

Title (en)

Dome made of aluminium alloy, especially to form a bottom of a tank and method to produce the same

Title (de)

Kuppel aus einer Aluminiumlegierung, insbesondere zum Formen eines Tankbodens, und dessen Herstellungsverfahren

Title (fr)

Dôme en alliage d'aluminium, notamment destiné à former un fond de réservoir, et son procédé de fabrication

Publication

EP 1157762 A1 20011128 (FR)

Application

EP 01401242 A 20010515

Priority

FR 0006503 A 20000522

Abstract (en)

The aluminium alloy dome, made from a curved component with a cap welded over its central hole, is produced from a truncated conical blank (5) cut from a flat metal sheet and shaped inside a hemispherical mould (9). A deformable wall (15) with a series of vanes and a pressure membrane (21) are fitted inside the blank, which is then subjected to a two-stage heat and pressure process to form it to the shape of the mould's inner surface.

IPC 1-7

B21D 26/02; B21D 22/12

IPC 8 full level

B64G 1/40 (2006.01); **B21D 26/02** (2011.01); **B21D 51/18** (2006.01); **B21D 53/92** (2006.01)

CPC (source: EP US)

B21D 26/02 (2013.01 - EP US); **B21D 26/021** (2013.01 - EP US); **B21D 26/023** (2013.01 - EP US); **B21D 26/031** (2013.01 - EP US);
B21D 51/18 (2013.01 - EP US); **Y10T 29/49904** (2015.01 - EP US); **Y10T 29/49906** (2015.01 - EP US)

Citation (search report)

- [A] FR 1159269 A 19580625 - CONST AERO NAVALES
- [A] US 3739617 A 19730619 - STEJSKAL L
- [A] US 3572073 A 19710323 - DEAN WALTER B, et al
- [A] FR 2326997 A1 19770506 - CHARLATTE MAURICE [FR]
- [A] US 4252244 A 19810224 - CHRISTIAN RALPH R, et al
- [A] US 5152452 A 19921006 - FENDEL EDWIN [US]

Cited by

DE102010013207A1; WO2011124341A1; DE102010013207B4

Designated contracting state (EPC)

DE IT

DOCDB simple family (publication)

EP 1157762 A1 20011128; FR 2809033 A1 20011123; FR 2809033 B1 20020809; JP 2003534133 A 20031118; US 2003006270 A1 20030109;
US 6629353 B2 20031007; WO 0189733 A1 20011129

DOCDB simple family (application)

EP 01401242 A 20010515; FR 0006503 A 20000522; FR 0101556 W 20010521; JP 2001585962 A 20010521; US 3025302 A 20020109