

Title (en)

METHOD FOR OPERATING A ONCE-THROUGH STEAM GENERATOR

Title (de)

VERFAHREN ZUM BETREIBEN EINES DURCHLAUFDAMPFERZEUGERS

Title (fr)

PROCÉDÉ POUR FAIRE FONCTIONNER UN GÉNÉRATEUR DE VAPEUR À CIRCULATION OUVERTE

Publication

EP 2676072 A1 20131225 (DE)

Application

EP 12709060 A 20120309

Priority

- DE 102011006390 A 20110330
- EP 2012054105 W 20120309

Abstract (en)

[origin: WO2012130588A1] Method for operating a once-through steam generator (2) comprising an evaporator (4), in which a feeding mass flow (SM) of a flow medium (M) is supplied with the aid of a feed pump (12) to the evaporator (4) and at least partially evaporated there, wherein flow medium (W) that has not evaporated is separated in a separator (18) arranged downstream of the evaporator (4) and a circulating mass flow (UM) of the separated flow medium (W) is returned with the aid of a circulating pump (24) to the evaporator (4), and so the mass flow referred to as the evaporator mass flow (VM) of the flow medium (M) flowing through the evaporator (4) is additively made up of the feeding mass flow (SM) and the circulating mass flow (UM). It is thereby provided that in a low-load interval (I) the feeding mass flow (SM) is increased with increasing load (L) while the circulating mass flow (UM) is kept substantially constant, in a moderate load interval (II) the feeding mass flow (SM) is further increased with increasing load (L) and the circulating mass flow (UM) is reduced to zero, and optionally in a high load interval the feeding mass flow (SM) is further increased with increasing load (L) and the circulating mass flow (UM) is kept at zero. The invention also relates to a once-through steam generator that is particularly suitable for carrying out the method.

IPC 8 full level

F22B 35/10 (2006.01); **F22B 29/12** (2006.01)

CPC (source: EP KR US)

F22B 29/12 (2013.01 - EP KR US); **F22B 35/10** (2013.01 - KR); **F22B 35/101** (2013.01 - EP US); **Y10T 137/0374** (2015.04 - EP US)

Citation (search report)

See references of WO 2012130588A1

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

DOCDB simple family (publication)

DE 102011006390 A1 20121004; AU 2012237306 A1 20131107; AU 2012237306 B2 20160908; CN 103459926 A 20131218;
CN 103459926 B 20151125; EP 2676072 A1 20131225; EP 2676072 B1 20171018; JP 2014512501 A 20140522; JP 5818963 B2 20151118;
KR 101960554 B1 20190320; KR 20140024343 A 20140228; US 2014014189 A1 20140116; US 9194577 B2 20151124;
WO 2012130588 A1 20121004; ZA 201306812 B 20160127

DOCDB simple family (application)

DE 102011006390 A 20110330; AU 2012237306 A 20120309; CN 201280015660 A 20120309; EP 12709060 A 20120309;
EP 2012054105 W 20120309; JP 2014501516 A 20120309; KR 20137028267 A 20120309; US 201214007723 A 20120309;
ZA 201306812 A 20130910