

Title (en)

Radiator with horizontally juxtaposed heating elements, through which a heating medium flows.

Title (de)

Heizkörper mit nebeneinander waagerecht angeordneten Heizelementen, durch welche ein Heizmedium fließt.

Title (fr)

Radiateur à éléments chauffants verticaux juxtaposés horizontalement et traversés par un fluide chauffant.

Publication

EP 0448473 B1 19931201 (FR)

Application

EP 91400771 A 19910321

Priority

FR 9003753 A 19900323

Abstract (en)

[origin: EP0448473A1] The invention concerns a radiator with horizontally juxtaposed vertical heating elements (2). According to the invention, the radiator (1) is constituted by a plurality of horizontal unit modules (10) disposed one above the other in order to constitute a vertical stack, and by two lateral tubular collectors (3, 4) extending vertically over the whole height of the stack on either side of the latter; the feed collector (3) is connected to each of the unit modules by a means (100) of fixing and connecting, and the return collector (4) is connected to each of these modules by a means of fixing and connecting (200) offset in height with respect to the first means (100). Application in particular to the production of cast modular radiators. <IMAGE>

IPC 1-7

F28D 1/053; F28F 9/26; F24D 19/02

IPC 8 full level

F24D 19/02 (2006.01); **F28D 1/053** (2006.01); **F28F 9/26** (2006.01); **F24D 19/06** (2006.01)

CPC (source: EP)

F24D 19/02 (2013.01); **F24D 19/0209** (2013.01); **F24D 19/0213** (2013.01); **F24D 19/023** (2013.01); **F28D 1/05358** (2013.01); **F28D 1/05383** (2013.01); **F28F 9/264** (2013.01); **F24D 19/0203** (2013.01); **F24D 19/061** (2013.01); **F24D 2220/2018** (2013.01)

Cited by

EP1167890A3; ITAN20090017A1; FR2723439A1; DE19504242A1; DE19504242B4; DE10113589A1; EP1243870A3; DK178714B1; US2017082383A1; CN106560658A; US9989263B2; US6619557B1; WO2017054828A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

EP 0448473 A1 19910925; **EP 0448473 B1 19931201**; AT E98011 T1 19931215; DE 69100700 D1 19940113; ES 2047992 T3 19940301; FR 2660061 A1 19910927; FR 2660061 B1 19920724

DOCDB simple family (application)

EP 91400771 A 19910321; AT 91400771 T 19910321; DE 69100700 T 19910321; ES 91400771 T 19910321; FR 9003753 A 19900323