Title (en)

LIQUID-METAL HEATED STEAM GENERATOR HAVING SEVERAL LIQUID METAL-NEUTRAL GAS INTERFACES

Publication

EP 0089869 B1 19850731 (FR)

Application

EP 83400494 A 19830311

Priority

FR 8204076 A 19820311

Abstract (en)

[origin: US4515109A] Apparatus for the production of steam by heat-exchange between a heat-transfer liquid metal and feed-water, comprising an envelope (1) containing a tube bundle (8) which occupies only part of the internal volume of the envelope with the bundle (8) in which the feed water is passed in. At least two superposed compartments (18, 28), in communication with the internal volume of the envelope (1) by their lower part, are located inside the envelope (1). Each of the compartments (18, 28) communicates with the compartment located thereabove by means of a first tube (23), and with the compartment located therebelow by means of a second tube (21). The compartment (28a) located at the lowest level is fed with inert gas through the establishment of liquid/inert gas interfaces in each of the compartments (18, 28). The invention applies particularly to the steam generators of fast neutron nuclear reactors, in which it is desired to avoid the harmful effects of pressure waves in case of a sodium/water reaction.

IPC 1-7

F22B 1/06

IPC 8 full level

F22B 1/06 (2006.01); G21D 5/08 (2006.01)

CPC (source: EP US)

F22B 1/063 (2013.01 - EP US)

Cited by

FR2563895A1; EP0167417A1; US4624217A

Designated contracting state (EPC)

BE CH DE GB IT LI LU NL SE

DOCDB simple family (publication)

EP 0089869 A1 19830928; **EP 0089869 B1 19850731**; DE 3360456 D1 19850905; FR 2523268 A1 19830916; FR 2523268 B1 19850510; JP S58175701 A 19831015; US 4515109 A 19850507

DOCDB simple family (application)

EP 83400494 Á 19830311; DE 3360456 T 19830311; FR 8204076 A 19820311; JP 3999283 A 19830310; US 47080783 A 19830228