

Title (en)

CONTROLLED REMOVAL OF A VOLATILE FISSION PRODUCT AND HEAT RELEASED BY A BURN WAVE

Title (de)

GESTEUERTE ABLEITUNG EINES FLÜCHTIGEN FISSIONSPRODUKTS UND DER DURCH EINE BRENNWELLE VERURSACHTEN WÄRME

Title (fr)

ÉLIMINATION CONTRÔLÉE D'UN PRODUIT DE FISSION VOLATIL ET DE LA CHALEUR LIBÉRÉE PAR UNE ONDE DE COMBUSTION

Publication

**EP 2419905 A4 20131030 (EN)**

Application

**EP 10772357 A 20100416**

Priority

- US 2010001123 W 20100416
- US 38652409 A 20090416
- US 45985509 A 20090707
- US 45985609 A 20090707
- US 45985709 A 20090707

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

**G21C 1/02** (2006.01); **G21C 3/04** (2006.01); **G21C 3/32** (2006.01); **G21C 17/10** (2006.01); **G21C 21/02** (2006.01); **G21C 7/00** (2006.01)

CPC (source: EP KR)

**G21C 1/026** (2013.01 - EP KR); **G21C 3/041** (2013.01 - EP); **G21C 3/044** (2013.01 - EP); **G21C 3/22** (2013.01 - KR); **G21C 3/3213** (2013.01 - EP); **G21C 7/00** (2013.01 - KR); **G21C 21/02** (2013.01 - EP KR); **G21C 7/00** (2013.01 - EP); **Y02E 30/30** (2013.01 - EP KR)

Citation (search report)

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- [XI] US 2008123796 A1 20080529 - HYDE RODERICK A [US], et al
- [X] GB 2163888 A 19860305 - ATOMIC ENERGY AUTHORITY UK
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Designated contracting state (EPC)

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