

Title (en)  
LIGHTWEIGHT CONSTRUCTION ELEMENT WHICH IS CAPABLE OF BEARING OR IS BEARING

Title (de)  
TRAGFÄHIGES ODER TRAGENDES LEICHTBAUELEMENT

Title (fr)  
ÉLÉMENT STRUCTURAL LÉGER PORTEUR

Publication  
**EP 2678490 B1 20190102 (DE)**

Application  
**EP 11794641 A 20111128**

Priority  

- DE 102011012492 A 20110225
- DE 102011014206 A 20110317
- EP 2011005960 W 20111128

Abstract (en)  
[origin: WO2012113423A1] The invention relates to a lightweight construction element (2) which is capable of bearing or is bearing and has one or more rows of parallel chambers (6) which are each surrounded by tubular boundary walls (12, 42), wherein the boundary walls (12, 42) are at least partially composed of paper. In order to increase the bearing capacity of the lightweight construction elements (2) and to reduce the weight thereof per unit area, it is proposed according to the invention that the boundary walls (12, 42) are connected to one another and form a multi-chamber hollow profile (4) which has a uniform cross section in the direction of the longitudinal centre axes (8) of the chambers (6), and that the inner surfaces (16, 52) of the boundary walls (12, 42), which surfaces face the chambers (6), and the outer surfaces (14, 54) of the boundary walls (12, 42), which surfaces face away from the chambers, are provided with a water-repelling coating (10) and/or impregnation increasing the bending and/or compressive strength of the paper.

IPC 8 full level  
**E04C 2/34** (2006.01)

CPC (source: EP)  
**E04C 2/3405** (2013.01); **E04C 2/365** (2013.01); **E04C 2002/3466** (2013.01); **E04C 2002/3472** (2013.01); **E04C 2002/3477** (2013.01)

Citation (examination)  

- DE 2836418 A1 19800228 - NUSSBAUM HELMUT DIPL PHYS
- GB 2341619 A 20000322 - H H ROBERTSON [GB]

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**WO 2012113423 A1 20120830**; DK 2678490 T3 20190423; EP 2678490 A1 20140101; EP 2678490 B1 20190102; HR P20190636 T1 20191101

DOCDB simple family (application)  
**EP 2011005960 W 20111128**; DK 11794641 T 20111128; EP 11794641 A 20111128; HR P20190636 T 20190402