

Title (en)

METHOD AND DEVICE FOR DENSIFYING MATERIALS OR CONSOLIDATING AN ASSEMBLY OF MATERIALS BY HYDROTHERMAL OR SOLVOTHERMAL SINTERING

Title (de)

VERFAHREN UND VORRICHTUNG ZUR VERDICHUNG VON MATERIALIEN ODER ZUR ZUSAMMENFÜHRUNG EINER ANORDNUNG VON MATERIALIEN DURCH HYDROTHERMISCHES ODER SOLVOTHERMISCHES SINTERN

Title (fr)

PROCÉDÉ ET DISPOSITIF DE DENSIFICATION DE MATÉRIAUX OU DE CONSOLIDATION D'UN ASSEMBLAGE DE MATÉRIAUX PAR FRITTAGE HYDROTHERMAL OU SOLVOTHERMAL

Publication

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Application

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Abstract (en)

[origin: CA3063853A1] The invention relates to a method and a device for densifying materials or consolidating an assembly of materials wherein a single sintering step is carried out which consists of simultaneously applying, inside a chamber (11), a uniaxial force and a sintering temperature to the moistened material or the moistened assembly placed in this chamber (11), said force being applied by at least two pistons (12) which can be moved towards each other inside said chamber (11), each piston having a housing (14) for recovering the fluid discharged during sintering, the assembly consisting of said chamber (11) and said pistons (12), and being sealed so that the sintering step is carried out entirely in a liquid medium or in a supercritical fluid medium.

IPC 8 full level

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CPC (source: EP US)

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