Title (en)

LIQUID-METAL HEATED STEAM GENERATOR WITH INTEGRATED REHEATER

Publication

EP 0011834 B1 19811111 (DE)

Application

EP 79104671 A 19791123

Priority

DE 2851197 A 19781127

Abstract (en)

[origin: WO8001101A1] The steam generator used preferably in a nuclear plant comprises a plurality of helical tube bundles (5) coupled in series, arranged in a common envelope (1) and in which the steam is first generated, and then superheated. The pipe bundles are separated by spaces (16) containing straight communication pipes. The elements requiring a periodic inspection or which might be the source of leakages, such as welded joints between the different pipes are arranged in these spaces for easy access. The same envelope further comprises pipe bundles (21) in which the steam is superheated. In a central pipe (4) is provided the water feed supply (6). The central part (4) is close during the motion by a breaking plate (15) to evacuate, if need be, the products of a water-liquid metal reaction. Special arrangements for the fit supply water distributor (8 to 11) are provided which increase the safety of the vapor generator in case of such incidents, for example by absorbing the reaction forces of the torn out pipes. Special arrangements for the steam collector (27) allow an easy inspection of the pipe bundles.

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F22B 1/06; F28D 7/02; F28F 9/00

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