

Title (en)
BONDING OF PLASTIC AND PLASTIC MATRIX COMPOSITE MATERIALS

Publication
EP 0427793 A4 19920115 (EN)

Application
EP 89910536 A 19890727

Priority
• US 22529688 A 19880728
• US 32932389 A 19890327

Abstract (en)
[origin: WO9000970A1] Joining of thermoplastic parts (2, 4) of indeterminate thickness to each other is effected by application of heat to selected surface areas thereof (42, 44) by intense focussed infrared heat lines produced by parabolic-elliptical-reflection heat sources (22, 24) displaced by a reciprocating linear actuator (26), removable by a robotic controller (36) after completion of heating to enable intermediate pushing together of the parts by further actuators (32, 34) for bonding.

IPC 1-7
B32B 31/20

IPC 8 full level
B29C 65/00 (2006.01); **B29C 65/02** (2006.01); **B29C 65/14** (2006.01); **B29C 65/50** (2006.01); **B32B 37/10** (2006.01); **B29C 35/08** (2006.01)

CPC (source: EP US)
B29C 65/1432 (2013.01 - EP); **B29C 65/1454** (2013.01 - EP); **B29C 65/1467** (2013.01 - EP); **B29C 65/5042** (2013.01 - EP); **B29C 65/5057** (2013.01 - EP); **B29C 66/112** (2013.01 - EP); **B29C 66/1122** (2013.01 - EP); **B29C 66/12261** (2013.01 - EP); **B29C 66/12443** (2013.01 - EP); **B29C 66/12464** (2013.01 - EP); **B29C 66/1282** (2013.01 - EP); **B29C 66/12841** (2013.01 - EP); **B29C 66/131** (2013.01 - EP); **B29C 66/14** (2013.01 - EP); **B29C 66/242** (2013.01 - EP); **B29C 66/24221** (2013.01 - EP); **B29C 66/43** (2013.01 - EP); **B29C 66/438** (2013.01 - EP); **B29C 66/5346** (2013.01 - EP); **B29C 66/54** (2013.01 - EP); **B29C 66/652** (2013.01 - EP); **B29C 66/721** (2013.01 - EP); **B29C 66/723** (2013.01 - EP); **B29C 66/73921** (2013.01 - EP); **B29C 66/83221** (2013.01 - EP); **B29C 66/8432** (2013.01 - EP); **B29C 66/863** (2013.01 - EP); **B29C 66/91212** (2013.01 - EP); **B29C 66/91216** (2013.01 - EP); **B29C 66/91221** (2013.01 - EP); **B29C 66/91411** (2013.01 - EP); **B29C 66/91443** (2013.01 - EP); **B29C 66/9161** (2013.01 - EP); **B29C 66/91931** (2013.01 - EP); **B29C 66/91951** (2013.01 - EP); **B29C 66/9241** (2013.01 - EP); **B29C 66/9261** (2013.01 - EP); **B29C 66/92651** (2013.01 - EP); **B29C 66/934** (2013.01 - EP); **B29C 66/961** (2013.01 - EP); **B32B 7/12** (2013.01 - US); **B32B 27/18** (2013.01 - US); **B32B 37/12** (2013.01 - US); **B29C 65/04** (2013.01 - EP); **B29C 65/08** (2013.01 - EP); **B29C 65/1412** (2013.01 - EP); **B29C 65/4815** (2013.01 - EP); **B29C 65/7847** (2013.01 - EP); **B29C 66/71** (2013.01 - EP); **B29C 66/7212** (2013.01 - EP); **B29C 66/72141** (2013.01 - EP); **B29C 66/7392** (2013.01 - EP); **B29C 66/929** (2013.01 - EP); **B29C 66/944** (2013.01 - EP); **B29C 66/949** (2013.01 - EP); **B29C 66/9592** (2013.01 - EP); **B29C 2035/0822** (2013.01 - EP); **B29K 2071/00** (2013.01 - EP); **B29K 2079/085** (2013.01 - EP); **B29K 2081/04** (2013.01 - EP); **B29K 2081/06** (2013.01 - EP); **B29K 2105/06** (2013.01 - EP)

Citation (search report)
• [Y] DE 938499 C 19560202 - SIEMENS AG
• [Y] CH 260146 A 19490228 - ARC MANUFACTURING CO LIMITED [GB]
• [A] FR 1424109 A 19660107 - FMC CORP
• [A] US 4156626 A 19790529 - SOUDER JAMES J [US]
• [A] FR 1577304 A 19690808
• See references of WO 9000970A1

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
WO 9000970 A1 19900208; CA 1339405 C 19970902; EP 0427793 A1 19910522; EP 0427793 A4 19920115; JP H04502737 A 19920521

DOCDB simple family (application)
US 8903256 W 19890727; CA 606992 A 19890728; EP 89910536 A 19890727; JP 50980189 A 19890727