

Title (en)

METHOD FOR PREPARING A NICKEL SUPERALLOY PART, AND PART THUS OBTAINED

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES TEILS AUS NICKEL-SUPERLEGIERUNG UND SO ERHALTENES TEIL

Title (fr)

PROCÉDÉ DE PRÉPARATION D'UNE PIÈCE EN SUPERALLIAGE BASE NICKEL ET PIÈCE AINSI OBTENUE

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Application

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Priority

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Abstract (en)

[origin: WO2010023405A2] The invention relates to a method for preparing a nickel superalloy part by: - developing a nickel superalloy from a composition capable of hardening through double precipitation of a gamma' phase and a gamma" or delta phase; - spraying a molten mass of said superalloy to obtain a powder; - sifting said powder; - placing said powder in a container; - closing and placing the container in a vacuum; - densifying the powder and the container to obtain an ingot or billet; - hot forming said ingot or said billet; characterized in that, before the densifying step, the powder and the container are heated for at least 4 hours to a temperature that is both greater than 1,140°C and less than the solidus temperature of the superalloy by 10°C at a pressure causing a densification less than or equal to 15% of the powder volume. The invention also relates to a part thus produced.

IPC 8 full level

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CPC (source: EP US)

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