

Title (en)
PRE-HEATING CONTIGUOUS IN-LINE WATER HEATER

Title (de)
VORHEIZENDER NAHER WASSERERHITZER

Title (fr)
CHAUFFE-EAU INSTANTANE CONTIGU DE PRECHAUFFAGE

Publication
EP 1604154 A4 20131204 (EN)

Application
EP 04710618 A 20040212

Priority

- US 2004004038 W 20040212
- US 36507203 A 20030212
- US 52635203 P 20031202
- US 52633303 P 20031202

Abstract (en)
[origin: WO2004072562A2] An improved pre-heating, contiguous in-line water heater is described. The in-line water heater utilizes a passive heating means to passively heat at least a portion of the input water received by the in-line water heater. The result is a more cost efficient water heater. The in-line water heater is integrated with a means for control to receive input from at least one sensor and to regulate the operation of the in-line water heater.

IPC 8 full level
F24H 1/10 (2006.01); **H05B 3/18** (2006.01)

CPC (source: EP US)
F24H 1/102 (2013.01 - EP US)

Citation (search report)

- [X] DE 10003042 A1 20010726 - STIEBEL ELTRON GMBH & CO KG [DE]
- [X] WO 9117640 A1 19911114 - SEITZ DAVID E [US]
- [X] DE 904924 C 19540225 - AEG
- [A] DE 3039383 A1 19820519 - STIEBEL ELTRON GMBH & CO KG [DE]
- [A] US 4567350 A 19860128 - TODD JR ALVIN E [US]
- [A] DE 1232720 B 19670119 - LICENTIA GMBH
- [A] DE 1301033 B 19690814 - LICENTIA GMBH
- [A] US 5325822 A 19940705 - FERNANDEZ GUILLERMO N [US]
- [A] US 5438642 A 19950801 - POSEN ALAN [US]
- See references of WO 2004072562A2

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

DOCDB simple family (publication)
WO 2004072562 A2 20040826; WO 2004072562 A3 20050728; EP 1604154 A2 20051214; EP 1604154 A4 20131204;
US 2006222351 A1 20061005

DOCDB simple family (application)
US 2004004038 W 20040212; EP 04710618 A 20040212; US 54549005 A 20050812