

Title (en)

High-strength, formable, isotropic aluminium alloys for deep drawing.

Title (de)

Zum Tiefziehen geeignete Hochfeste verformbare isotropische Legierungen auf Aluminiumbasis.

Title (fr)

Alliages d'al pour emboutissage-étirage résistants, formables et isotropes.

Publication

**EP 0666330 A3 19960717 (FR)**

Application

**EP 95105950 A 19920312**

Priority

- CA 2077315 A 19920901
- EP 92420073 A 19920312
- FR 9103662 A 19910314

Abstract (en)

[origin: EP0504077A1] Al-based alloys intended for deep drawing and/or drawing and exhibiting high mechanical strength characteristics as well as good isotropy (low distortion wedge content) and good cold processability. The alloys according to the invention have the following compositions by weight (%): (I) (II) Fe  $\leq$  0.25 from 0.7 to 1.5 Si  $\leq$  0.25  $\leq$  0.4 Mn from 0.8 to 1.6  $\leq$  0.8 Mg from 0.7 to 2.5 from 1.5 to 3 Cu from 0 to 0.6 from 0 to 0.6 Cr from 0 to 0.35 from 0 to 0.35 Ti from 0 to 0.1 from 0 to 0.1 V from 0 to 0.1 from 0 to 0.1 Remainder Al and unavoidable remainder Al and unavoidable impurities: impurities Each  $\leq$  0.05%  $\leq$  0.05 Total  $\leq$  0.15%  $\leq$  0.15 They are particularly well-suited for the manufacture of drawn cans, particularly beverage cans, which are lighter and/or stronger with an increased saving of material, the manufacturing range being wholly comparable with that of the conventional alloys (3004/3104), with optional omission of the intermediate annealing operations.

IPC 1-7

**C22C 21/06**; **C22C 21/00**; **C22F 1/047**

IPC 8 full level

**C22C 21/00** (2006.01); **C22C 21/06** (2006.01); **C22F 1/047** (2006.01)

CPC (source: EP)

**C22C 21/00** (2013.01); **C22C 21/06** (2013.01); **C22F 1/047** (2013.01)

Citation (search report)

- [DA] US 4318755 A 19820309 - JEFFREY PAUL W, et al
- [A] EP 0298876 A1 19890111 - CEGEDUR [FR]
- [A] EP 0097319 A2 19840104 - SUMITOMO LIGHT METAL IND [JP]
- [A] EP 0121620 A1 19841017 - KOBE STEEL LTD [JP]
- [A] GB 2027743 A 19800227 - ALUSUISSE
- [A] WO 9010091 A1 19900907 - GOLDEN ALUMINUM CO [US]
- [X] DATABASE WPI Section Ch Week 8620, Derwent World Patents Index; Class M26, AN 86-127770, XP002003683

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

**EP 0504077 A1 19920916**; **EP 0504077 B1 19961009**; CA 2077315 A1 19940302; CA 2077315 C 20000808; DE 504077 T1 19941103; EP 0666330 A2 19950809; EP 0666330 A3 19960717; ES 2051258 T1 19940616; ES 2051258 T3 19961201; GR 940300046 T1 19940729

DOCDB simple family (application)

**EP 92420073 A 19920312**; CA 2077315 A 19920901; DE 92420073 T 19920312; EP 95105950 A 19920312; ES 92420073 T 19920312; GR 940300046 T 19940729