

Title (en)

Heat exchanger for indirect heat exchange

Title (de)

Wärmetauscher für den indirekten Wärmeaustausch

Title (fr)

Echangeur de chaleur pour échange de chaleur indirecte

Publication

EP 1209434 A3 20060412 (DE)

Application

EP 01125219 A 20011024

Priority

DE 10058023 A 20001123

Abstract (en)

[origin: EP1209434A2] Heat exchanger for indirect heat exchange of two gaseous media consisting of at least one aggressive component containing e.g. sulfuric acid comprises a chamber through which one medium flows and pipes (1) for the other medium passing through the chamber. The ends of the pipes are fixed in a gas- and liquid-tight manner in at least one pipe base (4) separating the media from each other. The pipes are made of plastic with walls forming a zigzag pattern (5). The zigzag patterns on the inner side and the outer side correspond with each other. The sides (6) on the inner side of the zigzag pattern angled downward lie at a smaller angle (α) to the pipe middle axis (1a) than the sides (7) angled upward. Preferred Features: The angle (β) of the sides angled upward is 1.3-2 times the angle (α) of the sides angled downward.

IPC 8 full level

F28F 1/08 (2006.01); **F28F 9/013** (2006.01); **F28F 9/18** (2006.01); **F28F 21/06** (2006.01)

CPC (source: EP)

F28F 1/08 (2013.01); **F28F 9/0132** (2013.01); **F28F 9/187** (2013.01); **F28F 21/062** (2013.01); **F28F 21/067** (2013.01); **F28F 2275/20** (2013.01)

Citation (search report)

- [A] WO 9516873 A1 19950622 - 2H KUNSTSTOFFE FA [DE]
- [A] WO 9956049 A1 19991104 - CHEMSPEED LTD [CH], et al
- [A] EP 0494321 A1 19920715 - POLIFLUOR S L [ES]
- [A] DE 1231270 B 19661229 - ANDRE HUET
- [A] GB 935091 A 19630828 - ANDRE HUET
- [A] DE 3049535 A1 19820708 - CERNYJ ANATOLIJ ALEKSEEVIC [SU]
- [A] CH 511078 A 19710815 - AIRCOLD SYSTEM AG [CH]

Cited by

EP2101095A3; CN108801001A; DE10350765A1; DE10350765B4

Designated contracting state (EPC)

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