

Title (en)
Fluidized bed heat exchanger

Title (de)
Wirbelbett-Wärmetauscher

Title (fr)
Échangeur de chaleur à lit fluidisé

Publication
EP 2884166 A1 20150617 (EN)

Application
EP 13197438 A 20131216

Priority
EP 13197438 A 20131216

Abstract (en)
A fluidized bed heat exchanger with a chamber (24) comprises a solid particles inlet port (22), a solid particles outlet port (30), arranged at a distance to the inlet port (22), means (46) for introducing a fluidizing gas from a bottom area into the chamber (24), and at least one heat transfer means (28) arranged within the chamber (24). The heat exchanger further comprises at least one baffle (50, 52) extending downwardly from a chamber ceiling (24c) substantially perpendicular to a straight line between inlet port (22) and outlet port (30), with its lower end at a distance to the heat transfer means (28). The baffle may comprise at least one opening (0) to allow pressure adjusting. Multiple baffles (50, 52) may be arranged at a distance to each other along the line between inlet port (22) and outlet port (30).

IPC 8 full level
F22B 31/00 (2006.01); **F23C 10/00** (2006.01); **F23C 10/04** (2006.01); **F28D 13/00** (2006.01); **F28F 9/02** (2006.01); **F28F 9/22** (2006.01)

CPC (source: EP)
F01K 5/02 (2013.01); **F23C 10/00** (2013.01); **F23C 10/04** (2013.01); **F28D 7/085** (2013.01); **F28D 13/00** (2013.01); **F28F 9/026** (2013.01); **F28F 9/22** (2013.01); **F23C 2206/103** (2013.01)

Citation (applicant)
• US 6802890 B2 20041012 - HYPPAENEN TIMO [FI]
• US 4615715 A 19861007 - SESHAMANI VENKATRAMAN [US]

Citation (search report)
• [XY] WO 9411691 A1 19940526 - AHLSTROEM OY [FI], et al
• [I] JP 2006078069 A 20060323 - MITSUI SHIPBUILDING ENG
• [I] DE 102005037111 A1 20070215 - ALSTOM TECHNOLOGY LTD [CH]
• [YA] EP 0495296 A2 19920722 - FOSTER WHEELER ENERGY CORP [US]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

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