# CPC COOPERATIVE PATENT CLASSIFICATION

## 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)

**WARNING**

The following IPC group is not used in the CPC scheme. H05G 1/61 covered by H05G 1/60

**H05G 1/00** **X-ray apparatus involving X-ray tubes; circuits therefor**

H05G 1/02 . Constructional details

H05G 1/025 . . {Means for cooling the X-ray tube or the generator}

H05G 1/04 . . Mounting the X-ray tube within a closed housing

H05G 1/06 . . . X-ray tube and at least part of the power supply apparatus being mounted within the same housing

H05G 1/08 . Electrical details

H05G 1/085 . . {Circuit arrangements particularly adapted for X-ray tubes having a control grid}

H05G 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 to H04B 1/1623)}

H05G 1/12 . . . with dc or rectified single-phase ac {or double-phase}

H05G 1/14 . . . with single-phase low-frequency ac {also when a rectifer element is in series with the X-ray tube}

H05G 1/16 . . . . Reducing the peak-inverse voltage

H05G 1/18 . . . with polyphase ac of low frequency {rectified}

H05G 1/20 . . . with high-frequency ac; with pulse trains {(pulse generators in general H03K 3/00, H03K 4/00)}

H05G 1/22 . . . with single pulses

H05G 1/24 . . . . Obtaining pulses by using energy storage devices (pulse generators H03K {current and voltage pulse generators H03K 3/53})

H05G 1/26 . . Measuring, controlling, protecting (measuring electric values G01R; measuring X-ray intensity G01T)

H05G 1/265 . . . {Measurements of current, voltage or power}

H05G 1/28 . . . Measuring or recording actual exposure time; Counting number of exposures; Measuring required exposure time

H05G 1/30 . . . Controlling

H05G 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})

H05G 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})

H05G 1/36 . . . . temperature of anode; brightness of image {power (electrical temperature regulating in general G05D 23/19)}

H05G 1/38 . . . . exposure time {(time switches in general H01H 43/00 and subgroups)}

H05G 1/40 . . . . . using adjustable time-switch

H05G 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

H05G 1/44 . . . . . . in which the switching instant is determined by measuring the amount of radiation directly {(dosimetry in general G01T 1/02)}

H05G 1/46 . . . . Combined control of different quantities, e.g. exposure time as well as voltage or current

H05G 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})

H05G 1/50 . . . . Passing the tube current only during a restricted portion of the voltage waveform

H05G 1/52 . . . . target size or shape; direction of electron beam, e.g. in tubes with one anode and more than one cathode

H05G 1/54 . . . Protecting {or lifetime prediction} (overload protection combined with control H05G 1/46)

H05G 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 an other}

H05G 1/60 . . Circuit arrangements for obtaining a series of X-ray photographs or for X-ray cinematography

H05G 1/62 . . Circuit arrangements for obtaining X-ray photography at predetermined instants in the movement of an object, e.g. X-ray stroboscopy

H05G 1/64 . . Circuit arrangements for X-ray apparatus incorporating image intensifiers

**WARNING**

image intensifiers H01J 31/00

H05G 1/66 . . Circuit arrangement for X-ray tubes with target movable relatively to the anode

H05G 1/68 . . Circuit arrangements for Lilienfield tubes; Circuit arrangements for gas-filled X-ray tubes

H05G 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)}

**H05G 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)

H05G 2/001 . {X-ray radiation generated from plasma (plasma for generation of electrons to be accelerated towards an anode H01J 35/00)}

H05G 2/003 . . {being produced from a liquid or gas}

H05G 2/005 . . . {containing a metal as principal radiation generating component}

H05G 2/006 . . . {details of the ejection system, e.g. constructional details of the nozzle}

H05G 2/008 . . {involving a beam of energy, e.g. laser or electron beam in the process of exciting the plasma}