

Title (en)
Gas turbine rotor blade

Title (de)
Gasturbinenrotorschaukel

Title (fr)
Aube de rotor d'une turbine à gaz

Publication
EP 1653047 B1 20150429 (FR)

Application
EP 05292209 A 20051020

Priority
FR 0411436 A 20041027

Abstract (en)
[origin: EP1653047A2] The rotor blade (10) has stiffeners (24,26) in the form of reinforcing webs extending from a platform (20) from its side opposite from an airfoil and passing under the trailing edge (18) of the airfoil. Cooling fluid ducts (34) are formed in the blade and in the blade root (22). A cooling portion is formed in a section of the stiffeners that is adjacent to the platform and that is situated in alignment with the trailing edge of the blade. The cooling portion has a cavity (50) formed in the stiffeners and connected to the cooling fluid flow duct formed in the blade root and to the cooling fluid outlet orifices (58) opening downstream under the platform. Each outlet orifice from the cavity is oriented parallel to the trailing edge of the blade. The platform connects the airfoil to the blade root. Independent claims are included for the following: (A) Turbojet turbine; and (B) Turbojet.

IPC 8 full level
F01D 5/18 (2006.01); **F01D 5/08** (2006.01)

CPC (source: EP US)
F01D 5/081 (2013.01 - EP US); **F01D 5/187** (2013.01 - EP US); **F05D 2240/81** (2013.01 - EP US)

Citation (examination)
JP S5979006 A 19840508 - HITACHI LTD

Cited by
EP2228518A3

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 1653047 A2 20060503; EP 1653047 A3 20110907; EP 1653047 B1 20150429; FR 2877034 A1 20060428; FR 2877034 B1 20090403; JP 2006125402 A 20060518; JP 4663479 B2 20110406; US 2006088416 A1 20060427; US 7497661 B2 20090303

DOCDB simple family (application)
EP 05292209 A 20051020; FR 0411436 A 20041027; JP 2005309403 A 20051025; US 25715105 A 20051025