

Title (en)  
Heating device and mounting method of said device

Title (de)  
Heizgerät and Methode zur Montage des Heizgeräts

Title (fr)  
Dispositif de chauffage et procédé de montage associé

Publication  
**EP 2840329 B1 20160907 (EN)**

Application  
**EP 14425092 A 20140707**

Priority  
IT RM20130440 A 20130726

Abstract (en)  
[origin: EP2840329A1] The present invention concerns a heating device (1) connectable to a power supply, comprising a support frame (2), one or more radiating elements (3), each comprising a containment tube (31), having an inner surface, said containment tube (31) being capable to operate as an electrode and being connectable to said power supply, a longitudinal housing (32), made of insulating material, arranged within said containment tube (31), open at the top and having a lower base (32'), a longitudinal electrode (33), connectable to said power supply and arranged within said longitudinal housing (32), so as to be isolated from said containment tube (31), heat generating means (34), as one or more PTC (Positive Temperature Coefficient) elements, each one inserted in said containment tube (31) and arranged between, and in contact with, said longitudinal electrode (33) and said containment tube (31), so that, by applying an electric current between said containment tube (31) and said longitudinal electrode (33), said heat generating means (34) generate heat, compression means (35), located in said longitudinal housing (32), interposed between said longitudinal housing (32) and said longitudinal electrode (33), and one or more dissipation fins (4) arranged in said support frame (2), suitable to dissipate the heat generated from said radiating elements (3), characterized in that said longitudinal housing (32) comprises a plurality of seats (32') on said base (32'), and in that said compression means comprise a plate (35) on which a plurality of tabs or springs (35') are obtained, each one insertable in a respective seat (32') of said longitudinal housing (32), said plate (35) being capable to assume a rest position, in which said tabs or springs (35') are inserted in said seats (32'), and an operating position, in which said plate (35) is shifted longitudinally with respect to said longitudinal housing (32), so that said tabs or springs (35') are in compression, such that said heat generating means (34) are held in thermal and electrical contact with said inner surface of said containment tube (31) in which they are inserted, by means of the force exerted by said tabs or springs (35'). The present invention also concerns a method for mounting of a heating device (1).

IPC 8 full level  
**F24H 3/04** (2006.01); **F24H 9/18** (2006.01)

CPC (source: EP)  
**F24H 3/0429** (2013.01); **F24H 3/0435** (2013.01); **F24H 3/0476** (2013.01); **F24H 9/1872** (2013.01); **H05B 3/50** (2013.01); **H05B 2203/016** (2013.01); **H05B 2203/017** (2013.01); **H05B 2203/02** (2013.01); **H05B 2203/023** (2013.01)

Cited by  
CN109982879A; FR3073039A1; WO2019086802A1; WO2022238538A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**EP 2840329 A1 20150225**; **EP 2840329 B1 20160907**; IT RM20130440 A1 20150127

DOCDB simple family (application)  
**EP 14425092 A 20140707**; IT RM20130440 A 20130726