELEMENTEN AUF EINER UNTERKONSTRUKTION

Title (fr)

ÉLÉMENT DE FIXATION ET PROCÉDÉ DE FIXATION D'ÉLÉMENTS DE GARDE-FOU À UNE SOUS-STRUCTURE

Publication

**EP 3311038 A1 20180425 (DE)**

Application

**EP 16750602 A 20160610**

Priority

- DE 202015103230 U 20150618
- DE 2016100264 W 20160610

Abstract (en)

[origin: WO2016202325A1] The present invention relates to a fastening element (1) and a method for fastening guard elements (2) on a substructure (5). In order to provide an improved fastening element (1) for fastening guard elements (2), the fastening element (1) according to the invention consists of a shot-fire element (3) and a collar screw connection (4), wherein the shot-fire element (3) comprises a tip (3a) and a body with an external thread (3b), and the collar screw connection (4) has a blind hole, which has an internal thread (4b) that corresponds to the external thread (3b) of the shot-fire element (3), whereby the shot-fire element (3) can be connected to the collar screw connection (4). The guard elements (2), which have a peripheral collar, are placed on a substructure (5), in particular a steel structure, for example an I-beam, and subsequently fastened by means of fastening elements (1). For this purpose, the shot-fire element (3) is fired into the substructure (steel substructure) (5) by means of a bolt gun, such that the tip (3a) is plunged into the substructure (5). This results in a form-locked and captive connection between the shot-fire element (1) and the substructure (5).

IPC 8 full level

**F16B 19/14** (2006.01); **F16B 5/02** (2006.01)

CPC (source: EP US)

**F16B 5/02** (2013.01 - EP US); **F16B 19/14** (2013.01 - EP US)

Citation (search report)

See references of WO 2016202325A1

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 202015103230 U1 20150722**; EP 3311038 A1 20180425; MX 2017016462 A 20181211; US 2018313386 A1 20181101; WO 2016202325 A1 20161222

DOCDB simple family (application)

**DE 202015103230 U 20150618**; DE 2016100264 W 20160610; EP 16750602 A 20160610; MX 2017016462 A 20160610; US 201615580924 A 20160610