

Title (en)

FIRE HEATER WITH HEAT PIPE PREHEATER

Title (de)

BEFEUERTES HEIZER MIT WÄRMEROHRVORWÄRMER

Title (fr)

APPAREIL DE CHAUFFAGE À COMBUSTIBLE DOTÉ D'UN PRÉCHAUFFEUR À CALODUC

Publication

**EP 3472269 A1 20190424 (EN)**

Application

**EP 17729621 A 20170526**

Priority

- US 201662352099 P 20160620
- US 2017034616 W 20170526

Abstract (en)

[origin: US2017363288A1] An improved fired heater with air preheating provided by one or more heat pipes. The fired heater may include at least one burner for combusting a fuel stream and an air stream and producing heated exhaust gases; a hot gas flow path and at least one conduit containing a process fluid to be heated by heat transfer from the heated exhaust gases; and an air preheater comprising at least one heat pipe having a first section exposed to the heated exhaust gases and a second section exposed to the air stream, wherein the heat pipe is positioned and arranged to transfer heat from the heated exhaust gases to the air stream, wherein the at least one heat pipe contains a working fluid sealed within the heat pipe, wherein said working fluid transfers heat from the heated exhaust gas to the air stream to be preheated.

IPC 8 full level

**C10G 9/00** (2006.01); **C10G 9/20** (2006.01); **F23L 15/00** (2006.01); **F28D 7/08** (2006.01)

CPC (source: EP US)

**C10G 9/005** (2013.01 - EP US); **C10G 9/20** (2013.01 - EP US); **F23L 15/00** (2013.01 - EP US); **F23L 15/045** (2013.01 - EP US); **F28D 7/08** (2013.01 - EP US); **F28D 15/0275** (2013.01 - EP US); **F28D 21/001** (2013.01 - EP US); **Y02E 20/34** (2013.01 - EP US)

Citation (search report)

See references of WO 2017222744A1

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**US 2017363288 A1 20171221**; CA 3028372 A1 20171228; CN 109312236 A 20190205; EP 3472269 A1 20190424; SG 11201810304U A 20190130; WO 2017222744 A1 20171228

DOCDB simple family (application)

**US 201715606038 A 20170526**; CA 3028372 A 20170526; CN 201780037056 A 20170526; EP 17729621 A 20170526; SG 11201810304U A 20170526; US 2017034616 W 20170526