Title (en)

DRY CONNECTION SYSTEM OF PREFABRICATED ELEMENTS

Title (de)

TROCKENVERBINDUNGSSYSTEM FÜR FERTIGBAUELEMENTE

Title (fr)

SYSTÈME DE RACCORDEMENT À SEC D'ÉLÉMENTS PRÉFABRIQUÉS

Publication

EP 4004302 B1 20230607 (EN)

Application

EP 20746292 A 20200722

Priority

- IT 201900012978 A 20190726
- IT 201900020038 A 20191030
- IB 2020056890 W 20200722

Abstract (en)

[origin: WO2021019368A1] The present invention relates to a connection system of prefabricated elements used in the construction of industrial, commercial and civil buildings. More specifically, the present invention proposes a connection system of prefabricated elements by coupling based on the combined formation mechanisms of extraction cone and adhesion. The connection can be oversized with respect to the reinforcing ribbed bars of reinforced concrete with the resistance hierarchy criterion, in order to ensure ductile capacities and stable energy dissipation and consequently the use of structures in seismic areas with traditional design methods. The connection system of prefabricated elements according to the invention is characterized in that it comprises an anchoring device which provides for the use of high-strength bars with continuous threading and in that all the elements of the anchoring device, when the device is assembled, are completely inserted in the castings of the prefabricated concrete elements so that there are no mechanical parts protruding from the encumbrance of the elements themselves. The use of a special element also allows the support of the loads in the transitory phase and the mechanical adjustment of the verticality/alignment of the overlying structural element.

IPC 8 full level

E04B 1/21 (2006.01)

CPC (source: EP)

E04B 1/043 (2013.01); **E04B 1/21** (2013.01)

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

DOCDB simple family (publication)

WO 2021019368 A1 20210204; EP 4004302 A1 20220601; EP 4004302 B1 20230607; EP 4223949 A1 20230809; ES 2953793 T3 20231116; FI 4004302 T3 20230808

DOCDB simple family (application)

IB 2020056890 W 20200722; EP 20746292 A 20200722; EP 23169019 A 20200722; ES 20746292 T 20200722; FI 20746292 T 20200722