

Title (en)  
REACTION-TYPE STEAM TURBINE

Title (de)  
DAMPFTURBINE VOM REAKTIONSTYP

Title (fr)  
TURBINE À VAPEUR DU TYPE À RÉACTION

Publication  
**EP 3392456 A4 20190814 (EN)**

Application  
**EP 16875858 A 20160518**

Priority

- KR 20150179105 A 20151215
- KR 2016005228 W 20160518

Abstract (en)  
[origin: EP3392456A1] The present invention relates to a reaction-type steam turbine. More specifically, the present invention relates to a reaction-type steam turbine that has guide blades mounted on a turbine shaft located between disk blades and a steam inlet tube to divert steam introduced into a housing from the steam inlet tube to the disk blades, thereby preventing a vortex phenomenon within the housing, and rotates the guide blades by means of the pressure of the introduced steam to rotate the turbine shaft, thereby reducing the initial load against the rotation of the turbine shaft and doubling the rotational output of the turbine shaft along with the rotation of the disk blades. To achieve this, provided is a reaction-type steam turbine that comprises: a housing having steam inlet and outlet tubes formed on opposite sides thereof, respectively, and having a space formed therein; and a turbine shaft installed to pass through the space of the housing and having a plurality of disk blades mounted thereon, wherein guide blades are shaft-coupled to the turbine shaft between the passage of the steam inlet tube and the disk blades to guide steam introduced into the space of the housing through the steam inlet tube to the disk blades.

IPC 8 full level  
**F01D 1/32** (2006.01); **F01D 1/06** (2006.01); **F01D 1/34** (2006.01)

CPC (source: EP US)  
**F01D 1/06** (2013.01 - EP US); **F01D 1/14** (2013.01 - US); **F01D 1/32** (2013.01 - EP US); **F01D 1/34** (2013.01 - EP US);  
**F01D 5/147** (2013.01 - US); **F05D 2210/43** (2013.01 - EP US); **F05D 2220/31** (2013.01 - EP US); **F05D 2240/242** (2013.01 - EP US);  
**F05D 2250/51** (2013.01 - EP US)

Citation (search report)

- [X] JP S467443 Y1 19710317
- [A] KR 20130061781 A 20130612 - GANG GI SEON [KR]
- [A] WO 2015019294 A1 20150212 - OMAROV VALERIY IGOREVICH [RU], et al
- [A] WO 2013058500 A1 20130425 - HK TURBINE CO LTD [KR]
- See references of WO 2017104916A1

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

DOCDB simple family (publication)  
**EP 3392456 A1 20181024**; **EP 3392456 A4 20190814**; CN 108368741 A 20180803; JP 2018534478 A 20181122; US 2018291741 A1 20181011;  
WO 2017104916 A1 20170622

DOCDB simple family (application)  
**EP 16875858 A 20160518**; CN 201680072886 A 20160518; JP 2018526082 A 20160518; KR 2016005228 W 20160518;  
US 201816008301 A 20180614