

Title (en)  
COMPOSITE ELEMENTS

Title (de)  
VERBUNDELEMENTE

Title (fr)  
ELEMENTS DE LIAISON

Publication  
**EP 1597065 A1 20051123 (DE)**

Application  
**EP 04705808 A 20040128**

Priority  
• EP 2004000707 W 20040128  
• DE 10306892 A 20030218

Abstract (en)  
[origin: DE10306892A1] Structures comprise a central plastic layer(ii), 5-300mm thick, sandwiched between two outer 1-20mm thick layers(i,iii) of metal, plastic or wood. Sidewalls(iv) surrounding the central layer are initially bonded to the outer layers before the central layer is formed between them. Sidewalls(iv) are initially bonded to the first layer(i) and then the free ends of the walls are attached to the second layer(iii) to form a chamber which is subsequently filled with fluid components for producing the central layer(ii). The first layer may be the deck of a ship. An independent claim is included for composite structures produced by the process.

IPC 1-7  
**B32B 15/08**; **B32B 27/40**; **B32B 31/00**

IPC 8 full level  
**B32B 15/08** (2006.01); **B32B 37/24** (2006.01); **E04C 2/292** (2006.01); **E04C 2/38** (2006.01)

CPC (source: EP US)  
**B32B 7/12** (2013.01 - US); **B32B 15/08** (2013.01 - EP US); **B32B 21/08** (2013.01 - US); **B32B 27/08** (2013.01 - US); **B32B 37/24** (2013.01 - EP); **E04C 2/292** (2013.01 - EP); **E04C 2/384** (2013.01 - EP); **E04C 2/386** (2013.01 - EP); **E04C 2/388** (2013.01 - EP); **B32B 2311/00** (2013.01 - EP US); **B32B 2605/12** (2013.01 - EP US)

Citation (search report)  
See references of WO 2004073973A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**DE 10306892 A1 20040826**; EP 1597065 A1 20051123; WO 2004073973 A1 20040902

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**DE 10306892 A 20030218**; EP 04705808 A 20040128; EP 2004000707 W 20040128