

Title (en)

METHOD AND DEVICE FOR PRODUCING TWO DIFFERENT RADIOACTIVE ISOTOPES

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERZEUGUNG ZWEIER VERSCHIEDENER RADIOAKTIVER ISOTOPE

Title (fr)

PROCÉDÉ ET DISPOSITIF POUR PRODUIRE DEUX ISOTOPES RADIOACTIFS DIFFÉRENTS

Publication

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Application

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Abstract (en)

[origin: CA2788617A1] The invention relates to a method for producing a first and a second radioactive isotope by means of an accelerated particle beam, in which the accelerated particle beam is directed to a first initial material and the first radioactive isotope is produced by a first nuclear reaction based on the interaction of the particle beam with the first initial material, said particle beam is also slowed down and is subsequently directed to a second initial material, and the second radioactive isotope is produced by a second nuclear reaction based on the interaction of the particle beam with the second initial material. The effective cross-section for the induction of the first nuclear reaction has a first peak for first particle energy, and the effective cross-section for the induction of the second nuclear reaction has a second peak for a second particle energy which is less than the first particle energy. The invention also relates to a corresponding device comprising an acceleration unit, a first exposure target having the first initial material and a second exposure target arranged upstream in the direction of the radiation path, having the second initial material.

IPC 8 full level

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CPC (source: EP US)

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