

Title (en)
Heating group for diathermic fluid radiant elements

Title (de)
Wärmegruppe für ein diathermisches Flüssigkeitsstrahlungselement

Title (fr)
Groupe chauffante pour éléments radiantes à fluide diathermique

Publication
EP 1655546 A1 20060510 (EN)

Application
EP 04106370 A 20041207

Priority
IT VI20030248 A 20031209

Abstract (en)
A heating group (1) for diathermic fluid radiant elements (A, B) comprising: a heater (2) put in contact with the diathermic fluid and consisting of a tubular body (4) containing an electric insulator (4a) in which at least an electric resistance (5) is immersed; a tubular sleeve (6) disposed at one end of the tubular body (4) and provided with fastening means (6a) to the radiant element (A, B); a feeding group (7) of the heater (2), comprising at least a solid-state switch (8) able to connect the electric resistance (5) to a distribution power grid (9); electronic control means (10) for switching off and switching on the switch (8). The solid-state switch (8) is disposed inside the sleeve (6), where it is incorporated in a thermo-conductive core (11; 19; 20) adherent to the inner wall (6a) of the sleeve (6).

IPC 8 full level
F24D 19/10 (2006.01); **H05B 1/02** (2006.01); **H05B 3/42** (2006.01); **H05K 7/20** (2006.01)

CPC (source: EP US)
F24H 9/2071 (2013.01 - EP US); **F24H 15/407** (2022.01 - EP US); **H05B 3/08** (2013.01 - EP); **H05B 3/44** (2013.01 - EP); **F24H 3/004** (2013.01 - EP)

Citation (applicant)
• EP 1278400 A2 20030122 - JEDAC [FR]
• DE 10209905 A1 20030918 - STIEBEL ELTRON GMBH & CO KG [DE]
• US 6147335 A 20001114 - VON ARX THEODORE T [US], et al

Citation (search report)
• [X] EP 1278400 A2 20030122 - JEDAC [FR]
• [X] DE 10209905 A1 20030918 - STIEBEL ELTRON GMBH & CO KG [DE]
• [X] US 6147335 A 20001114 - VON ARX THEODORE T [US], et al
• [A] EP 1156704 A1 20011121 - ACOVA [FR]
• [A] EP 1081986 A2 20010307 - BLECKMANN GMBH [AT]
• [A] EP 0317435 A1 19890524 - ANDRE DAVID
• [A] WO 03100326 A1 20031204 - IRCA SPA [IT], et al

Cited by
FR2932551A1; EP2000747A3; EP4271128A1; IT202200008582A1; EP2251612A1; FR2945107A1; ITVI20120103A1; EP2661151A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1655546 A1 20060510; EP 1655546 A3 20060726; IT VI20030248 A1 20050610

DOCDB simple family (application)
EP 04106370 A 20041207; IT VI20030248 A 20031209