

**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 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**

**Guidance heading:****G21G 2001/00**

**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 2001/001	. { 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