

Title (en)

Reinforcement elements and steel or reinforced concrete sections produced with same

Title (de)

Bewehrungselemente und damit hergestellte Stahl- oder Spannbetonteile

Title (fr)

Éléments d'armature et pièces en béton armé ou précontraint ainsi produites avec ces éléments d'armature

Publication

**EP 2075388 A1 20090701 (DE)**

Application

**EP 09005165 A 20040309**

Priority

- EP 04718614 A 20040309
- DE 10310715 A 20030310

Abstract (en)

The reinforcement (10) is for a reinforced concrete or prestressed concrete section (1) which has upper and lower reinforcement layers (Bo,Bu), each formed by at least one inner layer (Boy,Buy) and an outer layer (Box,Bux). A main section (12) is through the thickness of the concrete to pass at least over and under the innermost of at least one inner layer of the upper and lower reinforcement layers. The main section is a flat body, with fasteners (20) at the upper (14) and lower (15) ends to grip around at least a peripheral part of a reinforcement (S) at the upper and lower reinforcement layers.

Abstract (de)

Die Erfindung betrifft Bauteile und deren Einsatz in Betonteilen, insbesondere in querkraftbeanspruchten Betonteilen. Vorgeschlagen werden neuartige Betonteile, welche neben der Biegebewehrung auch eine Schub- oder Querkraftbewehrung in Form von neuartigen Bauteilen vorsehen, welche die Biegebewehrung zumindest teilweise umfassen.

IPC 8 full level

**E04C 5/16** (2006.01); **E04C 5/06** (2006.01)

CPC (source: EP US)

**E04C 5/0645** (2013.01 - EP US); **E04C 5/168** (2013.01 - EP US); **E04C 5/18** (2013.01 - EP US)

Citation (applicant)

- DE 7118881 U 19710805
- DE 29814923 U1 20000105 - LOESCH GMBH BETONWERKE [DE]
- DE 2111243 A1 19720525 - KELLER AUGUST
- DE 1913104 A1 19691002 - ALPLAST PRODUKTER

Citation (search report)

- [X] GB 606288 A 19480811 - JONES WILLIAM T, et al
- [X] US 1684195 A 19280911 - OLMSTED RUSSELL C
- [X] US 3238684 A 19660308 - PETER WOOD JOHN
- [X] DE 8708056 U1 19880114
- [XP] WO 2004016874 A1 20040226 - FRISCH HANS [DE]
- [X] DE 20211116 U1 20020912 - FRISCH HANS [DE]
- [X] US 4283896 A 19810818 - FRICKER SIEGFRIED, et al

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2004081313 A1 20040923**; AT E483077 T1 20101015; CA 2541978 A1 20040923; CA 2541978 C 20080513; DE 10310715 A1 20041007; DE 502004011697 D1 20101111; EP 1601842 A1 20051207; EP 1601842 B1 20100929; EP 2075388 A1 20090701; EP 2075388 B1 20130911; JP 2006519944 A 20060831; US 2007101672 A1 20070510

DOCDB simple family (application)

**DE 2004000458 W 20040309**; AT 04718614 T 20040309; CA 2541978 A 20040309; DE 10310715 A 20030310; DE 502004011697 T 20040309; EP 04718614 A 20040309; EP 09005165 A 20040309; JP 2006504255 A 20040309; US 54847204 A 20040309