

Title (en)

BLADE FOR TURBOMACHINERY COMPRISING A SHROUD AND A WEIGHT-OPTIMISED SEALING STRIP

Title (de)

STRÖMUNGSMASCHINENSCHAUFEL MIT EINEM DECKBAND UND GEWICHTSOPTIMIERTER DICHTLEISTE

Title (fr)

AUBE DE TURBOMACHINE MUNIE D'UN ANNEAU DE RENFORCEMENT ET D'UNE BAGUETTE D'ETANCHEITE A POIDS OPTIMISE

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Application

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Abstract (en)

[origin: WO2005113941A1] The invention relates to a blade (1) for turbomachinery comprising a shroud element (14). During the operation of said machinery, plastic deformations occur under the influence of centrifugal stress, resulting in the lifting of the shroud element on one side. Said stress can cause high-temperature creep in the blade. According to the invention, a sealing strip (15), which is situated on the shroud element, is configured with a thickness that varies in the peripheral direction (U). Material is removed from the outlying areas of the periphery (21, 22), resulting in a reduction of the mass of the shroud element (14) and thus a reduction of the asymmetrical centrifugal stress and the associated lifting of the shroud element on one side.

IPC 8 full level

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