

Title (en)

CERAMIC-CERAMIC COMPOSITES AND PROCESS THEREFOR, NUCLEAR FUELS FORMED THEREBY, AND NUCLEAR REACTOR SYSTEMS AND PROCESSES OPERATED THEREWITH

Title (de)

KERAMIK-KERAMIK-VERBUNDSTOFFE UND VERFAHREN DAFÜR, DARAUS GEFORMTE NUKLEARE BRENNSTOFFE SOWIE KERNREAKTORSYSTEME UND DAMIT DURCHGEFÜHRTE VERFAHREN

Title (fr)

COMPOSITES CÉRAMIQUE-CÉRAMIQUE ET PROCÉDÉ POUR CEUX-CI, COMBUSTIBLES NUCLÉAIRES FORMÉS DE CETTE FAÇON, ET SYSTÈMES DE RÉACTEUR NUCLÉAIRE ET PROCÉDÉS MIS EN UVRE AVEC LESDITS COMPOSITES

Publication

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Application

EP 11831301 A 20110927

Priority

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- US 2011053473 W 20110927

Abstract (en)

[origin: WO2012047657A2] A process of producing ceramic-ceramic composites, including but not limited to nuclear fuels, and composites capable of exhibiting increased thermal conductivities. The process includes milling a first ceramic material to produce a powder of spheroidized particles of the first ceramic material, and then co-milling particles of a second ceramic material with the spheroidized particles of the first ceramic material to cause the particles of the second ceramic material to form a coating on the spheroidized particles of the first material. The spheroidized particles coated with the particles of the second ceramic material are then compacted and sintered to form the ceramic-ceramic composite, in which the second ceramic material forms a continuous phase completely surrounding the spheroidized particles of the first ceramic material.

IPC 8 full level

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CPC (source: EP KR)

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