

SECTION G — PHYSICS

G21 NUCLEAR PHYSICS; NUCLEAR ENGINEERING

G21H OBTAINING ENERGY FROM RADIOACTIVE SOURCES; APPLICATIONS OF RADIATION FROM RADIOACTIVE SOURCES; UTILISING COSMIC RADIATION (fusion reactors G21B; nuclear reactors G21C)

1/00 Arrangements for obtaining electrical energy from radioactive sources, e.g. from radioactive isotopes

- 1/02 • Cells charged directly by beta radiation
- 1/04 • Cells using secondary emission induced by alpha radiation, beta radiation, or gamma radiation
- 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
- 1/10 • Cells in which radiation heats a thermoelectric junction or a thermionic converter [2]
- 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. light

- 3/02 • in which material is excited to luminesce by the radiation (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 3/07; 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; for preparation of organic chemical compounds C07, 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 15/10, 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 3/04; measuring G01T; 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

7/00 Use of effects of cosmic radiation