

Title (en)

NUCLEAR REACTOR FUEL ELEMENT WITH HIGH BURN-UP AND METHOD OF PRODUCING THE SAME

Title (de)

KERNREAKTOR-BRENNELEMENT MIT HOHEM ABBRAND UND VERFAHREN ZU SEINER FERTIGUNG

Title (fr)

ELEMENT COMBUSTIBLE DE REACTEUR NUCLEAIRE A COMBUSTION ELEVEE ET SON PROCEDE DE PRODUCTION

Publication

EP 0948794 A1 19991013 (DE)

Application

EP 97942878 A 19970826

Priority

- DE 19636563 A 19960909
- EP 9704652 W 19970826

Abstract (en)

[origin: DE19636563C1] In order to increase the burn-up potential of fuel elements, pellets enriched to an unacceptably high degree are produced on the production lines (3 to 9) which are designed to produce large amounts of normally enriched fuel. The unacceptable enrichment is compensated by mixing with the fuel (T, P, N) in the powder mixer (M) at the production line inlet an amount of absorber material (U/B powder) such that the reactivity of the contaminated mixture does not exceed the reactivity of a normally enriched uncontaminated fuel mixture. Corresponding fuel elements thus contain larger amounts of these contaminated pellets (or only such contaminated pellets) which can be produced with conventional plants in large numbers (and hence economically).

IPC 1-7

G21C 3/62; G21C 21/02

IPC 8 full level

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CPC (source: EP KR US)

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