

**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](#) )

**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**

**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