

Title (en)

NUCLEAR FUEL BUNDLE AND NUCLEAR REACTOR COMPRISING A NUMBER OF SUCH FUEL BUNDLES

Title (de)

KERNBRENNSTABBÜNDEL UND MIT DERARTIGEN KERNBRENNSTABBÜNDELN BESTÜCKTER KERNREAKTOR

Title (fr)

ASSEMBLAGE DE COMBUSTIBLE NUCLÉAIRE ET RÉACTEUR NUCLÉAIRE COMPORTANT DE TELS ASSEMBLAGES

Publication

**EP 2489043 A1 20120822 (FR)**

Application

**EP 10765631 A 20101014**

Priority

- FR 0957283 A 20091016
- EP 2010065455 W 20101014

Abstract (en)

[origin: WO2011045390A1] The invention relates to a nuclear fuel assembly comprising: a housing (2) defining an inner space divided into a central portion (10), referred to as a fissile area, in which a bundle of nuclear fuel pins (11) is arranged, an upper portion (14), and a lower portion (12); a lower end comprising a coolant supply inlet; an upper end comprising a coolant discharge outlet; the pins of the bundle of pins comprising an upper plenum and/or lower plenum; means (18) for placing the lower portion (12) of the inner space of the housing in communication with the area (20) surrounding the assembly, referred to as the interconnecting area through the wall of the housing (2), said means being sealed below a given pressure threshold in the inner portion; and upper neutron protection means (22.1) inside the housing.

IPC 8 full level

**G21C 3/322** (2006.01); **G21C 3/324** (2006.01); **G21C 9/016** (2006.01); **G21C 15/18** (2006.01)

CPC (source: EP US)

**G21C 3/322** (2013.01 - EP US); **G21C 3/324** (2013.01 - EP US); **G21C 9/016** (2013.01 - EP US); **G21C 15/18** (2013.01 - EP US);  
**Y02E 30/30** (2013.01 - EP US)

Citation (search report)

See references of WO 2011045390A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**WO 2011045390 A1 20110421**; CN 102576571 A 20120711; EP 2489043 A1 20120822; FR 2951578 A1 20110422; FR 2951578 B1 20120608;  
JP 2013507631 A 20130304; KR 20120092636 A 20120821; RU 2012120109 A 20131127; US 2012201342 A1 20120809

DOCDB simple family (application)

**EP 2010065455 W 20101014**; CN 201080046734 A 20101014; EP 10765631 A 20101014; FR 0957283 A 20091016;  
JP 2012533637 A 20101014; KR 20127012590 A 20101014; RU 2012120109 A 20101014; US 201013500770 A 20101014