

Title (en)

METHOD OF PRODUCING A COHESIVE FINISH ON COMPOSITE MATERIALS

Publication

**EP 0501959 A4 19921007 (EN)**

Application

**EP 90907610 A 19891121**

Priority

US 8905348 W 19891121

Abstract (en)

[origin: WO9107281A1] A method of providing a finish to an article (10) containing resin wherein an overlay (12) of sheet material that is impregnated with thermosetting resin -- typically a fabric of a type including metallic, synthetic fiber, natural fiber and ceramic cloths impregnated with epoxy resin -- is wrapped about or laid on an underlay (11) of material that is also impregnated with thermosetting resin -- typically a resin material reinforced with fibers of the graphite, glass, aramid, or ceramic types. The overlay (12) and underlay (11) are cured under heat and pressure in an oven at the same time, causing cohesive bonding of the resin within each. The resin exudes through the fabric overlay (12) during curing and forms a hard transparent shell of cured resin to the composite article. The embedded sheet material selectively imparts color, pattern, texture, reflectivity, penetration resistance, tensile strength, thermal and electrical conductivity, and other visual and mechanical properties to the composite article as desired.

IPC 1-7

**B32B 31/12**

IPC 8 full level

**B29C 65/70** (2006.01); **A63B 49/10** (2006.01); **A63B 53/10** (2006.01); **B29C 43/18** (2006.01); **B29C 43/20** (2006.01); **B29C 51/10** (2006.01); **B29C 51/14** (2006.01); **B29C 70/08** (2006.01); **B29C 70/34** (2006.01); **B29D 23/00** (2006.01); **B29D 99/00** (2010.01); **C08J 5/00** (2006.01); **B29C 53/56** (2006.01); **B29K 105/06** (2006.01); **B29L 9/00** (2006.01); **B63B 15/00** (2006.01)

CPC (source: EP KR)

**B29C 53/56** (2013.01 - KR); **B29C 70/086** (2013.01 - EP KR); **B29C 70/34** (2013.01 - EP KR); **B29D 23/001** (2013.01 - EP KR); **B29D 99/0046** (2013.01 - EP KR); **B32B 5/26** (2013.01 - KR); **B32B 27/08** (2013.01 - KR); **B32B 27/12** (2013.01 - KR); **B32B 37/00** (2013.01 - KR); **B32B 38/08** (2013.01 - KR); **B63B 15/0083** (2013.01 - KR); **B29C 53/56** (2013.01 - EP); **B29K 2995/0005** (2013.01 - EP KR); **B29K 2995/0013** (2013.01 - EP KR); **B29K 2995/0026** (2013.01 - EP KR); **B29L 2031/06** (2013.01 - EP KR); **B29L 2031/5227** (2013.01 - EP KR); **B29L 2031/5245** (2013.01 - EP KR); **B63B 15/0083** (2013.01 - EP)

Citation (search report)

- [X] EP 0009007 A1 19800319 - CIBA GEIGY AG [CH]
- [X] WO 8900099 A1 19890112 - AEROSPATIALE [FR], et al
- [A] PATENT ABSTRACTS OF JAPAN vol. 008, no. 148 (M-308)11 July 1984 & JP-A-59 045 117 ( TOHO BESLON ) 13 March 1984
- [A] BRITISH PLASTICS vol. 44, no. 2, February 1971, pages 63 - 64; 'Two new in-mould decoration processes for DMC moulding'
- [A] COMPOSITES vol. 29, no. 1, January 1989, PARIS, FRANCE page 42; 'Pourquoi Utiliser des Voiles de Surface en Polyester'
- See references of WO 9107281A1

Designated contracting state (EPC)

AT BE CH DE ES FR GB IT LI LU NL SE

DOCDB simple family (publication)

**WO 9107281 A1 19910530**; AU 5636690 A 19910613; AU 652538 B2 19940901; EP 0501959 A1 19920909; EP 0501959 A4 19921007; JP H05504104 A 19930701; KR 920703337 A 19921217; KR 960011751 B1 19960830

DOCDB simple family (application)

**US 8905348 W 19891121**; AU 5636690 A 19891121; EP 90907610 A 19891121; JP 50744890 A 19891121; KR 920701221 A 19920523