

Title (en)

LIGHTWEIGHT CONSTRUCTION ELEMENT IN THE FORM OF A HOLLOW BODY CONTOURED HONEYCOMB STRUCTURE

Title (de)

LEICHTBAUELEMENT IN FORM EINER HOHLKÖRPERKONTURWABE

Title (fr)

ELEMENT DE CONSTRUCTION LEGER SOUS FORME D'UNE STRUCTURE EN NID D'ABEILLES PROFILEE A CORPS CREUX

Publication

EP 1181421 B1 20030730 (DE)

Application

EP 00941929 A 20000525

Priority

- DE 0001683 W 20000525
- DE 19924332 A 19990527
- DE 10022742 A 20000510

Abstract (en)

[origin: WO0073602A1] The invention relates to a lightweight construction element in the form of a hollow body contoured honeycomb structure. The construction component (1) is composed of a plurality of individual layers (2, 3, 4), the medium individual layer (3) being composed of a plurality of additional individual layers (23, 24, 25). The individual layers (2, 4, 23, 24, 25) are configured in such a way that they intermesh and firmly interlock with one another thereby producing or defining surfaces that allow that any forces acting upon the elements or individual layers (2, 4, 23, 24, 25) that make up the construction element (1) are absorbed and evened out. Said elements or layers are capable of absorbing not only pressure or lateral forces but also tensile and transverse forces so that they allow for the production of a construction element (1) of less weight but simultaneously high stability. Said construction element (1) can be shaped or deformed as required and can be also extended three-dimensionally so that it can be adapted to the respective conditions in any plane and direction.

IPC 1-7

E04C 2/34

IPC 8 full level

E04C 2/34 (2006.01); **E04C 2/36** (2006.01)

CPC (source: EP US)

E04C 2/3405 (2013.01 - EP US); **E04C 2002/3422** (2013.01 - EP US); **E04C 2002/3433** (2013.01 - EP US); **E04C 2002/3472** (2013.01 - EP US)

Cited by

CN100425433C

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 0073602 A1 20001207; AT E246289 T1 20030815; AU 5672600 A 20001218; AU 764925 B2 20030904; BG 106148 A 20020830; BR 0011007 A 20020514; CA 2375016 A1 20001207; CN 1133785 C 20040107; CN 1365414 A 20020821; CZ 20014211 A3 20020612; DK 1181421 T3 20031103; EA 003566 B1 20030626; EA 200101210 A1 20020425; EE 200100625 A 20030217; EP 1181421 A1 20020227; EP 1181421 B1 20030730; ES 2203490 T3 20040416; HU 224112 B1 20050530; HU P0201458 A2 20021028; IL 146630 A0 20020725; IL 146630 A 20050831; IS 6169 A 20011121; JP 2003500580 A 20030107; MA 25415 A1 20020401; NO 20015684 D0 20011121; NO 20015684 L 20011121; NZ 515784 A 20030926; PL 354358 A1 20040112; PT 1181421 E 20031128; SK 16872001 A3 20021008; TR 200103407 T2 20020621; US 7010897 B1 20060314

DOCDB simple family (application)

DE 0001683 W 20000525; AT 00941929 T 20000525; AU 5672600 A 20000525; BG 10614801 A 20011126; BR 0011007 A 20000525; CA 2375016 A 20000525; CN 00810885 A 20000525; CZ 20014211 A 20000525; DK 00941929 T 20000525; EA 200101210 A 20000525; EE P200100625 A 20000525; EP 00941929 A 20000525; ES 00941929 T 20000525; HU P0201458 A 20000525; IL 14663000 A 20000525; IS 6169 A 20011121; JP 2001500075 A 20000525; MA 26430 A 20011127; NO 20015684 A 20011121; NZ 51578400 A 20000525; PL 35435800 A 20000525; PT 00941929 T 20000525; SK 16872001 A 20000525; TR 200103407 T 20000525; US 97992601 A 20011212