

Title (en)

METHOD FOR PRODUCING A VANE FOR A ROTARY VANE PUMP

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES FLÜGELS FÜR EINE FLÜGELZELLENPUMPE

Title (fr)

PROCÉDÉ DE FABRICATION D'UNE PALETTE DESTINÉE À UNE POMPE À PALETTES

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Application

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Abstract (en)

[origin: WO2014114461A1] The invention relates to a method for producing a net-shape vane for a rotary vane pump, which vane is preferably open-pored and consists of a metal sinter material. The vane has at least one first front face and one second front face which is preferably oriented parallel to the first front face, and a first lateral surface and second lateral surface that is oriented parallel to the first lateral surface. Furthermore, the vane comprises a first contour surface and a second contour surface. The method for producing the vane comprises at least the following steps: pressing (20) a powder mixture to a green body by means of a powder press, sintering (21) the green body inside a sintering furnace to a sintering element having an austenitic structure, quenching the sintering element inside the sintering furnace to a temperature below the martensitic start temperature for hardening (22), tempering (23) the sintering element preferably inside the sintering furnace, removing (24) the sintering element as net-shape vane, preferably as removal from the sintering furnace. After removing the sintering element, deburring (25) can optionally be made. The invention further relates to a vane and a rotary vane pump.

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