

Title (en)

Cavitation thermogenerator and method for heat generation by the caviation thermogenerator

Title (de)

Kavitationswärmeerzeuger und Verfahren zur Wärmeerzeugung anhand des Kavitationswärmeerzeugers

Title (fr)

Générateur thermique à cavitation et procédé de génération de chaleur par le générateur thermique à cavitation

Publication

EP 1808651 A3 20111026 (EN)

Application

EP 06425768 A 20061110

Priority

- RU 2006100954 A 20060117
- RU 2006100956 A 20060117
- RU 2006100960 A 20060117

Abstract (en)

[origin: EP1808651A2] A cavitation thermogenerator is proposed providing heat generation by creation in a flow of liquid of zones of lowered and raised pressure and moving of a mixture of liquid with the cavitation bubbles formed in the zone of lowered pressure, from the zone of lowered pressure into the zone of raised pressure. The cavitation thermogenerator comprises a coaxially located hollow housing (1) having a bottom (2), a flow twisting means (3) with a cylindrical internal surface, a nozzle (4) and a braking element. The flow twisting (3) means is located between the nozzle (4) and the housing (1), and internal surface of the flow twisting means (3) forms a uniform cavity with the internal surface of a housing (1). A through aperture (5) is formed in the housing bottom (2) at the axis thereof, and the braking element it is formed by a face part of the nozzle (4) adjoining to the flow twisting means (3) which input aperture (5) has a smaller diameter than internal diameter of said cavity. The thermogenerator is placed in a tank (11) with a liquid medium (water) which has a function of a heat-carrier. By means of the pump (6) the liquid moves from the tank (11) into the thermogenerator flow twisting means (3) providing functioning thereof.

IPC 8 full level

F24J 3/00 (2006.01)

CPC (source: EP)

F24V 99/00 (2018.04)

Citation (search report)

- [XY] EP 1533675 A1 20050525 - RMG REGEL & MESSTECHNIK GMBH [DE]
- [YD] RU 2190162 C1 20020927 - KURNOSOV NIKOLAJ EFIMOVICH
- [A] FR 2375910 A1 19780728 - RANQUE PIERRE [FR]
- [A] EP 1396690 A1 20040310 - SINTOS SYSTEMS OU [EE]
- [A] US 3460373 A 19690812 - FORD STEPHEN H
- [AD] RU 2144627 C1 20000120 - EHVNA AOOT
- [AD] RU 2142604 C1 19991210 - PETRAKOV ALEKSANDR DMITRIEVICH

Cited by

KR101885588B1; CN113531904A; CN114956230A; KR100978220B1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 1808651 A2 20070718; EP 1808651 A3 20111026

DOCDB simple family (application)

EP 06425768 A 20061110