

CPC COOPERATIVE PATENT CLASSIFICATION

G PHYSICS (NOTES omitted)

NUCLEONICS

G21 NUCLEAR PHYSICS; NUCLEAR ENGINEERING

G21K TECHNIQUES FOR HANDLING PARTICLES OR IONISING RADIATION NOT OTHERWISE PROVIDED FOR; IRRADIATION DEVICES; GAMMA RAY OR X-RAY MICROSCOPES

NOTE

In this subclass, the following term is used with the meaning indicated:
"particle" means a molecular, atomic or subatomic particle

WARNING

The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

G21K 3/00

covered by

[G21K 1/10](#)

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| <p>1/00 Arrangements for handling particles or ionising radiation, e.g. focusing or moderating (production or acceleration of neutrons, electrically-charged particles, neutral molecular beams or neutral atomic beams H05H 3/00 - H05H 15/00)</p> <p>1/003 . {Manipulation of charged particles by using radiation pressure, e.g. optical levitation (acceleration of charged particles H05H 5/00, H05H 7/00, H05H 9/00, H05H 11/00, H05H 13/00)}</p> <p>1/006 . {Manipulation of neutral particles by using radiation pressure, e.g. optical levitation (production or acceleration of neutral particles H05H 3/00)}</p> <p>1/02 . using diaphragms, collimators</p> <p>1/025 . . {using multiple collimators, e.g. Bucky screens; other devices for eliminating undesired or dispersed radiation}</p> <p>1/04 . . using variable diaphragms, shutters, choppers</p> <p>1/043 . . . {changing time structure of beams by mechanical means, e.g. choppers, spinning filter wheels}</p> <p>1/046 . . . {varying the contour of the field, e.g. multileaf collimators}</p> <p>1/06 . using diffraction, refraction or reflection, e.g. monochromators (G21K 1/10, G21K 7/00 take precedence)</p> <p>1/062 . . {Devices having a multilayer structure}</p> <p>1/065 . . {using refraction, e.g. Tomie lenses}</p> <p>1/067 . . {using surface reflection, e.g. grazing incidence mirrors, gratings (multilayer mirrors G21K 1/062; crystal optics G21K 1/06)}</p> | <p>1/08 . Deviation, concentration or focusing of the beam by electric or magnetic means (electron-optical arrangements in electric discharge tubes H01J 29/46; {details, e.g. electric or magnetic deviating means for direct voltage accelerators or in accelerators using single pulses H05H 5/02; arrangements for injecting particles into orbits H05H 7/08; arrangements for ejecting particles from orbits H05H 7/10)}</p> <p>1/087 . . by electrical means</p> <p>1/093 . . by magnetic means</p> <p>1/10 . Scattering devices; Absorbing devices; Ionising radiation filters</p> <p>1/12 . . Resonant absorbers or driving arrangements therefor, e.g. for Moessbauer-effect devices {(motors with reciprocating, oscillating or vibrating magnet, armature or coil system in general H02K 33/00)}</p> <p>1/14 . using charge exchange devices, e.g. for neutralising or changing the sign of the electrical charges of beams (producing or accelerating neutral particle beams H05H 3/00)</p> <p>1/16 . using polarising devices, e.g. for obtaining a polarised beam {(ion sources, ion guns H01J 27/02; polarised targets for producing nuclear reactions H05H 6/005)}</p> <p>4/00 Conversion screens for the conversion of the spatial distribution of X-rays or particle radiation into visible images, e.g. fluoroscopic screens (photographic processes using X-ray intensifiers G03C 5/17; discharge tubes comprising luminescent screens H01J 1/62; cathode ray tubes for X-ray conversion with optical output H01J 31/50)</p> <p>2004/02 . {characterised by the external panel structure}</p> <p>2004/04 . {with an intermediate layer}</p> <p>2004/06 . {with a phosphor layer}</p> <p>2004/08 . {with a binder in the phosphor layer}</p> <p>2004/10 . {with a protective film}</p> |
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2004/12 . {with a support}

5/00 Irradiation devices (discharge tubes for irradiating [H01J 37/00](#))

- 5/02 . having no beam-forming means
- 5/04 . with beam-forming means
- 5/08 . Holders for targets or for other objects to be irradiated
- 5/10 . with provision for relative movement of beam source and object to be irradiated

7/00 Gamma- or X-ray microscopes

2201/00 Arrangements for handling radiation or particles

- 2201/06 . using diffractive, refractive or reflecting elements
- 2201/061 . . characterised by a multilayer structure
- 2201/062 . . the element being a crystal
- 2201/064 . . having a curved surface
- 2201/065 . . provided with cooling means
- 2201/067 . . Construction details
- 2201/068 . . specially adapted for particle beams

2207/00 Particular details of imaging devices or methods using ionizing electromagnetic radiation such as X-rays or gamma rays

- 2207/005 . Methods and devices obtaining contrast from non-absorbing interaction of the radiation with matter, e.g. phase contrast