

Title (en)

PARALLEL REGENERATIVE CYCLE IN ORGANIC RANKINE CYCLE WITH CONVECTIVE HEAT SOURCE

Title (de)

PARALLELER REGENERATIVER KREISLAUF IM ORGANISCHEN RANKINE-KREISLAUF MIT KONVEKTIVER WÄRMEQUELLE

Title (fr)

CYCLE RÉGÉNÉRATIF PARALLÈLE DANS UN CYCLE DE RANKINE ORGANIQUE COMPORTANT UNE SOURCE DE CHALEUR PAR CONVECTION

Publication

**EP 3757359 A1 20201230 (EN)**

Application

**EP 19182579 A 20190626**

Priority

EP 19182579 A 20190626

Abstract (en)

An Organic Rankine Cycle system (1) is provided, the system (1) comprising, arranged one behind the other in the direction of flow of an organic fluid in an Organic Rankine Cycle (2), a turbine (3), a regenerator (4) with a first side (5), a condenser (6), a feed pump (7), the regenerator (4) with a second side (8) and a heat recovery unit (9) with first heating surfaces (10), wherein the Organic Rankine Cycle (2) branches out between the condenser (6) and the regenerator (4) and reunites between the regenerator (4) and the heat recovery unit (9), forming first and second branches (11, 12), wherein the first branch (11) includes the regenerator (4) and the second branch (12) includes a second heating surface (13) arranged in the heat recovery unit (9) behind the first heating surfaces (10) in the direction of flow of a flue gas through the heat recovery unit (9). is provided. Furthermore, a method for operating an Organic Rankine Cycle system (1) is provided.

IPC 8 full level

**F01K 23/10** (2006.01)

CPC (source: EP)

**F01K 23/10** (2013.01); **F01K 25/08** (2013.01); **Y02E 20/16** (2013.01)

Citation (search report)

- [X] DE 10052414 A1 20020508 - ECKERT FRANK [DE], et al
- [X] US 2006207255 A1 20060921 - BOETTGER MATTHIAS [DE], et al
- [X] DE 102009014185 A1 20100930 - GMK GES FUER MOTOREN UND KRAFT [DE]

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)

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