

Title (en)

Heat exchanger with a bypass tube

Title (de)

Wärmetauscher mit einem Bypassrohr

Title (fr)

Echangeur de chaleur avec un tuyau bypass

Publication

**EP 1498678 B1 20060906 (DE)**

Application

**EP 03015944 A 20030712**

Priority

EP 03015944 A 20030712

Abstract (en)

[origin: EP1498678A1] A heat exchanger has a by-pass pipe (2) to cool hot gases emanating from a petrochemical plant by application of water to the pipe. The pipe has an inlet chamber (5) and an outlet chamber (6) and a by-pass pipe that is roughly parallel to and passes through the centre of the heat exchanger. The by-pass pipe has a throttle coupled to a pushrod (14). The by-pass pipe is co-located with a pipe (12) with a twin-walled (15) sliding piston (13) valve. The valve twin walls have cooling channels.

IPC 8 full level

**F28D 7/16** (2006.01); **F28F 27/02** (2006.01)

CPC (source: EP)

**F28D 7/163** (2013.01); **F28F 27/02** (2013.01); **F28D 2021/0075** (2013.01); **F28F 2250/06** (2013.01)

Cited by

JP2013539006A; DE102015013517A1; EP4368933A1; CN103913078A; JP2017078567A; EP2312252A1; EP2562506A1; GB2516122B; DE102005057674A1; DE102005057674B4; DE102008051268A1; US7412945B2; EP3159646A1; US11226159B2; EP3407001A1; WO2018215102A1; US11073347B2; WO2012041344A1; US10072223B2; US10190065B2; US9278814B2; WO2016135299A1; US9550630B2; US9592963B2; US10071863B2; US10782073B2; EP3262363B1; EP3159646B1; EP3159646B2

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)

**EP 1498678 A1 20050119**; **EP 1498678 B1 20060906**; AT E338931 T1 20060915; DE 50304958 D1 20061019; DK 1498678 T3 20070122; ES 2271434 T3 20070416

DOCDB simple family (application)

**EP 03015944 A 20030712**; AT 03015944 T 20030712; DE 50304958 T 20030712; DK 03015944 T 20030712; ES 03015944 T 20030712