

Title (en)
WATER HEATER

Title (de)
WARMWASSERBEREITER

Title (fr)
CHAUFFE-EAU

Publication
EP 0699289 A1 19960306 (DE)

Application
EP 94918778 A 19940524

Priority

- DE 4317554 A 19930526
- EP 9401667 W 19940524

Abstract (en)
[origin: US5709174A] PCT No. PCT/EP94/01667 Sec. 371 Date Nov. 27, 1995 Sec. 102(e) Date Nov. 27, 1995 PCT Filed May 24, 1994 PCT Pub. No. WO94/28359 PCT Pub. Date Dec. 8, 1994A hot water heater has an inlet for liquid fuels, a plurality of inlets for fresh air, an inlet for a fluid to be heated, at least two combustion stages traversed by the fuel-air mixture with catalytic combustion chambers surrounded at least partially by at least one fluid chamber filled with fluid and with an offgas heat exchanger for fluid to be heated. The heat exchanger is traversed by the offgas escaping from the combustion chambers. The first combustion stage has an evaporation chamber that has on its outside surface, at least a partial catalyst layer.

IPC 1-7
F24H 1/00; F23C 11/00

IPC 8 full level
F23C 6/04 (2006.01); F23C 13/00 (2006.01); F23D 11/00 (2006.01); F24H 1/00 (2006.01)

CPC (source: EP US)
F23C 6/04 (2013.01 - EP US); F23C 13/00 (2013.01 - EP US); F23C 13/02 (2013.01 - EP US); F23D 11/008 (2013.01 - EP US); F24H 1/0045 (2013.01 - EP US)

Citation (search report)
See references of WO 9428359A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
US 5709174 A 19980120; DE 4317554 A1 19941201; DE 4317554 C2 19970306; DE 59401664 D1 19970306; EP 0699289 A1 19960306; EP 0699289 B1 19970122; WO 9428359 A1 19941208

DOCDB simple family (application)
US 55337195 A 19951127; DE 4317554 A 19930526; DE 59401664 T 19940524; EP 9401667 W 19940524; EP 94918778 A 19940524