

Title (en)

Blading of a turbomachine with contoured shrouds

Title (de)

Beschaufelung einer Turbomaschine mit konturierten Deckbändern

Title (fr)

Aubage d'une turbomachine avec un carenage contouré

Publication

**EP 1515000 B1 20160309 (DE)**

Application

**EP 03103323 A 20030909**

Priority

EP 03103323 A 20030909

Abstract (en)

[origin: EP1515000A1] A method for reducing the flow losses around the tips of turbine blades, especially with blade tips linked by outer bands located in circular recesses in the turbine housing has the inner surface of the recesses contoured with a periodic pattern, e.g. a wave pattern, evenly applied over the surface. A similar wave pattern is applied to the outer surface of the bands linking the blade tips. The periodic pattern sets up localised pressure patterns which reduce the leakage flow around the outer edge of the turbine.

IPC 8 full level

**F01D 5/22** (2006.01); **F01D 11/02** (2006.01); **F01D 11/08** (2006.01)

CPC (source: EP US)

**F01D 5/225** (2013.01 - EP US); **F01D 11/02** (2013.01 - EP US); **F01D 11/08** (2013.01 - EP US); **F05D 2240/11** (2013.01 - EP US); **F05D 2250/183** (2013.01 - EP US); **F05D 2250/184** (2013.01 - EP US); **F05D 2250/611** (2013.01 - EP US); **F05D 2250/70** (2013.01 - EP US)

Cited by

EP2031184A1; EP2770165A1; EP2055902A1; US7481615B2; DE102009042857A1; EP2136033A4; EP2607626A1; EP2937515A1; EP2484871A3; EP2607625A1; US11655723B2; US9051840B2; US9920644B2; US9863251B2; WO2014127954A1

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DE

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