CPC COOPERATIVE PATENT CLASSIFICATION

G PHYSICS

(NOTES omitted)

NUCLEONICS

G21 NUCLEAR PHYSICS; NUCLEAR ENGINEERING

G21H OBTAINING ENERGY FROM RADIOACTIVE SOURCES; APPLICATIONS OF RADIATION FROM RADIOACTIVE SOURCES; UTILISING COSMIC RADIATION

(measurement of nuclear or X-radiation G01T; fusion reactors G21B; nuclear reactors G21C; semiconductor devices sensitive to electro-magnetic or corpuscular radiation H01L 31/00)

1/00 **Arrangements for obtaining electrical energy from radioactive sources, e.g. from radioactive isotopes {, nuclear or atomic batteries}**

1/02 . Cells charged directly by beta radiation

1/04 . Cells using secondary emission induced by alpha radiation, beta radiation, or gamma radiation (discharge tubes H01J 40/00)

1/06 . Cells wherein radiation is applied to the junction of different semiconductor materials

1/08 . Cells in which radiation ionises a gas in the presence of a junction of two dissimilar metals, i.e. contact potential difference cells (discharge tubes H01J)

1/10 . Cells in which radiation {of disintegration heat} heats a thermoelectric junction or a thermionic converter (discharge tubes functioning as thermionic generators H01J 45/00; thermo electric devices comprising a junction of dissimilar materials H01L 35/00 {Devices where heating occurs from fission reactions G21C 3/04})

1/103 . . {Cells provided with thermo-electric generators}

1/106 . . {Cells provided with thermionic generators}

1/12 . Cells using conversion of the radiation into light combined with subsequent photoelectric conversion into electric energy

3/00 **Arrangements for direct conversion of radiation energy from radioactive sources into forms of energy other than electric energy, e.g. {into} light {or mechanic energy}** (lasers H01S 3/00; {gamma masers H01S 4/00})

3/02 . in which material is excited to luminesce by the radiation ({luminescent substances containing radioactive material C09C 1/00}; lamps in which a gas filling or screen or coating is excited to luminesce by radioactive material structurally associated with the lamp H01J 65/00)

5/00 **Applications of radiation from radioactive sources or arrangements therefor** (producing mutation in plants A01H 1/06; preservation of dairy products A23C; preservation of foodstuffs A23L 3/26; for therapeutic purposes A61N 5/10; in chemical, physical or physicochemical processes in general B01J 19/08; in electrostatic separation B03C 3/38; for after-treatment of coatings applied as liquids or other fluent materials B05D 3/06; for action between electric vehicles and tracked apparatus B61L 1/10, B61L 3/06; introducing isotopes into organic compounds C07B 59/00; for preparation of organic chemical compounds C07, C08, e.g. C08F 2/46; for treating macromolecular substances or articles made therefrom B29C 71/04, C08J 3/28, C08J 7/18; for cracking of hydrocarbon oils C10G 15/00, C10G 32/04; for reforming naphtha C10G 35/16; preservation or ageing of products obtained from fermentation processes C12H 1/06, C12H 1/16; for bleaching fibres D06L 4/50; measuring G01; irradiation devices, gamma- or X-ray microscopes G21K; in discharge tubes H01J; apparatus for generating ions to be introduced into non-enclosed gases, e.g. into the atmosphere, H01T 23/00; for carrying-off electrostatic charges H05F 3/06)

5/02 . as tracers {(medicinal preparations containing radioactive substances A61K 51/00; investigating or analysing biological material G01N 33/48)}

7/00 **Use of effects of cosmic radiation**