

**CPC****COOPERATIVE PATENT CLASSIFICATION****G21G****CONVERSION OF CHEMICAL ELEMENTS; RADIOACTIVE SOURCES**

(applications of radiation in general [G21H 5/00](#); handling particles, e.g. neutrons, or electromagnetic radiation not otherwise provided for [G21K](#) )

**Guidance heading:****G21G 1/00**

**Arrangements for converting chemical elements by electromagnetic radiation, corpuscular radiation or particle bombardment, e.g. producing radioactive isotopes**  
(separation of different isotopes of the same element [B01D 59/00](#))

[G21G 1/0005](#) . { [Isotope delivery systems](#) (use of radioisotopes as tracers [G21H 5/02](#)) }

[G21G 1/001](#) . { [Recovery of specific isotopes from irradiated targets](#) }

[G21G 2001/0015](#) .. Fluorine

[G21G 2001/0021](#) .. Gallium

[G21G 2001/0026](#) .. Arsenic

[G21G 2001/0031](#) .. Rubidium

[G21G 2001/0036](#) .. Molybdenum

[G21G 2001/0042](#) .. Technetium

[G21G 2001/0047](#) .. Rhodium

[G21G 2001/0052](#) .. Palladium

[G21G 2001/0057](#) .. Indium

[G21G 2001/0063](#) .. Iodine

[G21G 2001/0068](#) .. Cesium

[G21G 2001/0073](#) .. Rhenium

[G21G 2001/0078](#) .. Thallium

[G21G 2001/0084](#) .. Bismuth

[G21G 2001/0089](#) .. Actinium

[G21G 2001/0094](#) .. Other isotopes not provided for in the groups listed above

[G21G 1/02](#) . in nuclear reactors (by thermonuclear reactions [G21B](#) ; conversion of nuclear fuel [G21C](#) )

[G21G 1/04](#) . outside nuclear reactors or particle accelerators

[G21G 1/06](#) .. by neutron irradiation

[G21G 1/08](#) ... accompanied by nuclear fission

[G21G 1/10](#) .. by bombardment with electrically charged particles (irradiation devices [G21K 5/00](#))

[G21G 1/12](#) .. by electromagnetic irradiation, e.g. with gamma or X-rays (applications of radiation [G21H 5/00](#); irradiation devices [G21K 5/00](#))

**G21G 4/00**

**Radioactive sources** (producing neutrons or other subatomic particles, X- or gamma rays, in fusion reactors [G21B](#) , in nuclear reactors [G21C](#) , by cosmic radiation [G21H 7/00](#), in accelerators [H05H](#) ; X-ray tubes [H01J 35/00](#); gamma masers [H01S 4/00](#))

- G21G 4/02
  - . Neutron sources
- G21G 4/04
  - . Radioactive sources other than neutron sources ([radioactive dressings A61N 5/1029](#))
- G21G 4/06
  - . . characterised by constructional features
- G21G 4/08
  - . . . specially adapted for medical application ([radiation therapy using radioactive sources A61N 5/10](#))
- G21G 4/10
  - . . with radium emanation
- G21G 5/00**
  - Alleged conversion of chemical elements by chemical reaction**
- G21G 7/00**
  - Conversion of chemical elements not provided for in other groups of this subclass**