

Title (en)

Internal reaction steam turbine cooling arrangement

Title (de)

Interne Reaktionsdampfturbinenkühlanordnung

Title (fr)

Agencement de refroidissement de turbine à vapeur à réaction interne

Publication

EP 2372085 A2 20111005 (EN)

Application

EP 10195081 A 20101215

Priority

US 64947009 A 20091230

Abstract (en)

A rotor 12 of a turbomachine 10 includes a rotor drum 13 located at a central axis 14 and a plurality of buckets 16 secured to the rotor drum. A first negative reaction stage includes axial entry dovetailed buckets 116. An axial passage 70 for cooling flow 72 is provided between the bucket dovetail 50 and the dovetail slot 32 in the rotor drum 13. Cool steam is taken between a first stage bucket 116 and a second stage nozzle 118 and passed through the axial passage 70 to a low pressure sink 140 at an upstream end of the rotor 12.

IPC 8 full level

F01D 5/08 (2006.01)

CPC (source: EP US)

F01D 5/084 (2013.01 - EP US); **F01D 5/085** (2013.01 - EP US); **F01D 5/323** (2013.01 - EP US); **F05D 2220/31** (2013.01 - EP US)

Designated contracting state (EPC)

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Designated extension state (EPC)

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DOCDB simple family (application)

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