

Title (en)

Improvements in or relating to methods of grinding blade tips of turbine/compressor rotors.

Title (de)

Schleifverfahren für Endteile von Turbinen- oder Kompressoren-Rotorschaufern.

Title (fr)

Méthodes de rectification de l'extrémité des aubes de rotors de turbines ou compresseurs.

Publication

**EP 0592112 A1 19940413 (EN)**

Application

**EP 93307124 A 19930909**

Priority

GB 9219055 A 19920909

Abstract (en)

The disclosure relates to a method of grinding blade tips of a turbine or compressor rotor, comprising the steps of spinning a rotor having one or more sets of blades to be ground on its axis, and using a grinding wheel which is narrower than the blades to be ground and has a convexly curved grinding periphery as seen as cross section. The grinding wheel is rotated about an axis parallel to the rotor axis and the wheel and rotor are moved relative to one another parallel to the axes of the rotor and wheel and in a feed direction orthogonally to the axis of the rotor and wheel to grind the blade tips of the rotor to a required dimension and profile which may be flat, angled, convexly or concavely curved with a simple or complex curvature. <IMAGE>

IPC 1-7

**B24B 5/36; B24B 19/14**

IPC 8 full level

**B24B 19/14** (2006.01); **F01D 5/20** (2006.01)

CPC (source: EP)

**B24B 19/14** (2013.01); **F01D 5/20** (2013.01); **F05D 2230/61** (2013.01)

Citation (search report)

- [Y] EP 0128110 A2 19841212 - UNITED TECHNOLOGIES CORP [US]
- [A] EP 0441627 A1 19910814 - KOBELCO COMPRESSORS AMERICA INC [US]
- [AD] GB 2076323 A 19811202 - KEIGHLEY GRINDERS MACHINE TOOL
- [Y] PATENT ABSTRACTS OF JAPAN vol. 12, no. 343 (M-741)(3190) 14 September 1988 & JP-A-63 102 864 ( NGK INSOLATORS LTD ) 7 May 1988
- [A] WERKSTATTSTECHNIK, ZEITSCHRIFT FUR INDUSTRIELLE FERTIGUNG vol. 79, no. 8, August 1989, BERLIN DE pages 419 - 422 P. LÜTJENS 'Profilschleifen auf moderner CNC-Flachschleifmaschinen'

Cited by

CN1069253C; US7833086B2; CN113778039A; ES2368242A1; ES2117513A1; CN114326581A; CN115284130A; WO0145898A1; WO2011135118A1

Designated contracting state (EPC)

DE ES FR IT

DOCDB simple family (publication)

**GB 2270485 A 19940316; GB 9219055 D0 19921021; EP 0592112 A1 19940413**

DOCDB simple family (application)

**GB 9219055 A 19920909; EP 93307124 A 19930909**