

Title (en)

COGENERATIVE ORGANIC RANKINE CYCLE WITH VAPOR EXTRACTION FROM THE TURBINE

Title (de)

KOGENERATIVER RANKINE KREISLAUF MIT DAMPFENTNAHME AUS DER TURBINE

Title (fr)

CYCLE ORGANIQUE DE RANKINE DE COGÉNÉRATION AVEC EXTRACTION DE VAPEUR DEPUIS LA TURBINE

Publication

EP 4083393 A1 20221102 (EN)

Application

EP 21212837 A 20211207

Priority

IT 202000030470 A 20201211

Abstract (en)

Partially cogenerative organic Rankine cycle plant (100) comprising, along a main path (5) in which a main flow of organic working fluid flows:- an evaporator (10),- at least one turbine (20, 21, 22),- a first condenser (40),- a first supply pump (50),- at least one preheater (60),at least two heat exchangers enslaved to a heat user, said two heat exchangers being placed in series along a path (85) of the heat user and in which:- a first heat exchanger is a further condenser (45) fed by a partial flow of organic working fluid, in the vapor phase extracted from an intermediate stage of the expansion phase, and- a second heat exchanger (80) is fed by a partial flow of the primary heat source.

IPC 8 full level

F01K 25/08 (2006.01); **F01K 17/02** (2006.01)

CPC (source: EP)

F01K 17/02 (2013.01); **F01K 25/08** (2013.01)

Citation (applicant)

EP 3455465 B1 20200826 - TURBODEN SPA [IT]

Citation (search report)

- [Y] EP 2538040 A1 20121226 - UNIV MUENCHEN TECH [DE], et al
- [Y] WO 2017199170 A1 20171123 - TURBODEN SPA [IT]
- [Y] WO 2013171685 A1 20131121 - EXERGY SPA [IT], et al
- [Y] DE 102018201172 A1 20190725 - SIEMENS AG [DE]
- [A] DE 20313411 U1 20031106 - KOEHLER & ZIEGLER ANLAGENTECHN [DE]
- [A] DE 102012217339 A1 20140327 - DUERR CYPLAN LTD [GB], et al

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

Designated validation state (EPC)

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DOCDB simple family (publication)

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