

Title (en)

Use of an aluminium alloy for making bottles for compressed gas

Title (de)

Verwendung einer Aluminium-Legierung zur Herstellung von Gasflaschen

Title (fr)

Utilisation d'un alliage d'aluminium pour la fabrication de bouteilles pour gaz comprimés

Publication

**EP 0589807 B1 19980610 (FR)**

Application

**EP 93420377 A 19930920**

Priority

FR 9211502 A 19920922

Abstract (en)

[origin: EP0589807A1] Alloy of the 7000 series and a specific heat treatment with a view to the manufacture of hollow bodies under pressure and, in particular, of metal bottles for compressed gases. The alloy contains, in weight %: 6.25  $\leq$  Zn  $\leq$  8.0 Mn  $\leq$  0.20 1.2  $\leq$  Mg  $\leq$  2.2 Ti  $\leq$  0.05 1.7  $\leq$  Cu  $\leq$  2.8 0.10  $\leq$  Zr  $\leq$  0.25 others, each  $\leq$  0.05 Fe  $\leq$  0.20 " total  $\leq$  0.15 Si+Fe  $\leq$  0.40 remainder: Al Cr  $\leq$  0.05. The final annealing is preferably performed in 3 stages: - 1st stage between 105 and 120 DEG C for 6 to 12 h - 2nd stage: between 170 and 190 DEG C for 0.5 to 20 h - 3rd stage: between 105 and 120 DEG C for 12 to 36 h.

IPC 1-7

**C22C 21/10**; **C22F 1/053**; **F17C 1/14**

IPC 8 full level

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CPC (source: EP)

**C22C 21/10** (2013.01); **C22F 1/053** (2013.01); **F17C 1/14** (2013.01); **F17C 2201/058** (2013.01); **F17C 2203/0646** (2013.01); **F17C 2203/0648** (2013.01); **F17C 2209/232** (2013.01); **F17C 2260/011** (2013.01); **F17C 2260/053** (2013.01); **F17C 2270/0745** (2013.01)

Cited by

EP2541120A1; FR2977298A1; EP1127952A1; FR2805282A1; EP2541119A1; FR2977297A1; FR3068370A1; EP1544315A1; US11976347B2; US10301710B2; US7452429B2; WO2005001149A3; WO2019007817A1; EP3670690A1

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**EP 0589807 A1 19940330**; **EP 0589807 B1 19980610**; AT E167237 T1 19980615; AU 4751193 A 19940331; AU 670114 B2 19960704; BR 9303846 A 19940329; CA 2106320 A1 19940323; CA 2106320 C 20031118; DE 69319051 D1 19980716; DE 69319051 T2 19981210; DK 0589807 T3 19990322; ES 2118209 T3 19980916; FR 2695942 A1 19940325; FR 2695942 B1 19941118; JP H06256882 A 19940913

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