

## Title (en)

Method for producing a negative mould for casting a turbine rotor and mould for producing a wax model of a turbine rotor

## Title (de)

Verfahren zum Herstellen einer Negativform zum Gießen einer Turbinenschaufel und Form zum Herstellen eines Wachsmodells einer Turbinenschaufel

## Title (fr)

Procédé de fabrication d'un moule négatif destiné à couler une aube de turbine et moule de fabrication d'un modèle en cire d'une aube de turbine

## Publication

**EP 2241391 A1 20101020 (DE)**

## Application

**EP 09005327 A 20090414**

## Priority

EP 09005327 A 20090414

## Abstract (en)

The process for producing a negative mold for casting a turbine blade (1) with blade platform (11) and fastening element (7) to fasten the turbine blade to a blade holder (3), comprises producing a wax model of the turbine blade to be produced, creating the negative mold of the turbine blade based on wax model, after which the wax model is hardened, and melting off the wax model after completing the negative mold. During storage and/or transportation of the wax model, a distance holder is arranged between a platform surface (15) of the blade platform and a surface of the fastening element. The process for producing a negative mold for casting a turbine blade (1) with a blade platform (11) and a fastening element (7) for fastening the turbine blade to a blade holder (3), comprises producing a wax model of the turbine blade to be produced, creating the negative mold of the turbine blade based on the wax model, after which the wax model is hardened, and melting off the wax model after completing the negative mold. During storage and/or transportation of the wax model, a distance holder is arranged between a platform surface (15) of the blade platform and a surface of the fastening element of the wax model, where the surface of the fastening element lies against the platform surface of the blade platform with a distance (d). The distance holder is removed from the wax model by producing the negative mold, completely fills out a space between the platform surface of the blade platform and the surface of the fastening element of the wax model, adjoins onto a further surface of the fastening element of the wax model, has a reception adapted to the shape of the fastening element of the wax model and provided for receiving a part of the fastening element, is a part of a mold for producing the wax model, and is made of metal or ceramic. An independent claim is included for a method for producing a turbine blade with a blade platform and a fastening element.

## Abstract (de)

es wird ein Verfahren zum Herstellen einer Negativform zum Gießen einer Turbinenschaufel (1) mit einer Schaufelplattform (11) und wenigstens einem Befestigungselement (7) zum Befestigen der Turbinenschaufel (1) an einer Schaufelhalterung (3), wobei wenigstens eine Fläche (17) des Befestigungselementes (7) einer Plattformfläche (15) der Schaufelplattform (11) mit Abstand (d) gegenüber liegt, zur Verfügung gestellt. In dem Verfahren wird - ein Wachsmodell (201) der herzustellenden Turbinenschaufel (1) hergestellt, - eine Negativform der Turbinenschaufel (1) anhand des Wachsmodells (201) erstellt, nachdem das Wachsmodell (201) ausgehärtet ist, und - das Wachsmodell (201) nach dem Fertigstellen der Negativform ausgeschmolzen. Während des Aushärtens und/oder während einer Lagerung und/oder während einem Transport des Wachsmodells (201) ist wenigstens ein Abstandhalter (219) zwischen der Plattformfläche (215) der Schaufelplattform (211) und der wenigstens einen gegenüber liegenden Fläche des Befestigungselementes (207) des Wachsmodells (201) angeordnet.

## IPC 8 full level

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## Citation (applicant)

- DE 19726111 C1 19981112 - MTU MUENCHEN GMBH [DE]
- EP 1204776 B1 20040602 - SIEMENS AG [DE], et al
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## Citation (search report)

- [XD] DE 19726111 C1 19981112 - MTU MUENCHEN GMBH [DE]
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## DOCDB simple family (application)

