

Title (en)

Nuclear power plant and apparatus for superheating steam.

Title (de)

Kernkraftanlage und Apparat zum Überhitzen von Dampf.

Title (fr)

Centrale nucléaire et appareil pour surchauffer la vapeur.

Publication

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Application

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Priority

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Abstract (en)

A nuclear power plant (10) comprises a steam turbine (16), a nuclear steam generator (11) for driving the turbine, a heat exchanger or steam superheating apparatus (14, 30) via which the steam flows to the turbine (16), and a fossil-fuel-fired vapor generator (20) for heating a medium and passing it in vapor form through the heat exchanger to superheat the steam. The apparatus (30) for superheating the steam comprises two banks (48, 50) of inclined tubes (46) extending upwardly from an outlet header (44) to respective inlet headers (62, 64). The banks (48, 50) of tubes (46) are disposed in the flow path of the steam through the apparatus (30) and provide a flow of vapor for adding superheat to the steam. In accordance with another form of the apparatus shown in Fig. 5, the tubes (86) extend upwardly to closed ends whereby a header (92) acts as both a vapor inlet and condensate outlet.

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IPC 8 full level

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CPC (source: EP)

F01K 3/183 (2013.01); F22B 37/266 (2013.01); F28D 7/0058 (2013.01)

Citation (search report)

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