

Title (en)

Structure and method of connecting I-Type prestressed concrete beams using steel brackets

Title (de)

Konstruktion und Verfahren zur Verbindung von Type-I Spannbetonträgern unter Verwendung von Stahlkonsolen

Title (fr)

Structure et procédé pour la fixation des poutres en béton précontraint du type-I utilisant des consoles en acier

Publication

**EP 1548190 A3 20060301 (EN)**

Application

**EP 04012158 A 20040522**

Priority

KR 20030095319 A 20031223

Abstract (en)

[origin: EP1548190A2] A structure and method of connecting a plurality of PSC-I beams (PSC-I beams) to each other using steel brackets. The beam connecting structure, each having a sheath pipe therein, includes an end plate which is mounted on each of both ends of each of the PSC-I beams, with a through hole provided on an upper portion of the end plate to correspond to the sheath pipe embedded in each of the PSC-I beams; a steel bracket integrally which is provided on the end plate to be perpendicular to the end plate; a bracket coupling plate to integrally couple the aligned steel brackets to each other; a bottom connecting plate which is provided on lower ends of the aligned steel brackets to connect the steel brackets to each other; a connecting sheath pipe which is provided between the PSC-I beams so that both ends of the connecting sheath pipe are respectively inserted into the through holes of the neighboring end plates of the PSC-I beams while the PSC-I beams are arranged linearly; a prestress strand which is inserted in the sheath pipes of the PSC-I beams and the connecting sheath pipe; and a concrete part which is filled in a space between the PSC-I beams to embed the aligned steel brackets, the bracket coupling plate and the connecting sheath pipe in the concrete part.

IPC 8 full level

**E01D 1/00** (2006.01); **E01D 2/00** (2006.01); **E01D 2/02** (2006.01); **E01D 21/00** (2006.01); **E04B 1/21** (2006.01); **E04B 1/58** (2006.01); **E01D 101/24** (2006.01); **E01D 101/28** (2006.01)

CPC (source: EP KR US)

**E01D 2/00** (2013.01 - EP US); **E01D 2/02** (2013.01 - EP KR US); **E01D 2101/285** (2013.01 - EP US)

Citation (search report)

- [A] DE 3114219 A1 19821104 - SCHRECK PHILIPP DIPL ING
- [A] DE 1256671 B 19671221 - DYCKERHOFF & WIDMANN AG
- [A] GB 1417027 A 19751210 - SOUM R

Cited by

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Designated contracting state (EPC)

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DOCDB simple family (publication)

**EP 1548190 A2 20050629**; **EP 1548190 A3 20060301**; CN 100417771 C 20080910; CN 1637215 A 20050713; JP 2005180162 A 20050707; KR 100621539 B1 20060913; KR 20050064049 A 20050629; US 2005144890 A1 20050707

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