

Title (en)

Industrial process of manufacture of modular radiator elements in injected aluminium, symetrically shaped

Title (de)

Verfahren zur Herstellung von modularen,symetrischen Radiatorenelementen aus spritzgegossenem Aluminium

Title (fr)

Procédé de fabrication d'éléments de radiateur modulaires, symétriques, en aluminium moulé par injection

Publication

**EP 0772020 A3 19980812 (EN)**

Application

**EP 96500139 A 19961028**

Priority

- ES 9601286 A 19960610
- IT AN950052 A 19951030

Abstract (en)

[origin: EP0772020A2] Industrial process for manufacture of modular radiator elements (1) in injected or die-cast aluminium of the kind made up of a tubular column (2) which is finished off at the top and bottom with crosswise bosses (4), each of which is hidden inside an extension (3A,3B) fitted onto the respective end. These two extensions can be symmetrical and U-shaped, or of any other configuration. The invention also comprises the radiator elements (1).

IPC 1-7

**F28F 21/08; F28D 1/053**

IPC 8 full level

**B21D 53/02** (2006.01); **F28D 1/053** (2006.01); **F28F 1/16** (2006.01); **F28F 9/26** (2006.01); **F28F 21/08** (2006.01)

CPC (source: EP)

**B21D 53/02** (2013.01); **F28D 1/05308** (2013.01); **F28D 1/05358** (2013.01); **F28F 1/16** (2013.01); **F28F 9/262** (2013.01); **F28F 21/088** (2013.01); **F28D 2021/0035** (2013.01)

Citation (search report)

- [A] CH 649374 A5 19850515 - SCHLATTER AG
- [A] US 2083028 A 19370608 - LIVAR ALLEN P
- [A] FR 2068647 A1 19710827 - TERMIA SARL

Cited by

ITMI20112027A1; ITBS20110031A1; EP2146170A1; ITMI20121977A1; EP2000747A3; EP1471309A3; ITMI20112028A1; CN104053964A; EA025798B1; WO2013068989A1; WO2012127508A1; WO2014080363A1; WO2010006901A1; WO2013068991A1

Designated contracting state (EPC)

**BE ES FR IT PT**

DOCDB simple family (publication)

**EP 0772020 A2 19970507; EP 0772020 A3 19980812; EP 0772020 B1 20020417;** ES 2174043 T3 20021101; PT 772020 E 20020930

DOCDB simple family (application)

**EP 96500139 A 19961028;** ES 96500139 T 19961028; PT 96500139 T 19961028