

Title (en)
ELECTRIC FLUID HEATER

Title (de)
ELEKTRISCHER FLUIDHEIZER

Title (fr)
DISPOSITIF ELECTRIQUE DE CHAUFFAGE DE FLUIDES

Publication
EP 1730996 A1 20061213 (DE)

Application
EP 05740627 A 20050331

Priority
• DE 2005000586 W 20050331
• DE 102004016434 A 20040331

Abstract (en)
[origin: WO2005096672A1] The invention relates to an electric resistance heating element for heating flowing media. The aim of the invention is to provide an assembly for electric resistance heating elements, which can be configured from simple technology and at the same time produces high power densities. This is achieved by an electric fluid heater consisting of a ceramic or polymer composite material with a plurality of channels, through which the medium to be heated flows. Said inventive fluid heater consists of at least one heating element, which is provided with at least one channel and whose opposing external surfaces comprise electrode surfaces, whose action causes a current to flow between said electrode surfaces, in an essentially transverse direction to that of the channels. At least one of the two electrode surfaces of the heating element has a connection surface that is located on the adjoining external surface of the heating element.

IPC 8 full level
H05B 3/42 (2006.01)

CPC (source: EP US)
H05B 3/42 (2013.01 - EP US); **H05B 2203/021** (2013.01 - EP US); **H05B 2203/022** (2013.01 - EP US)

Citation (search report)
See references of WO 2005096672A1

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)
WO 2005096672 A1 20051013; AT E394903 T1 20080515; DE 102004016434 A1 20051110; DE 102004016434 B4 20060105; DE 502005003996 D1 20080619; EP 1730996 A1 20061213; EP 1730996 B1 20080507; ES 2306142 T3 20081101; US 2007189741 A1 20070816

DOCDB simple family (application)
DE 2005000586 W 20050331; AT 05740627 T 20050331; DE 102004016434 A 20040331; DE 502005003996 T 20050331; EP 05740627 A 20050331; ES 05740627 T 20050331; US 54715005 A 20050331