

Title (en)
BEAM ASSEMBLY FOR COMPOSITE FLOOR

Title (de)
TRÄGERANORDNUNG FÜR VERBUNDBODEN

Title (fr)
ASSEMBLAGE DE POUTRE POUR DALLE COMPOSITE

Publication
EP 3540141 A1 20190918 (EN)

Application
EP 19162834 A 20190314

Priority
NL 2020588 A 20180314

Abstract (en)
Assembly of a steel girder for a composite floor including concrete hollow-core slabs, and a coupling device for connecting the hollow-core slabs to the girder, wherein the girder comprises:- at least one laterally extending lower flange having a support surface for support ends of the hollow-core slabs and- a web extending upwards from the lower flange, wherein the coupling device comprises:- a number of coupling rods which with the one, first end are intended to be accommodated in the respective longitudinal voids of the hollow-core slabs or in joints between the hollow-core slabs and to be secured to them by poured concrete, and at the other, second end are provided with a coupling protrusion projecting transverse from the respective coupling rod,- at least one coupling rail attached to the web of the girder, which rail extends substantially parallel to the lower flange, and which has a length of at least the width of a hollow-core slab, wherein the rail defines an accommodation space for the coupling protrusions that is at least partially screened off towards the hollow-core slabs in horizontal direction by a coupling wall, and is provided with an opening continuing in longitudinal direction for access of the coupling protrusions to the accommodation space, wherein the coupling protrusions in an insertion position can be introduced through the opening into the accommodation space and engage behind the coupling wall in a coupling position that is rotated relative to the insertion position.

IPC 8 full level
E04B 5/29 (2006.01); **E04C 3/293** (2006.01)

CPC (source: EP)
E04B 5/29 (2013.01); **E04C 3/293** (2013.01)

Citation (search report)
• [A] EP 2405070 A2 20120111 - DELTASTAAL B V [NL]
• [A] DE 202015104628 U1 20161205 - PFEIFER HOLDING GMBH & CO KG [DE]
• [A] CN 105019595 A 20151104 - UNIV SOUTHEAST
• [A] KR 20100002506 A 20100107 - UNIV SEOUL IND COOP FOUND [KR]

Cited by
CN113378255A

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)
EP 3540141 A1 20190918; EP 3540141 B1 20210407; DK 3540141 T3 20220808; ES 2878748 T3 20211119; NL 2020588 B1 20190926; PL 3540141 T3 20211025

DOCDB simple family (application)
EP 19162834 A 20190314; DK 19162834 T 20190314; ES 19162834 T 20190314; NL 2020588 A 20180314; PL 19162834 T 20190314