

Title (en)

FIBER REINFORCED COMPOSITE CORES AND PANELS

Title (de)

FASERVERSTÄRKTE VERBUNDKERNE UND -TAFELN

Title (fr)

ÂMES ET PANNEAUX COMPOSITES RENFORCÉS PAR FIBRES

Publication

**EP 2086746 A4 20120502 (EN)**

Application

**EP 07875053 A 20071108**

Priority

- US 2007023537 W 20071108
- US 85759306 P 20061109

Abstract (en)

[origin: WO2008147393A1] A fiber reinforced core panel is formed from strips of plastics foam helically wound with layers of rovings to form webs which may extend in a wave pattern or may intersect transverse webs. Hollow tubes may replace foam strips. Axial rovings cooperate with overlying helically wound rovings to form a beam or a column. Wound roving patterns may vary along strips for structural efficiency. Wound strips may alternate with spaced strips, and spacers between the strips enhance web buckling strength. Continuously wound rovings between spaced strips permit folding to form panels with reinforced edges. Continuously wound strips are helically wrapped to form annular structures, and composite panels may combine both thermoset and thermoplastic resins. Continuously wound strips or strip sections may be continuously fed either longitudinally or laterally into molding apparatus which may receive skin materials to form reinforced composite panels.

IPC 8 full level

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CPC (source: EP)

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**B29C 53/8058** (2013.01); **B29C 63/24** (2013.01); **B29C 70/202** (2013.01); **B29C 70/24** (2013.01); **B29C 70/545** (2013.01);  
**B32B 2305/022** (2013.01)

Citation (search report)

- [XI] US 6740381 B2 20040525 - DAY STEPHEN W [US], et al
- [X] US 2005074593 A1 20050407 - DAY STEPHEN W [US], et al
- See references of WO 2008147393A1

Cited by

US10519965B2; WO2015061905A1

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DOCDB simple family (publication)

**WO 2008147393 A1 20081204; WO 2008147393 A9 20090709;** AU 2007354365 A1 20081204; AU 2007354365 B2 20120927;  
BR PI0716707 A2 20140304; CA 2673013 A1 20081204; CA 2673013 C 20150526; CN 101646548 A 20100210; CN 101646548 B 20131204;  
EP 2086746 A1 20090812; EP 2086746 A4 20120502; JP 2010509101 A 20100325; JP 2013056558 A 20130328; JP 5685244 B2 20150318

DOCDB simple family (application)

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