

Title (en)
Shell-and-tube heat exchanger

Title (de)
Rohrbündelwärmeübertrager

Title (fr)
Échangeur de chaleur à calandre

Publication
EP 2562506 A1 20130227 (EN)

Application
EP 11178395 A 20110823

Priority
EP 11178395 A 20110823

Abstract (en)
A shell-and-tube heat exchanger has a tubular shell (10), two tube panels (11) mounted in the shell (10), multiple heat transfer tubes (13) axially mounted between the tube panels (11), an inlet tube (14) mounted in the shell (10) and connected to a shell side inlet (101) of the shell (10), a spurting tube (15) axially mounted in the shell (10) and connected to the inlet tube (14), and a front cover (20) and a rear cover (30) respectively mounted on a front opening and a rear opening of the shell (10). Shell side fluid spurts into the shell (10) from the spurting tube (15). The shell side fluid does not become turbulent, no air film occurs in the shell (10) and lower surfaces of the heat transfer tubes (15) act as heating surfaces so the heat exchanger has high heat transfer efficiency.

IPC 8 full level
F28D 7/16 (2006.01); **F28F 27/00** (2006.01)

CPC (source: EP)
F28D 7/16 (2013.01); **F28F 27/00** (2013.01)

Citation (search report)

- [A] EP 1498678 A1 20050119 - BORSIG GMBH [DE]
- [A] DE 273452 C
- [A] US 3173480 A 19650316 - PARKER KENNETH O, et al

Cited by
CN117989898A

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)
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