

Title (en)
Fluidized bed heat exchanger

Title (de)
Wirbelbett-Wärmetauscher

Title (fr)
Échangeur de chaleur à lit fluidisé

Publication
EP 2884165 A1 20150617 (EN)

Application
EP 13197431 A 20131216

Priority
EP 13197431 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 means (46) for introducing the fluidizing gas consist of several nozzle sets (N1 ...N5). Each nozzle set (N1...N5) has at least one nozzle (46) and is charged with a different gas pressure than the others.

IPC 8 full level
F23C 10/00 (2006.01); **F22B 31/00** (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 7/087** (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)
• [X] EP 2348252 A2 20110727 - BABCOCK & WILCOX POWER GENERAT [US]
• [X] US 4521976 A 19850611 - STEWART ROBERT D [US], et al
• [XI] EP 1612479 A2 20060104 - KVAERNER POWER OY [FI]
• [X] JP 2000314506 A 20001114 - ISHIKAWAJIMA HARIMA HEAVY IND

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RU2660696C1; US10502411B2; WO2017125641A1

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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