

Title (en)
METHOD FOR PRODUCING ^{18}F FLUORIDE ION

Title (de)
VERFAHREN ZUR ERZEUGUNG EINES ^{18}F -FLUORIDIONS

Title (fr)
PROCEDE POUR PRODUIRE UN ION FLUORURE ^{18}F

Publication
EP 1287532 A4 20061025 (EN)

Application
EP 01941492 A 20010516

Priority

- US 0115921 W 20010516
- US 20495200 P 20000517
- US 58483900 A 20000531

Abstract (en)
[origin: WO0187235A2] A method for producing ^{18}F fluoride ion comprises loading an enclosed chamber of a metal target with ^{18}O oxygen gas. The ^{18}O oxygen gas is irradiated in the enclosed chamber to produce ^{18}F fluoride ion in the chamber. The produced ^{18}F fluoride ion is removed from the chamber without opening the target, preferably by introducing a solubilizing agent into the enclosed chamber to solubilize produced ^{18}F fluoride ion and removing the solubilizing agent and produced ^{18}F fluoride ion from the enclosed chamber without opening the target. The remaining ^{18}O oxygen gas is removed from the chamber for reuse prior to removing the ^{18}F fluoride ion from the chamber. The produced ^{18}F fluoride ion is reactive and can be used to produce radiolabeled compounds such as 2-deoxy-2- ^{18}F fluoro-D-glucose.
[origin: WO0187235A2] A method for producing ^{18}F fluoride ion comprises loading an enclosed chamber (16) of a metal target with ^{18}O oxygen gas. The ^{18}O oxygen gas is irradiated in the enclosed chamber (16) to produce ^{18}F fluoride ion in the chamber (16). The produced ^{18}F fluoride ion is removed from the chamber (16) without opening the target, preferably by introducing a solubilizing agent into the enclosed chamber (16) to solubilize produced ^{18}F ion from the enclosed chamber (16) without opening the target. The remaining ^{18}O oxygen gas is removed from the chamber (16) for reuse prior to removing the ^{18}F fluoride ion from the chamber (16). The produced ^{18}F fluoride ion is reactive and can be used to produce radiolabeled compounds such as 2-deoxy-2- ^{18}F fluoro-D-glucose.

IPC 1-7
G21G 1/10

IPC 8 full level
C01B 7/20 (2006.01); **C07D 471/10** (2006.01); **C07D 473/18** (2006.01); **C07H 5/02** (2006.01); **C07H 19/06** (2006.01); **G21G 1/10** (2006.01); **G21G 4/08** (2006.01)

CPC (source: EP)
G21G 1/10 (2013.01)

Citation (search report)

- [E] EP 1258010 A1 20021120 - UNIV ALBERTA THE UNI OF BRITIS [CA]
- [X] NICKLES R J ET AL: "AN $^{18}\text{O}_2$ TARGET FOR THE PRODUCTION OF ^{18}F ", INTERNATIONAL JOURNAL OF APPLIED RADIATION AND ISOTOPES, PERGAMON PRESS, NEW YORK, NY, US, vol. 35, no. 2, February 1984 (1984-02-01), pages 117 - 122, XP001006328, ISSN: 0020-708X
- See references of WO 0187235A2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0187235 A2 20011122; **WO 0187235 A3 20020530**; AU 7484301 A 20011126; EP 1287532 A2 20030305; EP 1287532 A4 20061025; JP 2003536055 A 20031202

DOCDB simple family (application)
US 0115921 W 20010516; AU 7484301 A 20010516; EP 01941492 A 20010516; JP 2001583704 A 20010516