

Title (en)

Method and device for eluting and dosing a radio nuclide.

Title (de)

Verfahren und Vorrichtung zum Eluieren und Dosieren eines radioaktiven Nukleids.

Title (fr)

Procédé et dispositif pour l'éluion et le dosage d'un générateur d'isotopes.

Publication

EP 0141800 A1 19850515 (DE)

Application

EP 84890135 A 19840719

Priority

AT 294883 A 19830817

Abstract (en)

[origin: ES8605108A1] A process for the production and dispensing of a radioactive nuclide, esp. technetium, operates with a reservoir, nuclide generator and other equipment all contained within a radiation-proof casing having a dispensing station (9) where the product is discharged into a bottle. - This bottle is placed against an opening in the shielded casing and is filled through this opening, so that persons handling the bottle are not subject to risk of contamination. (0/1) EPAB- EP-141800 B A process for the production and dispensing of a radioactive nuclide, esp. technetium, operates with a reservoir, nuclide generator and other equipment all contained within a radiation-proof casing having a dispensing station (9) where the product is discharged into a bottle. - This bottle is placed against an opening in the shielded casing and is filled through this opening, so that persons handling the bottle are not subject to risk of contamination. (13pp Dwg.N .0/1) - EP-141800 B A method for the elution and metering of a radioactive nuclide such as technetium, from a nuclide generator into an ampoule or the like from which said nuclide may be taken for use, said generator being located in a radiation-proof housing and being connected on the one hand to a supply of liquid nuclide solvent and on the other hand to an eluate aspiration and metering device connected to a filling mechanism, characterized in that said generator is being flushed under program control with a predetermined quantity of solvent and the produced eluate is being transferred into an intermediate vessel of said aspiration means located within said radiation-proof housing, whereupon the radiation activity is being measured and a predetermined quantity of eluate is being discharged by means of said metering device located in said radiation-proof housing into said filling mechanism also located in said housing, in which mechanism said quantity is being filled into a pierceable ampoule which is being moved with its closure into alignment with an aperture formed in said radiation-proof housing, through which aperture said amount of eluate from said ampoule is being removed from the outside of said housing. (7pp) USAB- US4625118 A Device for the elution and metering of a radioactive nuclide such as technetium comprises a nuclide generator in a radiation-proof housing. A stock vessel contg. an eluate is connected to the inlet of the generator and passes through an instrument for measuring radioactivity. A stock vessel of nuclide solvent and the generator outlet are connected to an aspirator and a metering device which is connected to a station in which ampoules are filled.

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Abstract (de)

Zum strahlensicheren Eluieren und Dosieren eines radioaktiven Nukleids aus einem Nukleidgenerator in eine Vorratsampulle wird der in einem strahlensicheren Gehäuse (1) angeordnete Generator (2) einerseits an einem Vorrat (3) für flüssiges Nukleidlösungsmittel sowie andererseits an eine mit einer Abfülleinrichtung (9) in Verbindung stehende Eluat- Ansaug- und Dosiereinrichtung (6) angeschlossen; sodann wird der Generator programmgesteuert mit einer vorbestimmbaren Lösungsmittelmenge durchspült und das Eluat in einem Zwischenbehälter (8) der Ansaugeneinrichtung übergeführt, worauf eine vorbestimmte Menge von Eluat mittels der Dosiereinrichtung an die Abfülleinrichtung abgegeben wird, in welcher diese Menge in eine Durchstechampulle abgefüllt wird; der Zwischenbehälter, die Ansaug- und Dosiereinrichtung und die Abfülleinrichtung sind ebenfalls im strahlensicheren Gehäuse untergebracht und die Durchstechampulle wird mit ihrem Verschluss in Fluchtung mit einer Öffnung des Gehäuses bewegt, durch die die betreffende Eluatmenge der Durchstechampulle von der Aussenseite des Gehäuses her entnommen wird.

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G21G 4/08

IPC 8 full level

G21G 4/04 (2006.01); **G21G 4/08** (2006.01)

CPC (source: EP US)

G21G 4/08 (2013.01 - EP US)

Citation (search report)

- [A] US 3710118 A 19730109 - HOLGATE R, et al
- [A] US 3774035 A 19731120 - LITT G
- [A] FR 2024182 A1 19700828 - SQUIBB & SONS INC
- [A] FR 2053665 A5 19710416 - COMMISSARIAT ENERGIE ATOMIQUE
- [AD] FR 2194021 A1 19740222 - HOECHST AG [DE]

Cited by

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DE 3466824 D1 19871119; DK 170104 B1 19950522; DK 370684 A 19850218; DK 370684 D0 19840730; ES 535121 A0 19860316;
ES 8605108 A1 19860316; JP H0750200 B2 19950531; JP S6070400 A 19850422; NO 162174 B 19890807; NO 162174 C 19891115;
NO 843284 L 19850218; US 4625118 A 19861125

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