

Title (en)
Aluminium alloy containing silicon for use as pistons in automobiles

Title (de)
Al-Legierung mit Silizium für Kolben in Kraftfahrzeugen

Title (fr)
Alliage d'aluminium avec silicium pour un piston dans une voiture

Publication
EP 0924310 B1 20010912 (EN)

Application
EP 98123801 A 19981215

Priority
GB 9726840 A 19971220

Abstract (en)
[origin: EP0924310A1] An improved aluminium - silicon alloy for use in the manufacture of pistons is disclosed. The improved alloy is of the following composition in which the component elements are 10.5 to 13.5 silicon 2.0 to less than 4.0 copper 0.8 to 1.5 magnesium 0.5 to 2.0 nickel 0.3 to 0.9 cobalt at least 20 ppm phosphorous and either (i) 0.05 to 0.2 titanium; or (ii) at least one of the following up to 0.2 zirconium up to 0.2 vanadium; in either case with the balance Aluminium and unavoidable impurities.

IPC 1-7
C22C 21/02

IPC 8 full level
C22C 21/04 (2006.01); **F02F 3/00** (2006.01); **F02F 7/00** (2006.01)

CPC (source: EP)
C22C 21/04 (2013.01); **F02F 3/00** (2013.01); **F02F 7/0085** (2013.01); **F02F 2200/04** (2013.01); **F05C 2201/021** (2013.01); **F05C 2251/042** (2013.01)

Cited by
DE102012220765A1; DE102014209102A1; CN105190000A; EP1253210A1; US2021222271A1; KR20150070449A; CN104812921A; JP2016505382A; JP2018114556A; US7682469B2; US9163579B2; US9169800B2; WO2014137690A1; WO2013050357A1; WO2014076174A1; WO2020207829A1; WO2015173172A1; US11280292B2; EP1690953A4; CN106795591A; JP2017519105A; US10022788B2; US11391238B2

Designated contracting state (EPC)
DE FR IT SE

DOCDB simple family (publication)
EP 0924310 A1 19990623; EP 0924310 B1 20010912; DE 69802017 D1 20011115; DE 69802017 T2 20020321; GB 2332448 A 19990623; GB 2332448 B 20020626; GB 9726840 D0 19980218

DOCDB simple family (application)
EP 98123801 A 19981215; DE 69802017 T 19981215; GB 9726840 A 19971220