

Title (en)
Turbine and rotor blade with brush seal

Title (de)
Turbine und Rotorscheufel mit Bürstendichtung

Title (fr)
Turbine et aube de rotor avec garniture à brosse

Publication
EP 1918523 A3 20110223 (EN)

Application
EP 07254135 A 20071018

Priority
US 58406206 A 20061020

Abstract (en)
[origin: EP1918523A2] A turbine rotor for a turbine engine includes multiple rotor disks (26) having rotor blades (28) mounted about the circumference of each of the rotor disks (26). A fluid seal extends about the circumference of each rotor disk (26) in close proximity to a stationary component (36) of the rotor to separate the space between the rotor blades (28) and a stationary component (36) into separate cavities. The fluid seal includes a seal land (44) on the rotor disk (26) and a brush seal (46) extending from the stationary component (36). A plurality of disk land segments (54) and a plurality of blade land segments (56) form the seal land (44). The disk seal segments (54) are located on the rotor disk (26) between the rotor blades (28). The blade land segments (56) are located on the rotor blades (28). After the rotor blades (28) are assembled, the blade land segments (56) and the disk land segments (54) fit together to form a segmented ring-like seal land (44) around the circumference of the rotor disk (26).

IPC 8 full level
F01D 11/00 (2006.01); **F01D 5/30** (2006.01)

CPC (source: EP US)
F01D 5/3007 (2013.01 - EP US); **F01D 11/001** (2013.01 - EP US); **F05D 2240/56** (2013.01 - EP US)

Citation (search report)

- [XY] US 4218189 A 19800819 - PASK GEORGE [GB]
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- [Y] EP 1340902 A2 20030903 - GEN ELECTRIC [US]
- [Y] US 3917150 A 19751104 - FERGUSON JOHN GILBERT, et al
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