

Title (en)
COMPOSITE BEAM

Publication
EP 0123642 A3 19850925 (DE)

Application
EP 84630066 A 19840420

Priority
LU 84772 A 19830425

Abstract (en)
[origin: US4571913A] A composite structural element has a main steel beam having a web and at least two flanges extending therefrom, having oppositely directed outer faces, having outer edges generally defining a plane and defining with the web a recess open away from the web between the outer edges. A mass of concrete fills the recess substantially to the plane, the outer flange faces being exposed and substantially free of concrete. Another profiled steel beam is fixed to the web of the main beam and wholly imbedded in and covered by the concrete mass. Typically the main beam is an H- or I-beam and has two such channels provided with such other beams and filled with respective such masses. The other beams can be of T-section or each other beam can be an I- or H-beam. In addition it is possible to provide longitudinally extending steel reinforcing bars imbedded in the concrete mass. Steel fibers can also be imbedded as reinforcement in the concrete mass, and this mass can be at least partially of colloid concrete.

IPC 1-7
E04C 3/293

IPC 8 full level
E04C 3/293 (2006.01)

CPC (source: EP US)
E04C 3/293 (2013.01 - EP US)

Citation (search report)
• [X] FR 382117 A 19080130 - ALBERT ADAM [AR]
• [YD] DE 2829864 A1 19790201 - ARBED
• [Y] LU 83447 A1 19830406 - ARBED [LU]
• [Y] INTERNATIONAL CONSTRUCTION, Band 10, Nr. 11, November 1971, Seiten 57-58, London, GB; "Connector is key to new composite structural system"

Cited by
CN103498532A; CN103498530A; DE3525934A1; AT386237B; EP0189785A3; DE102019000116A1; US5644890A; AU679502B2; EP0212593A3; CN103437498A; WO9423147A3

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0123642 A2 19841031; EP 0123642 A3 19850925; EP 0123642 B1 19890104; AT E39723 T1 19890115; CA 1222642 A 19870609; DE 3475929 D1 19890209; LU 84772 A1 19841128; US 4571913 A 19860225

DOCDB simple family (application)
EP 84630066 A 19840420; AT 84630066 T 19840420; CA 452721 A 19840425; DE 3475929 T 19840420; LU 84772 A 19830425; US 60350984 A 19840424