

Title (en)

A method of fabricating structures from aluminium sheet and structures comprising aluminium components.

Title (de)

Verfahren zur Herstellung von Strukturen aus Aluminiumblech und Strukturen die Aluminiumkomponenten enthalten.

Title (fr)

Procédé de fabrication de structures à partir d'une plaque d'aluminium et structures comprenant des composants en aluminium.

Publication

**EP 0181168 A1 19860514 (EN)**

Application

**EP 85307939 A 19851101**

Priority

GB 8427981 A 19841105

Abstract (en)

An anodising process in an acidic electrolyte preferably comprising phosphoric or sulphuric acid produces an anodic oxide layer on an aluminium sheet in a period of 2 minutes or less and, with appropriate conditions, in less than 15 seconds. The anodised sheet is formed into components which are secured together by adhesive and by localised mechanical fastening means such as spot-welds. The resultant structure may be of sufficient strength and durability to be used as the structural, load bearing parts of a motor vehicle body.

IPC 1-7

**C25D 11/08**; **C25D 11/18**; **B21D 26/02**

IPC 8 full level

**B23K 11/11** (2006.01); **C09J 5/00** (2006.01); **C25D 11/04** (2006.01); **C25D 11/08** (2006.01)

CPC (source: EP KR)

**C25D 11/08** (2013.01 - EP KR)

Citation (search report)

- [A] DE 2507386 A1 19760122 - FUJI PHOTO FILM CO LTD
- [A] FR 2382330 A1 19780929 - BOEING CO [US]
- [A] EP 0001198 B1 19800820
- [A] FR 2416747 A1 19790907 - SCHMALBACH LUBECA [DE]
- [X] TRANSACTIONS OF THE INSTITUTE OF METAL FINISHING, vol. 58, 1980, pages 81-84; P.J. THOMPSON et al.: "Pretreatment of aluminium by phosphoric acid anodizing prior to adhesive bonding"
- [A] RESEARCH DISCLOSURE, no. 132, April 1975, page 29;
- [A] S. WERNICK et al.: "The surface treatment and finishing of aluminium and its alloys", vol. 1, 1972, pages 386-390, Robert Drager Ltd., Teddington, GB

Cited by

CN105543931A; DE102006003160A1; DE102006003160A8; US8387994B2; KR101251895B1; EP0264972B1; EP0181173B1

Designated contracting state (EPC)

BE DE FR GB IT NL SE

DOCDB simple family (publication)

**EP 0181168 A1 19860514**; **EP 0181168 B1 19900321**; AU 4926585 A 19860515; AU 583315 B2 19890427; BR 8505513 A 19860805; CA 1279842 C 19910205; DE 3576710 D1 19900426; ES 548506 A0 19861201; ES 8701858 A1 19861201; GB 2167443 A 19860529; GB 2167443 B 19890517; GB 8427981 D0 19841212; IN 166522 B 19900526; JP 2727299 B2 19980311; JP H0770790 A 19950314; JP S61179897 A 19860812; KR 860004171 A 19860618; KR 930000470 B1 19930121; MY 100246 A 19900712

DOCDB simple family (application)

**EP 85307939 A 19851101**; AU 4926585 A 19851101; BR 8505513 A 19851104; CA 494491 A 19851104; DE 3576710 T 19851101; ES 548506 A 19851104; GB 8427981 A 19841105; IN 869MA1985 A 19851030; JP 18046894 A 19940711; JP 24644185 A 19851105; KR 850008188 A 19851104; MY PI19870194 A 19870225