

Title (en)

METHOD FOR PRODUCING A SINGLE-PIECE ROTOR PORTION AND SINGLE-PIECE ROTOR PORTION

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES EINSTÜCKIGEN ROTORBEREICHES UND EINSTÜCKIGER ROTORBEREICH

Title (fr)

PROCÉDÉ DE FABRICATION D'UNE PARTIE DE ROTOR MONOBLOC ET PARTIE DE ROTOR MONOBLOC

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Application

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Abstract (en)

[origin: WO2012140103A1] The invention relates to a method for producing a single-piece rotor portion (9), especially of a jet engine (1). The rotor portion (9) comprises an annular base (10) and a plurality of blade elements (11) distributed over the periphery and extending away from the base (10) in a substantially radial fashion. Residual stress is introduced by deep rolling into near-surface portions of the blade elements (11) by means of deep rolling tools that engage between the blade elements. During deep rolling, a portion of a blade element (11) is arranged between portions of the deep-rolling tool and lateral sides of the blade element are deep-rolled at the same time. According to the invention, the deep-rolling tool is introduced radially between the blade elements (11) and the surfaces of the blade elements are deep-rolled, resulting in at least the blade elements (11) having deep-rolled surfaces.

IPC 8 full level

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