

CPC COOPERATIVE PATENT CLASSIFICATION

H ELECTRICITY

(NOTE omitted)

H05 ELECTRIC TECHNIQUES NOT OTHERWISE PROVIDED FOR

H05G X-RAY TECHNIQUE (apparatus for radiation diagnosis [A61B 6/00](#); X-ray therapy [A61N](#); testing by X-rays [G01N](#); apparatus for X-ray photography [G03B](#); filters, conversion screens, microscopes [G21K](#); X-ray tubes [H01J 35/00](#); TV systems having X-ray input [H04N 5/321](#))

WARNINGS

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

H05G 1/61	covered by	H05G 1/60
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- In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

1/00	X-ray apparatus involving X-ray tubes; Circuits therefor	1/32	. . . . Supply voltage of the X-ray apparatus or tube (regulating supply without reference to operating characteristics of the apparatus G05F ; voltage regulation in general G05F)
1/02	. Constructional details		
1/025	. . {Means for cooling the X-ray tube or the generator}		
1/04	. . Mounting the X-ray tube within a closed housing	1/34	. . . . Anode current, heater current, heater voltage of X-ray tube (regulating supply without reference to operating characteristics of the apparatus G05F ; current regulation in general G05F)
1/06	. . . X-ray tube and at least part of the power supply apparatus being mounted within the same housing		
1/08	. Electrical details		
1/085	. . {Circuit arrangements particularly adapted for X-ray tubes having a control grid}	1/36	. . . . Temperature of anode; Brightness of image {power (electrical temperature regulating in general G05D 23/19)}
1/10	. . Power supply arrangements for feeding the X-ray tube {(supply circuits with converters in general H02M ; supply circuits for emitters and amplifiers H04B 1/16 - H04B 1/1623)}	1/38	. . . . Exposure time {(time switches in general H01H 43/00 and subgroups)}
1/12	. . . with dc or rectified single-phase ac {or double-phase}	1/40	. . . . . using adjustable time-switch
1/14	. . . with single-phase low-frequency ac {also when a rectifier element is in series with the X-ray tube}	1/42	. . . . . using arrangements for switching when a predetermined dose of radiation has been applied, e.g. in which the switching instant is determined by measuring the electrical energy supplied to the tube
1/16	. . . . Reducing the peak-inverse voltage	1/44	. . . . . in which the switching instant is determined by measuring the amount of radiation directly {(dosimetry in general G01T 1/02)}
1/18	. . . with polyphase ac of low frequency {rectified}		
1/20	. . . with high-frequency ac; with pulse trains {(pulse generators in general H03K 3/00 , H03K 4/00)}	1/46	. . . . Combined control of different quantities, e.g. exposure time as well as voltage or current
1/22	. . . with single pulses	1/48	. . . . Compensating the voltage drop occurring at the instant of switching-on of the apparatus (regulating supply without reference to the operating characteristics of the apparatus G05F ; voltage regulation in general G05F)
1/24	. . . . Obtaining pulses by using energy storage devices (pulse generators H03K ; current and voltage pulse generators H03K 3/53)		
1/26	. . Measuring, controlling, protecting (measuring electric values G01R ; measuring X-ray intensity G01T)		
1/265	. . . {Measurements of current, voltage or power}	1/50	. . . . Passing the tube current only during a restricted portion of the voltage waveform
1/28	. . . Measuring or recording actual exposure time; Counting number of exposures; Measuring required exposure time	1/52	. . . . Target size or shape; Direction of electron beam, e.g. in tubes with one anode and more than one cathode
1/30	. . . Controlling	1/54	. . . Protecting {or lifetime prediction}(overload protection combined with control H05G 1/46)
		1/56	. . Switching-on; Switching-off

H05G

- 1/58 . . Switching arrangements for changing-over from one mode of operation to another, e.g. from radioscopy to radiography, from radioscopy to irradiation {or from one tube voltage to another}
- 1/60 . . Circuit arrangements for obtaining a series of X-ray photographs or for X-ray cinematography
- 1/62 . . Circuit arrangements for obtaining X-ray photography at predetermined instants in the movement of an object, e.g. X-ray stroboscopy
- 1/64 . . Circuit arrangements for X-ray apparatus incorporating image intensifiers
- 1/66 . . Circuit arrangements for X-ray tubes with target movable relatively to the anode
- 1/68 . . Circuit arrangements for Lilienfield tubes; Circuit arrangements for gas-filled X-ray tubes
- 1/70 . . Circuit arrangements for X-ray tubes with more than one anode; Circuit arrangements for apparatus comprising more than one X ray tube {or more than one cathode ([H05G 1/58](#) takes precedence)}

- 2/00 Apparatus or processes specially adapted for producing X-rays, not involving X-ray tubes, e.g. involving generation of a plasma (X-ray lasers [H01S 4/00](#); plasma technique in general [H05H](#))**
- 2/001 . {X-ray radiation generated from plasma (plasma for generation of electrons to be accelerated towards an anode [H01J 35/00](#))}
- 2/003 . . {being produced from a liquid or gas}
- 2/005 . . . {containing a metal as principal radiation generating component}
- 2/006 . . . {details of the ejection system, e.g. constructional details of the nozzle}
- 2/008 . . {involving a beam of energy, e.g. laser or electron beam in the process of exciting the plasma}