

Title (en)

APPARATUS FOR DEBINDING AND SINTERING A WORKPIECE

Title (de)

VORRICHTUNG ZUR ENTBINDERUNG UND SINTERUNG EINES WERKSTÜCKS

Title (fr)

APPAREIL POUR LE DÉLIANTAGE ET LE FRITTAGE D'UNE PIÈCE DE FABRICATION

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Application

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Abstract (en)

[origin: WO2023138919A1] The invention relates to an apparatus for debinding and sintering a workpiece. The apparatus comprises a retort furnace (2) with an interior (21) for receiving, debinding and sintering the workpiece (1), a double-walled tank (3), which surrounds the retort furnace (2) gas-tightly and comprises an inner wall (31), an outer wall (32) and a temperature-control system (33) between the inner wall (31) and the outer wall (32), and an acid reservoir (41), which is fluid-mechanically connected to the interior (21) of the retort furnace (2) and is designed and intended to receive an acid necessary for chemical debinding and to provide the acid (4) to the interior for a chemical debinding of the workpiece (1) in the gaseous state. Second heating means (42) are associated with the acid reservoir (41). Control means (5) are provided and designed, by adjustment of the temperature of the second heating means (42), to control the amount of acid (4) necessary for chemical debinding which is provided by the acid reservoir (41) to the interior (21) of the retort furnace (2), to control the temperature in the interior (21) of the retort furnace (2), and to control the temperature of the inner wall (31) of the tank (3).

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