

Title (en)
THERMOSETTING RESIN-FIBER COMPOSITE AND METHOD AND APPARATUS FOR THE MANUFACTURE THEREOF

Title (de)
WÄRMEHÄRTENDES HARZFASERVERBUNDETEIL SOWIE VERFAHREN UND GERÄT ZU DESSEN HERSTELLUNG

Title (fr)
COMPOSITE FIBRE-RESINE THERMODURCISSEABLE AINSI QUE PROCEDE ET APPAREIL DE FABRICATION ASSOCIES

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Application
EP 02709345 A 20020207

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Abstract (en)
[origin: WO02070599A2] The invention relates to composite materials of construction comprising thermosetting resins and fibrous reinforcing or filling agents therefore as well as methods for the fabrication thereof. The thermosetting resin composition comprises a particulate thermosetting phenol-aldehyde resin; and a particulate curing agent for the thermosetting resin. The curing agent is encapsulated in a water insoluble thermoplastic resin having a softening point higher than, (1) the melting point of said thermosetting resin and, (2) the temperature at which said thermosetting resin flows on a solid substrate. The encapsulating thermoplastic resin also is dissolvable in the thermosetting resin by heating said curing agent capable of curing said thermosetting resin upon melting of the encapsulating thermoplastic resin and release thereof. The phenol-aldehyde resin is a novolak formed by condensation of a phenol component comprising at least one bifunctional phenol with at least one aldehyde component represented by the formula: R-CHO wherein R represents a hydrogen atom, a methyl group or a halogenated methyl group.

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Citation (search report)
• [X] EP 0672707 A2 19950920 - TORAY INDUSTRIES [JP]
• [Y] US 4230471 A 19801028 - LEVECQUE MARCEL, et al
• [Y] US 4173443 A 19791106 - LIN VICTOR J [US]
• [XY] PATENT ABSTRACTS OF JAPAN vol. 1996, no. 03 29 March 1996 (1996-03-29)
• [X] PATENT ABSTRACTS OF JAPAN vol. 0184, no. 62 (C - 1243) 29 August 1994 (1994-08-29)

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