

Title (en)
Steam turbine rotor blade and corresponding steam turbine

Title (de)
Laufschaufel einer Dampfturbine und zugehörige Dampfturbine

Title (fr)
Aube de rotor de turbine à vapeur et turbine à vapeur associée

Publication
EP 2236754 A3 20140108 (EN)

Application
EP 10153973 A 20100218

Priority
JP 2009062229 A 20090316

Abstract (en)
[origin: EP2236754A2] In a steam turbine including a turbine rotor (7); a moving blade (1) secured to the turbine rotor (7); a shroud (3) provided on an outer circumferential side distal end of the moving blade (1); and an outer circumferential side stationary wall (4) internally embracing the turbine rotor (7) and forming an outer circumferential side passage wall of a steam path, the shroud (3) has an inner circumferential surface (14) so formed that a moving blade outlet flare angle ($\pm 3^\circ$) is greater than a moving blade inlet flare angle ($\pm 2^\circ$); an angle ($\pm 1^\circ$) formed between the outer circumferential side stationary wall (4) adjacently provided on the upstream side of the moving blade (1) and the turbine central axis (50) is generally equal to the moving blade inlet flare angle ($\pm 2^\circ$); and an angle ($\pm 4^\circ$) formed between the outer circumferential side stationary wall adjacently provided on the downstream side of the moving blade and the turbine central axis (50) and an turbine central axis (50) is generally equal to the moving blade outlet flare angle ($\pm 3^\circ$).

IPC 8 full level
F01D 5/22 (2006.01); **F01D 5/14** (2006.01)

CPC (source: EP US)
F01D 5/143 (2013.01 - EP US); **F01D 5/225** (2013.01 - EP US); **F05D 2220/31** (2013.01 - EP US); **F05D 2250/232** (2013.01 - EP US)

Citation (search report)

- [A] EP 0356305 A1 19900228 - SNECMA [FR]
- [A] JP H08210101 A 19960820 - MITSUBISHI HEAVY IND LTD
- [A] US 4213296 A 19800722 - SCHWARZ FREDERICK M [US]
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Cited by
EP2853694A3; EP2692996A3; US9581026B2; US9732627B2; WO2011045346A1

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DOCDB simple family (application)
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