

Title (en)

composite bridge structure consisting of steel girders carrying a deck made of steel case profiles and concrete

Title (de)

Brückentragwerk in Verbundbauweise bestehend aus Stahlträgern und einer von diesen getragenen Fahrbahnplatte aus Stahlkastenprofilen und Beton

Title (fr)

pont à structure composite comprenant des poutres en acier et un tablier constitué de profile en caisson en acier et de béton

Publication

EP 0666940 B1 19990623 (EN)

Application

EP 93924264 A 19931026

Priority

- SE 9300881 W 19931026
- SE 9203192 A 19921029

Abstract (en)

[origin: WO9410385A1] This invention is a new method to achieve composite action between girders (3) and a concrete slab (1), as well as within the slab itself. The load transmission within the slab (1) is improved by the invention in the following way. The inferior capacity of the concrete to carry transverse forces is repaired by the composite load carrying capacity of the profile's edge flanges (9), upwards inclined top flanges (10) and upwards extended top parts (11). Due to this fact the slab may be made thinner than usual. Shear forces between steel (2) and concrete (17) are effectively transmitted by mechanical contact between the vertical edges (16) of the cuts (12) and the reinforcing bars (13). Due to the fact that the bottom flange of the case profile (8) is capable of resisting the entire tensile force in the cross section, maximum moment carrying capacity is obtained, whereupon main reinforcement may be omitted.

IPC 1-7

E01D 2/02; **E01D 2/04**; **E01D 19/12**; **E04B 5/40**

IPC 8 full level

E01D 2/02 (2006.01); **E01D 2/04** (2006.01); **E01D 19/12** (2006.01); **E04B 5/40** (2006.01)

CPC (source: EP)

E01D 2/02 (2013.01); **E01D 2/04** (2013.01); **E01D 19/125** (2013.01); **E04B 5/40** (2013.01); **E01D 2101/268** (2013.01)

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB IE IT LI NL PT SE

DOCDB simple family (publication)

WO 9410385 A1 19940511; AT E181579 T1 19990715; DE 69325460 D1 19990729; DE 69325460 T2 20000504; DK 0666940 T3 19991227; EP 0666940 A1 19950816; EP 0666940 B1 19990623; FI 109715 B 20020930; FI 952002 A0 19950427; FI 952002 A 19950616; NO 305445 B1 19990531; NO 951564 D0 19950425; NO 951564 L 19950612; SE 501583 C2 19950320; SE 9203192 D0 19921029; SE 9203192 L 19940430

DOCDB simple family (application)

SE 9300881 W 19931026; AT 93924264 T 19931026; DE 69325460 T 19931026; DK 93924264 T 19931026; EP 93924264 A 19931026; FI 952002 A 19950427; NO 951564 A 19950425; SE 9203192 A 19921029