

Title (en)
TURBINE BLADE

Title (de)
TURBINENSCHAUFEL

Title (fr)
AUBE DE TURBINE

Publication
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Application
EP 16733363 A 20160621

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Abstract (en)
[origin: WO2017005484A1] The invention relates to a cast turbine blade (10) having a platform (16) and a hollow blade airfoil (18) arranged thereon, wherein the blade airfoil (18) has a pressure-side blade wall (34) and a suction-side blade wall (32) that extend, along a centrally arranged curved profile centerline (42), from a common leading edge (28) to a common trailing edge (30), and having a transition (36), with an outer contour profile, between the blade airfoil and the platform (36), wherein the blade walls (32, 34) each have a locally determined blade wall thickness (D), wherein the turbine blade has, internally, a contour profile that partially matches the outer contour profile of the transition (36) such that the region of the transition (36) has an essentially constant blade wall thickness. In order to further improve the service life of such a turbine blade, it is provided that, in the transition (36), the contour profile at a surface section (40) of the blade airfoil facing the leading edge (28) is such that the blade wall thickness is increased there in comparison to the blade wall thickness of the transition away from the leading edge.

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