

Title (en)  
A NUCLEAR FISSION REACTOR FUEL ASSEMBLY AND SYSTEM CONFIGURED FOR CONTROLLED REMOVAL OF A VOLATILE FISSION PRODUCT AND HEAT RELEASED BY A BURN WAVE IN A TRAVELING WAVE NUCLEAR FISSION REACTOR AND METHOD FOR SAME

Title (de)  
BRENNSTOFFBAUGRUPPE FÜR EINEN KERNFISSIONSREAKTOR, FÜR DIE KONTROLLIERTE ENTFERNUNG EINES FLÜCHTIGEN FISSIONSPRODUKTS UND DER DURCH EINE BRENNWELLE IN EINEM WANDERWELLEN-KERNFISSIONSREAKTOR FREIGESetzten WÄRME KONFIGURIERTES SYSTEM SOWIE VERFAHREN DAFÜR

Title (fr)  
ENSEMBLE ET SYSTÈME POUR COMBUSTIBLE DE RÉACTEUR DE FISSION NUCLÉAIRE CONÇUS POUR L'ÉLIMINATION CONTRÔLÉE D'UN PRODUIT DE FISSION VOLATIL ET DE CHALEUR DÉGAGÉE PAR UNE ONDE DE COMBUSTION DANS UN RÉACTEUR DE FISSION NUCLÉAIRE À ONDE PROGRESSIVE ET PROCÉDÉ CORRESPONDANT

Publication  
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Application  
**EP 10772359 A 20100416**

Priority  

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- US 45985609 A 20090707
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Abstract (en)  
[origin: WO2010129010A1] A nuclear fission reactor fuel assembly and system configured for controlled removal of a volatile fission product and heat released by a burn wave in a traveling wave nuclear fission reactor and method for same. The fuel assembly comprises an enclosure adapted to enclose a porous nuclear fuel body having the volatile fission product therein. A fluid control subassembly is coupled to the enclosure and adapted to control removal of at least a portion of the volatile fission product from the porous nuclear fuel body. In addition, the fluid control subassembly is capable of circulating a heat removal fluid through the porous nuclear fuel body in order to remove heat generated by the nuclear fuel body.

IPC 8 full level  
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CPC (source: EP KR)  
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Citation (search report)  

- [I] WO 2009040644 A2 20090402 - DEL NOVA VIS S R L [IT], et al
- [I] US 2008232535 A1 20080925 - AHLFELD CHARLES E [US], et al
- [I] GB 2163888 A 19860305 - ATOMIC ENERGY AUTHORITY UK
- [I] US 3996100 A 19761207 - OGUMA MASAOMI, et al
- [I] US 3322644 A 19670530 - BENSON GLENDON M
- [A] US 3813344 A 19740528 - KRAUTH A, et al
- See references of WO 2010129012A2

Designated contracting state (EPC)  
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