

Title (en)  
Electric heater and continuous-flow heater

Title (de)  
Elektrischer Heizkörper und Durchlauferhitzer

Title (fr)  
Radiateur électrique et chauffe-eau instantané

Publication  
**EP 2410813 B1 20151125 (DE)**

Application  
**EP 11172783 A 20110706**

Priority  
DE 102010031520 A 20100719

Abstract (en)  
[origin: EP2410813A1] The element (1) has an inner pipe (4) provided for receiving a heating element (14) that is electrically insulated against a pipe wall (18) of the inner pipe such that heated fluid is made to flow through an outer pipe (2). The inner pipe is arranged in an inner space (8) of the outer pipe. An inner tube is supported with a high thermal conductivity material of a wall (22) of the outer pipe over ribs (6a-6c). The ribs are designed as intermediate walls and the inner space, and are divided into a variety of channels (12a-12c). The outer pipe is made of a material with low heat conductivity.

IPC 8 full level  
**H05B 3/48** (2006.01); **A47L 15/42** (2006.01); **F24H 1/10** (2006.01)

CPC (source: EP)  
**F24H 1/142** (2013.01); **F24H 9/0015** (2013.01); **H05B 3/48** (2013.01); **A47L 15/4285** (2013.01)

Citation (examination)  
DE 2218796 B2 19740207

Cited by  
CN109556333A; CN104180511A; FR3073609A1; FR3026171A1; EP3564641A4; WO2014118313A1; WO2017196952A1; WO2018197726A1; DE102021215100A1; WO2023126156A1

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 2410813 A1 20120125; EP 2410813 B1 20151125; DE 102010031520 A1 20120119; PL 2410813 T3 20160531**

DOCDB simple family (application)  
**EP 11172783 A 20110706; DE 102010031520 A 20100719; PL 11172783 T 20110706**