

Title (en)

Steam turbine and method for extracting moisture from a steam turbine

Title (de)

Dampfturbine und Verfahren zur Extraktion von Feuchtigkeit aus einer Dampfturbine

Title (fr)

Turbine à vapeur et procédé pour extraire de l'humidité d'une turbine à vapeur

Publication

EP 2224096 A1 20100901 (EN)

Application

EP 09153874 A 20090227

Priority

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Abstract (en)

The steam turbine comprises a casing (1) containing a plurality of expansion stages each comprising stator and rotor airfoils. Downstream of the stator airfoils of one or more expansion stages, the casing (1) comprises a slot (7) arranged to receive moisture that concentrates on an end wall (3) of the stator airfoils (2) and discharge it to the outside. Each end wall (3) has a side portion facing the slot (7) having a variable radial obstruction in a tangential direction, in order to define with the slot (7) a passage (10) through which the moisture may pass that is smaller or closed at the suction side (12) and larger at the pressure side (13) of the stator blades (4), to at least partially prevent the dry steam from entering the slot (7) at the suction side (12) of the blade (4). The present invention also relates to a method for extracting moisture from a steam turbine.

IPC 8 full level

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Citation (search report)

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- [A] WO 9844240 A1 19981008 - SIEMENS AG [DE], et al
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