

Title (en)
ROTOR BLADE AND METHOD FOR REDUCING TIP RUB LOADING

Title (de)
LAUFSCHAUFEL UND VERFAHREN ZUR VERMINDERUNG VON REIBERMÜDUNG

Title (fr)
AUBE DE ROTOR ET PROCÉDÉ RÉDUISANT LA CHARGE LIÉE AU FROTTEMENT

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Abstract (en)
[origin: WO2011002570A1] An air foil (42) for use in a rotor assembly is disclosed, the airfoil having a tip- cutter (100) located on a sidewall (44) near a tip portion (60). Wherein the tip-cutter (100) is capable of removing a portion of an abradable material (32) during a tip rub. In another embodiment an airfoil (42) has a tip-grinder (120) located on the tip portion (60) wherein the tip-grinder (120) capable of removing a portion of an abradable material (32) during a tip rub in another embodiment an airfoil (42) has a tip-rake (110) that facilitates reducing loading induced to said airfoil (42) during tip rubs. A method (300) for reducing tip rub loads in a rotor blade (15) is described comprising the steps of incorporating a tip-cutter (100) having a selected a cutter-profile (102) on a selected location on the blade (15) such that tip-cutter (100) is capable of removing a portion of a static structure (32) during a tip rub such that tip rub loads are facilitated to be reduced.

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