

Title (en)
Cascaded Organic Rankine Cycle System

Title (de)
Kaskadiertes organisches Rankine-Kreislaufsystem

Title (fr)
Système à cycle de rankine organique en cascade

Publication
EP 2607635 A3 20170329 (EN)

Application
EP 12195287 A 20121203

Priority
US 201113334994 A 20111222

Abstract (en)
[origin: EP2607635A2] A cascaded Organic Rankine Cycle (ORC) system (20) includes a topping cycle (22) and a bottoming cycle (24) in thermal communication with said topping cycle (22) through a condenser/evaporator (32) in which a bottoming cycle working fluid is first evaporated and then superheated and a topping cycle working fluid is first desuperheated and then condensed such that a percentage of total heat transfer from the topping cycle fluid that occurs during a saturated condensation is equal to or less than a percentage of total heat transfer to the bottoming cycle fluid that occurs during a saturated evaporation.

IPC 8 full level
F01K 25/10 (2006.01); **F01K 23/04** (2006.01)

CPC (source: EP US)
F01K 23/04 (2013.01 - EP US); **F01K 25/10** (2013.01 - EP US)

Citation (search report)

- [X] US 2010319346 A1 20101223 - AST GABOR [DE], et al
- [X] WO 2006104490 A1 20061005 - UTC POWER LLC [US], et al
- [X] WO 2009045196 A1 20090409 - UTC POWER CORP [US], et al
- [X] DE 19907512 A1 20000831 - ECKERT FRANK [DE], et al

Cited by
EP3626937A4; US11248500B2; WO2018020428A2

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

DOCDB simple family (publication)
EP 2607635 A2 20130626; EP 2607635 A3 20170329; EP 2607635 B1 20210120; EP 2607635 B8 20210324; CA 2798770 A1 20130622;
CA 2798770 C 20151117; CN 103174475 A 20130626; CN 103174475 B 20160803; SG 191468 A1 20130731; US 2013160449 A1 20130627

DOCDB simple family (application)
EP 12195287 A 20121203; CA 2798770 A 20121213; CN 201210561391 A 20121221; SG 2012075271 A 20121009;
US 201113334994 A 20111222