

Title (en)
A HYBRID TUBE BUNDLE EVAPORATOR

Title (de)
HYBRIDROHRBÜNDELVERDAMPFER

Title (fr)
ÉVAPORATEUR DE FAISCEAU DE TUBES HYBRIDE

Publication
EP 3748272 A1 20201209 (EN)

Application
EP 20175901 A 20200521

Priority
IT 201900008154 A 20190605

Abstract (en)
A hybrid tube bundle evaporator comprising a shell, a tube bundle housed inside the shell, a shell-side refrigerant fluid, a tube-side refrigerated fluid, a lower zone of the evaporator flooded by the refrigerant fluid in the liquid state and containing a first number of tubes, a service refrigerant fluid distributor positioned in an upper zone of the evaporator for dispensing the refrigerant fluid in the liquid state by free fall onto a second number of tubes positioned outside said lower zone above said first number of tubes, and further comprising and at least one outlet of refrigerant fluid in the gaseous state positioned in an upper lateral zone of the shell, and, inside the shell, a conveying circuit towards the upper lateral outlet of the refrigerant fluid in the gaseous state.

IPC 8 full level
F28D 7/16 (2006.01); **F25B 39/02** (2006.01); **F28D 3/04** (2006.01); **F28F 9/22** (2006.01)

CPC (source: EP)
F25B 39/02 (2013.01); **F28D 7/163** (2013.01); **F28F 25/06** (2013.01); **F25B 2339/022** (2013.01); **F28D 2021/0071** (2013.01);
F28F 2009/224 (2013.01)

Citation (search report)
• [XY] WO 2011011421 A2 20110127 - JOHNSON CONTROLS TECH CO [US], et al
• [Y] US 2384413 A 19450904 - ZWICKL JOSEPH R
• [X] US 2010276130 A1 20101104 - DE LARMINAT PAUL [FR], et al
• [A] US 2011120181 A1 20110526 - DE LARMINAT PAUL [FR], et al

Cited by
IT202100029945A1; IT202100030026A1; WO2023095025A1; WO2023095023A1

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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