

Title (en)

Tip cover of a steam turbine for the drainage of water droplets

Title (de)

Deckband einer Dampfturbine zur Drainage von Wassertropfen

Title (fr)

Virole d'une turbine à vapeur pour la drainage des gouttelettes d'eau

Publication

EP 2617951 A3 20140827 (EN)

Application

EP 13151786 A 20130118

Priority

JP 2012008849 A 20120119

Abstract (en)

[origin: EP2617951A2] A steam turbine includes: a turbine rotor shaft; a plurality of blades that are provided on the turbine rotor shaft and are rotated by a steam flow; tip covers that are attached to tip ends of the respective blades and are connected to and in contact with one another; at least one water drip fin that is provided along a circumferential direction at the tip cover, and outwardly extends in a radial direction of each of the blades; and a diaphragm outer ring that is disposed at an outer circumferential side from each of the blades, and has a drain catcher opposed to a tip end portion of the water drip fin, wherein the tip cover is provided with a leading edge that is formed at a downstream side in an axial direction from a leading edge of the blade or at a position in the axial direction corresponding to the leading edge of the blade in the axial direction.

IPC 8 full level

F01D 5/14 (2006.01); **F01D 5/22** (2006.01); **F01D 11/08** (2006.01); **F01D 25/32** (2006.01)

CPC (source: EP US)

F01D 5/14 (2013.01 - EP US); **F01D 5/147** (2013.01 - US); **F01D 5/225** (2013.01 - EP US); **F01D 11/08** (2013.01 - EP US); **F01D 25/32** (2013.01 - EP US); **F05B 2260/602** (2013.01 - EP US)

Citation (search report)

- [XYI] SU 510583 A1 19760415
- [XYI] US 2004223844 A1 20041111 - FARRELL ALISON CAROL [US], et al
- [XYI] US 5234318 A 19930810 - BRANDON RONALD E [US]
- [Y] WO 2011007506 A1 20110120 - TOSHIBA KK [JP], et al
- [Y] US 5261785 A 19931116 - WILLIAMS JOHN C [US]
- [Y] JP S5752602 A 19820329 - TOKYO SHIBAURA ELECTRIC CO

Cited by

CN110043336A

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2617951 A2 20130724; **EP 2617951 A3 20140827**; JP 2013147999 A 20130801; JP 5823305 B2 20151125; US 2013189077 A1 20130725

DOCDB simple family (application)

EP 13151786 A 20130118; JP 2012008849 A 20120119; US 201313742824 A 20130116