

Title (en)

A HEAT EXCHANGER, METHODS THEREFOR AND A NUCLEAR FISSION REACTOR SYSTEM

Title (de)

WÄRMETAUSCHER, VERFAHREN DAFÜR UND KERNFISSIONSREAKTORSYSTEM

Title (fr)

ÉCHANGEUR THERMIQUE, PROCÉDÉS APPARENTÉS ET SYSTÈME DE RÉACTEUR À FISSION NUCLÉAIRE

Publication

EP 2481055 A2 20120801 (EN)

Application

EP 10839922 A 20100922

Priority

- US 58674109 A 20090925
- US 65365309 A 20091215
- US 65365609 A 20091215
- US 2010002604 W 20100922

Abstract (en)

[origin: WO2011078870A2] A heat exchanger, methods therefor and a nuclear fission reactor system. The heat exchanger comprises a heat exchanger body defining an exit plenum chamber therein shaped for uniform flow of a hot primary heat transfer fluid through the chamber. A plurality of adjacent heat transfer members are connected to the heat exchanger body and spaced apart by a predetermined distance for defining a plurality of flow passages between the heat transfer members. The flow passages open into the exit plenum chamber. Spacing of the heat transfer members by the predetermined distance evenly distributes flow of the primary heat transfer fluid through the flow passages, across the surfaces of the heat transfer members and into the exit plenum chamber. Each heat transfer member defines a flow channel therethrough for flow of a cooler secondary heat transfer fluid. Heat transfer occurs from the hot primary heat transfer fluid to the cooler secondary heat transfer fluid as the primary heat transfer fluid flows through the chamber and as the secondary heat transfer fluid simultaneously flows through the flow channel.

IPC 8 full level

G21C 15/24 (2006.01)

CPC (source: EP GB KR)

F01K 3/181 (2013.01 - EP); **F28D 1/0206** (2013.01 - EP); **F28F 1/04** (2013.01 - EP); **F28F 9/0282** (2013.01 - EP); **F28F 13/06** (2013.01 - EP); **F28F 13/08** (2013.01 - EP); **G21C 1/03** (2013.01 - EP GB); **G21C 1/326** (2013.01 - EP GB); **G21C 15/24** (2013.01 - KR); **G21C 15/247** (2013.01 - GB); **F28D 2021/0054** (2013.01 - EP); **G21C 1/026** (2013.01 - EP); **Y02E 30/30** (2013.01 - EP GB)

Citation (search report)

See references of WO 2011078872A2

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 SE SI SK SM TR

DOCDB simple family (publication)

WO 2011078870 A2 20110630; WO 2011078870 A3 20110818; CN 102667953 A 20120912; CN 102667954 A 20120912; CN 102667955 A 20120912; EP 2481053 A2 20120801; EP 2481053 A4 20130227; EP 2481054 A2 20120801; EP 2481055 A2 20120801; GB 201205569 D0 20120516; GB 201205571 D0 20120516; GB 201205572 D0 20120516; GB 2485752 A 20120523; GB 2485753 A 20120523; GB 2485754 A 20120523; JP 2013506130 A 20130221; JP 2013506131 A 20130221; JP 2013506132 A 20130221; KR 20120083432 A 20120725; KR 20120083433 A 20120725; KR 20120083434 A 20120725; RU 2012113142 A 20131027; RU 2012113143 A 20131027; RU 2012113145 A 20131027; WO 2011078871 A2 20110630; WO 2011078871 A3 20110818; WO 2011078872 A2 20110630; WO 2011078872 A3 20110818

DOCDB simple family (application)

US 2010002602 W 20100922; CN 201080053536 A 20100922; CN 201080053539 A 20100922; CN 201080053551 A 20100922; EP 10839920 A 20100922; EP 10839921 A 20100922; EP 10839922 A 20100922; GB 201205569 A 20100922; GB 201205571 A 20100922; GB 201205572 A 20100922; JP 2012530864 A 20100922; JP 2012530865 A 20100922; JP 2012530866 A 20100922; KR 20127010281 A 20100922; KR 20127010292 A 20100922; KR 20127010295 A 20100922; RU 2012113142 A 20100922; RU 2012113143 A 20100922; RU 2012113145 A 20100922; US 2010002603 W 20100922; US 2010002604 W 20100922