

Title (en)

METHOD FOR MAKING VEHICLE DOOR PANELS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON TÜRINNENVERKLEIDUNGEN

Title (fr)

PROCEDE PERMETTANT DE FABRIQUER DES PANNEAUX DE PORTIERE

Publication

EP 1587658 A2 20051026 (EN)

Application

EP 04702160 A 20040114

Priority

- US 2004000845 W 20040114
- US 44105103 P 20030117

Abstract (en)

[origin: WO2004067304A2] Composite structural parts such as energy-absorbing automotive parts are made by inserting a thermoplastic energy-absorbing component into a mold, injecting a substrate polymer into the mold, and molding the energy-absorbing component and the substrate polymer to form a composite in which the substrate polymer is affixed to the energy-absorbing component without use of an intervening adhesive, and the structure of the energy-absorbing component is substantially preserved. The parts are made without secondary foam tooling, and thus can be produced at lower cost. In preferred embodiments, the substrate polymer and the energy-absorbing component are made from the same polymeric material, or different polymeric materials that are classified the same for recycling purposes. This allows scrap, used and damaged parts to be recycled without the need to separate them into their component parts.

IPC 1-7

B29C 43/18; **B60R 21/04**

IPC 8 full level

B29C 43/18 (2006.01); **B60R 21/04** (2006.01)

CPC (source: EP)

B29C 43/18 (2013.01); **B60R 21/04** (2013.01); **B29C 2043/3433** (2013.01); **B29K 2105/26** (2013.01); **B29L 2031/3005** (2013.01); **B29L 2031/3014** (2013.01); **B60R 2021/0414** (2013.01)

Citation (search report)

See references of WO 2004067304A2

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)

WO 2004067304 A2 20040812; **WO 2004067304 A3 20041118**; EP 1587658 A2 20051026

DOCDB simple family (application)

US 2004000845 W 20040114; EP 04702160 A 20040114