COOPERATIVE PATENT CLASSIFICATION

INSTRUMENTS

G03 PHYSICS
(NOTES omitted)

G03G PHOTOGRAPHY; CINEMATOGRAPHY; ANALOGOUS TECHNIQUES USING WAVES OTHER THAN OPTICAL WAVES; ELECTROGRAPHY; HOLOGRAPHY
(NOTE omitted)

G03G ELECTROGRAPHY; ELECTROPHOTOGRAPHY; MAGNETOGRAPHY (information storage based on relative movement between record carrier and transducer G11B; static stores with means for writing-in or reading-out information G11C; recording of television signals H04N 5/76)

NOTES
1. This subclass covers:
   • the production of permanent directly-visible pictures in conformity with an original picture or document, using an intermediate imagewise distribution of an electric or magnetic quantity, such as a charge pattern, an electric conductivity pattern, or a magnetic pattern;
   • the production of permanent directly-visible pictures using an intermediate imagewise distribution of an electric or magnetic quantity, when the origin and the way of generating said intermediate distribution are not relevant.
2. This subclass does not cover:
   • use of electric signals for the transmission of the picture information from the original to the reproduction, i.e. pictorial communication, which is covered by subclass H04N;
   • production of pictures by heat patterns exclusively, not using an electrostatic or magnetic pattern, which is covered by group B41M 5/00;
   • production of prints by transferring ink from a printing form to a printing surface, without physical contact and using the force of an electrostatic field, which is covered by subclass B41M;
   • selective printing mechanisms characterised by the selective supply of electric current, or the selective application of magnetism or radiation, to a printing material or impression-transfer material, which are covered by groups B41J 2/385, B41J 2/435.

WARNING
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.

5/00 Recording members for original recording by exposure, e.g. to light, to heat, to electrons; Manufacture thereof; Selection of materials therefor (recording surfaces for measuring apparatus G01D 15/34; photosensitive materials for photographic purposes G03C)

5/005 . [Materials for treating the recording members, e.g. for cleaning, reactivating, polishing]

5/02 Charge-receiving layers (G03G 5/153 takes precedence)

5/0202 . . [Dielectric layers for electrography]

5/0205 . . [Macromolecular components]

5/0208 . . . [obtained by reactions only involving carbon-to-carbon unsaturated bonds]

5/0211 . . . [obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds]

5/0214 . . . [Organic non-macromolecular components]

5/0217 . . . [Inorganic components]

5/022 Layers for surface-deformation imaging, e.g. frost imaging

5/024 . . Photoelectret layers

5/026 . . Layers in which during the irradiation a chemical reaction occurs whereby electrically conductive patterns are formed in the layers, e.g. for chemixerography

5/028 . . Layers in which after being exposed to heat patterns electrically conductive patterns are formed in the layers, e.g. for thermoxerography

5/04 Photoconductive layers; Charge-generation layers or charge-transporting layers; Additives therefor; Binders therefor

5/043 . . Photoconductive layers characterised by having two or more layers or characterised by their composite structure

5/0433 . . . [all layers being inorganic]

5/0436 . . . [combining organic and inorganic layers]

5/047 . . . characterised by the charge-generation layers or charge transport layers ([G03G 5/0433 and G03G 5/0436 take precedence])

5/05 . . Organic bonding materials; Methods for coating a substrate with a photoconductive layer; Inert supplements for use in photoconductive layers

CPC - 2020.01
5/0503 . . . . . . [Inert supplements]
5/0507 . . . . . . [Inorganic compounds]
5/051 . . . . . . [Organic non-macromolecular compounds]
5/0514 . . . . . . [not comprising cyclic groups]
5/0517 . . . . . . [comprising one or more cyclic groups consisting of carbon-atoms only]
5/0521 . . . . . . [comprising one or more heterocyclic groups]
5/0525 . . . . . . [Coating methods]
5/0528 . . . . . . [Macromolecular bonding materials]

NOTE
In groups G03G 5/0528 - G03G 5/0596, in the absence of an indication to the contrary, a polymer is classified in the last appropriate place.

5/0532 . . . . . . [obtained by reactions only involving carbon-to-carbon unsatured bonds]
5/0535 . . . . . . [Polyolefins; Polystyrenes; Waxes]
5/0539 . . . . . . [Halogenated polymers]
5/0542 . . . . . . [Polyyvinylalkohol, polyallylalcohol; Derivatives thereof, e.g. polyvinylesters, polyvinylethers, polyvinylamines]
5/0546 . . . . . . [Polymers comprising at least one carboxyl radical, e.g. polyacrylic acid, polyacrylic acid; Derivatives thereof, e.g. their esters, salts, anhydrides, nitriles, amides]
5/055 . . . . . . [Polymers containing hetero rings in the side chain]
5/0553 . . . . . . [Polymers derived from conjugated double bonds containing monomers, e.g. polybutadiene; Rubbers]
5/0557 . . . . . . [obtained otherwise than by reactions only involving carbon-to-carbon unsatured bonds]
5/056 . . . . . . [Polysteres]
5/0564 . . . . . . [Polycarbonates]
5/0567 . . . . . . [Other polycondensates comprising oxygen atoms in the main chain; Phenol resins]
5/0571 . . . . . . [Polyamides; Polylimides]
5/0575 . . . . . . [Other polycondensates comprising nitrogen atoms with or without oxygen atoms in the main chain]
5/0578 . . . . . . [Polycondensates comprising silicon atoms in the main chain]
5/0582 . . . . . . [Polycondensates comprising sulfur atoms in the main chain]
5/0585 . . . . . . [Cellulose and derivatives]
5/0589 . . . . . . [Macromolecular compounds characterised by specific side-chain substituents or end groups]
5/0592 . . . . . . [Macromolecular compounds characterised by their structure or by their chemical properties, e.g. block polymers, reticulated polymers, molecular weight, acidity]
5/0596 . . . . . . [Macromolecular compounds characterised by their physical properties]

5/06 . . . . . . characterised by the photoconductive material being organic

NOTE
In groups G03G 5/06 - G03G 5/0698, the absence of an indication to the contrary, an invention is classified in the last appropriate place.

5/0601 . . . . . . [Acyclic or carbocyclic compounds]
5/0603 . . . . . . [containing halogens]
5/0605 . . . . . . [Carbocyclic compounds]
5/0607 . . . . . . [containing at least one non-six-membered ring]
5/0609 . . . . . . [containing oxygen]
5/0611 . . . . . . [Squirac acid]
5/0612 . . . . . . [containing nitrogen]
5/0614 . . . . . . [Amines]
5/0616 . . . . . . [Hydrazines; Hydrazones]
5/0618 . . . . . . [containing oxygen and nitrogen]
5/062 . . . . . . [containing non-metal elements other than hydrogen, halogen, oxygen or nitrogen]
5/0622 . . . . . . [Heterocyclic compounds]
5/0624 . . . . . . [containing one hetero ring]
5/0625 . . . . . . [being three- or four-membered]
5/0627 . . . . . . [being five-membered]
5/0629 . . . . . . [containing one hetero atom]
5/0631 . . . . . . [containing two hetero atoms]
5/0633 . . . . . . [containing three hetero atoms]
5/0635 . . . . . . [being six-membered]
5/0637 . . . . . . [containing one hetero atom]
5/0638 . . . . . . [containing two hetero atoms]
5/064 . . . . . . [containing three hetero atoms]
5/0642 . . . . . . [being more than six-membered]
5/0644 . . . . . . [containing two or more hetero rings]
5/0646 . . . . . . [in the same ring system]
5/0648 . . . . . . [containing two relevant rings]
5/065 . . . . . . [containing three relevant rings]
5/0651 . . . . . . [containing four relevant rings]
5/0653 . . . . . . [containing five relevant rings]
5/0655 . . . . . . [containing six relevant rings]
5/0657 . . . . . . [containing seven relevant rings]
5/0659 . . . . . . [containing more than seven relevant rings]
5/0661 . . . . . . [in different ring systems, each system containing at least one hetero ring]
5/0662 . . . . . . [containing metal elements]

NOTE
Alcoholates, phenates or organic acid salts of alkali or alkaline earth metals are classified as the parent compounds

5/0664 . . . . . . [Dyes]
5/0666 . . . . . . [containing a methine or polymethine group]
5/0668 . . . . . . [containing only one methine or polymethine group]
5/067 . . . . . . [containing hetero rings]
5/0672 . . . . . . [containing two or more methine or polymethine groups]
5/0674 . . . . . . [containing hetero rings]
5/0675 . . . . . . [Azo dyes]
5/0677 . . . . . . [Monoazo dyes]
5/0679 . . . . . . . . . . . . . [Disazo dyes]
5/0681 . . . . . . . . . . . . . [containing hetero rings in the part of the molecule between the azo-groups]
5/0683 . . . . . . . . . . . . . [containing polymethine or anthraquinone groups]
5/0685 . . . . . . . . . . . . . [containing hetero rings in the part of the molecule between the azo-groups]
5/0687 . . . . . . . . . . . . . [Trisazo dyes]
5/0688 . . . . . . . . . . . . . [containing hetero rings]
5/069 . . . . . . . . . . . . . [containing polymethine or anthraquinone groups]
5/0692 . . . . . . . . . . . . . [containing hetero rings]
5/0694 . . . . . . . . . . . . . [containing more than three azo groups]
5/0696 . . . . . . . . . . . . . [Phthalocyanines]
5/0698 . . . . . . . . . . . . . [Compounds of unspecified structure characterised by a substituent only]
5/07 . . . . . . . . . . . . . Polymeric photoconductive materials
5/071 . . . . . . . . . . . . . [obtained by reactions only involving carbon-to-carbon unsaturated bonds (G03G 5/078 takes precedence)]
5/073 . . . . . . . . . . . . . [comprising pending carbazol groups]
5/075 . . . . . . . . . . . . . [obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds (G03G 5/078 takes precedence)]
5/076 . . . . . . . . . . . . . [having a photoconductive moiety in the polymer backbone]
5/078 . . . . . . . . . . . . . [comprising silicon atoms]
5/08 . . . . . . . . . . . . . [characterised by the photoconductive material being inorganic]
5/082 . . . . . . . . . . . . . [not being incorporated in a bonding material, e.g. vacuum deposited]
5/08207 . . . . . . . . . . . . . [Selenium-based]
5/08214 . . . . . . . . . . . . . [Silicon-based]
5/08221 . . . . . . . . . . . . . [comprising one or two silicon based layers]
5/08228 . . . . . . . . . . . . . [at least one with varying composition]
5/08235 . . . . . . . . . . . . . [comprising three or four silicon-based layers]
5/08242 . . . . . . . . . . . . . [at least one with varying composition]
5/0825 . . . . . . . . . . . . . [comprising five or six silicon-based layers]
5/08257 . . . . . . . . . . . . . [at least one with varying composition]
5/08264 . . . . . . . . . . . . . [comprising seven or more silicon-based layers]
5/08271 . . . . . . . . . . . . . [at least one with varying composition]
5/08278 . . . . . . . . . . . . . [Depositing methods]
5/08285 . . . . . . . . . . . . . [Carbon-based (in ad mixture with Si G03G 5/08214)]
5/08292 . . . . . . . . . . . . . [Germanium-based (in ad mixture with Si G03G 5/08214)]
5/085 . . . . . . . . . . . . . [and being incorporated in an inorganic bonding material, e.g. glass-like layers]
5/087 . . . . . . . . . . . . . [and being incorporated in an organic bonding material]
5/09 . . . . . . . . . . . . . Sensitisors or activators, e.g. dyestuffs (G03G 5/12 takes precedence)
5/10 . . . . . . . . . . . . . Bases for charge-receiving or other layers
5/101 . . . . . . . . . . . . . [Paper bases (G03G 5/102, G03G 5/104, G03G 5/105 take precedence)]
5/102 . . . . . . . . . . . . . [consisting of or comprising metals]
5/104 . . . . . . . . . . . . . [comprising inorganic material other than metals, e.g. salts, oxides, carbon]
5/105 . . . . . . . . . . . . . [comprising electroconductive macromolecular compounds]
5/107 . . . . . . . . . . . . . [the electroconductive macromolecular compounds being cationic]
5/108 . . . . . . . . . . . . . [the electroconductive macromolecular compounds being anionic]
5/12 . . . . . . . . . . . . . Recording members for multicolour processes
5/14 . . . . . . . . . . . . . Inert intermediate or cover layers for charge-receiving layers (G03G 5/04 takes precedence)
5/142 . . . . . . . . . . . . . [Inert intermediate layers]
5/144 . . . . . . . . . . . . . [comprising inorganic material]
5/147 . . . . . . . . . . . . . [Cover layers]
5/14704 . . . . . . . . . . . . . [comprising inorganic material]
5/14708 . . . . . . . . . . . . . [comprising organic material]
5/14713 . . . . . . . . . . . . . [Macromolecular material]

NOTE
In groups G03G 5/14713 - G03G 5/14795, in the absence of an indication to the contrary, a polymer is classified in the last appropriate place

5/14717 . . . . . . . . . . . . . [obtained by reactions only involving carbon-to-carbon unsaturated bonds]
5/14721 . . . . . . . . . . . . . [Polyolefins; Polystyrenes; Waxes]
5/14726 . . . . . . . . . . . . . [Halogenated polymers]
5/1473 . . . . . . . . . . . . . [Polyvinyl alcohol, polyalcohols; Derivatives thereof; e.g. polyvinylesters, polyvinyl ethers]
5/14734 . . . . . . . . . . . . . [Polymers comprising at least one carboxy radical, e.g. polycrylic acid, polycrotonic acid, polymaleic acid; Derivatives thereof, e.g. their esters, salts, anhydrides, nitriles, amides]
5/14739 . . . . . . . . . . . . . [Polymers containing hetero rings in the side chain]
5/14743 . . . . . . . . . . . . . [Polymers derived from conjugated double bonds containing monomers, e.g. polybutadiene; Rubbers]
5/14747 . . . . . . . . . . . . . [obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds]
5/14752 . . . . . . . . . . . . . [Polysteres]
5/14756 . . . . . . . . . . . . . [Polycarbonates]
5/1476 . . . . . . . . . . . . . [Other polycondensates comprising oxygen atoms in the main chain; Phenol resins]
5/14765 . . . . . . . . . . . . . [Polyamides; Polyimides]
5/14769 . . . . . . . . . . . . . [Other polycondensates comprising nitrogen atoms with or without oxygen atoms in the main chain]
5/14773 . . . . . . . . . . . . . [Polycarbons comprising silicon atoms in the main chain]
5/14778 . . . . . . . . . . . . . [Polycarbons comprising sulfur atoms in the main chain]
5/14782 . . . . . . . . . . . . . [Cellulose and derivatives]
5/14786 . . . . . . . . . . . . . [Macromolecular compounds characterised by specific side-chain substituents or end groups]
Developers
9/06 . . . the developer being electrolytic
9/08 . . . with toner particles

NOTE
In groups G03G 9/0834 - G03G 9/0835, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.
Colouring agents for toner particles specified by the shell material agents by chemical reaction compounds capable of generating colouring properties characterised by physical or chemical properties provided for in a single one of groups G03G 9/08702 - G03G 9/08775 macromolecular material not specially provided for in a single one of groups G03G 9/08702 - G03G 9/08775 graft polymers block polymers characterised by the presence of specified groups or side chains crosslinked polymers characterised by their chemical properties, e.g. acidity, molecular weight, sensitivity to reactants characterised by their physical properties, e.g. viscosity, solubility, melting temperature, softening temperature, glass transition temperature colouring agents for toner particles inorganic compounds carbon black organic dyes anthracene dyes azo dyes indigoid; diaryl and triaryl methane; oxyketone dyes acridine; azine; oxazine; thiazone-; (xanthene-) dyes quinoline; polymethylene dyes phthalocyanine dyes quinacridones formazane dyes; nitro and nitroso dyes; quinone imides; azomethine dyes dyes characterised by specific substituents characterised by physical or chemical properties compounds capable of generating colouring agents by chemical reaction encapsulated toner particles specified by the shell material macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds non-macromolecular organic compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds inorganic compounds specified by the core material macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds non-macromolecular organic compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds inorganic compounds preparation thereof plasticisers; charge controlling agents inorganic compounds treated with organic compounds silicon-oxides; silicates organic compounds (G03G 9/08782 takes precedence) cationic anionic comprising a heterocyclic ring comprising fluorine containing atoms other than carbon, hydrogen or oxygen (G03G 9/09741 - G03G 9/09766 take precedence) organo-metallic compounds metallic soaps of higher carboxylic acids characterised by carrier particles having magnetic components carrier particles having a multi-layered structure; carrier particles comprising a core having coatings applied thereto coating methods; structure of coatings macromolecular components of coatings obtained by reactions only involving carbon-to-carbon unsaturated bonds containing fluorine atoms obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds containing silicon atoms being crosslinked non-macromolecular organic components of coatings inorganic components of coatings in liquid developer mixtures characterised by the colouring agents characterised by the liquid characterised by polymer components obtained by reactions only involving carbon-to-carbon unsaturated bonds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds graft- or block polymers
13/01 . . . for multicoloured copies (colour correction on photography G03B 27/725; picture communication systems H04N 1/46)

13/02 . . . Sensitising, i.e. laying-down a uniform charge (devices for corona discharge per se H01T 19/00)

13/03 . . . {characterised by the developing step, e.g. the properties of the colour developers}

13/04 . . . Exposing, i.e. imagewise exposure by optically projecting the original image on a photoconductive recording material

13/05 . . . Charging or discharging distinct portions of the charge pattern on the recording material, e.g. discharging non-image areas, contrast enhancement (G03G 13/34, G03G 15/36, G03G 21/06 take precedence)

13/06 . . . Developing

13/08 . . . using a solid developer, e.g. powder developer

13/09 . . . using magnetic brush

13/095 . . . Removing excess solid developer

13/10 . . . using a liquid developer, e.g. liquid suspension

13/11 . . . Removing excess liquid developer, e.g. by heat

13/14 . . . Transferring a pattern to a second base

13/15 . . . of a toner pattern, e.g. a powder pattern

13/16 . . . of a charge pattern

13/20 . . . Fixing, e.g. by using heat

13/22 . . . Processes involving a combination of more than one step according to groups G03G 13/02 - G03G 13/20 (G03G 13/01 takes precedence)

13/23 . . . specially adapted for copying both sides of an original or for copying on both sides of a recording or image-receiving material

13/24 . . . whereby at least two steps are performed simultaneously

13/26 . . . for the production of printing plates for non-xerographic printing processes

13/28 . . . Planographic printing plates

13/283 . . . {obtained by a process including the transfer of a toned image, i.e. indirect process}

13/286 . . . {for dry lithography}

13/30 . . . Hectographic masters

13/32 . . . Relief printing plates

13/34 . . . Editing, i.e. producing a composite image by copying one or more original images or parts thereof

15/00 Apparatus for electrographic processes using a charge pattern (G03G 16/00, G03G 17/00 take precedence; xerographic printers for data processors per se G06K 15/14)

15/01 . . . for producing multicoloured copies (colour correction in photography G03C; colour correction in printing plate production)

15/0105 . . . {Details of unit}

15/011 . . . {for exposing}

15/0115 . . . . . . (and forming a half-tone image)

15/0121 . . . . . . {for developing}

15/0126 . . . . . . {using a solid developer}

15/0131 . . . . . . {for transferring a pattern to a second base}

15/0136 . . . . . . {transfer member separable from recording member or vice versa, mode switching}

15/0142 . . . . . . {Structure of complete machines}

15/0147 . . . . . . {using a single reusable electrographic recording member}

15/0152 . . . . . . {onto which the monocolour toner images are superposed before common transfer from the recording member}

15/0157 . . . . . . {with special treatment between monocolour image formation}

15/0163 . . . . . . {primary transfer to the final recording medium}

15/0168 . . . . . . {single rotation of recording member to produce multicoloured copy (G03G 15/0163 takes precedence)}

15/0173 . . . . . . {plural rotations of recording member to produce multicoloured copy, e.g. rotating set of developing units (G03G 15/0163 takes precedence)}

15/0178 . . . . . . {using more than one reusable electrographic recording member, e.g. one for every monocolour image}

15/0184 . . . . . . {at least one recording member having plural associated developing units}

15/0189 . . . . . . {primary transfer to an intermediate transfer belt (G03G 15/0184 takes precedence)}

15/0194 . . . . . . {primary transfer to the final recording medium (G03G 15/0184 takes precedence)}

15/02 . . . {for laying down a uniform charge, e.g. for sensitising; Corona discharge devices (G03G 15/14 takes precedence)}

15/0208 . . . {by contact, friction or induction, e.g. liquid charging apparatus}

15/0216 . . . {by bringing a charging member into contact with the member to be charged, e.g. roller, brush chargers}

15/0225 . . . {provided with means for cleaning the charging member}
NOTE

The original image is obtained by direct optical projection or received from other sources, e.g. by computer modified or generated image data, by scanning, e.g. digital copiers.

15/0233 . . . . [Structure, details of the charging member, e.g. chemical composition, surface properties]

15/0241 . . . . [by bringing charging powder particles into contact with the member to be charged, e.g. by means of a magnetic brush]

15/025 . . . . [by bringing a charging member in the vicinity with the member to be charged, e.g. proximity charging, forming microgap]

15/0258 . . . . [provided with means for the maintenance of the charging apparatus, e.g. cleaning devices, ozone removing devices G03G 15/0225, G03G 15/0291 takes precedence]

15/0266 . . . . [Arrangements for controlling the amount of charge]

15/0275 . . . . [Arrangements for controlling the area of the photoconductor to be charged]

15/0283 . . . . [Arrangements for supplying power to the sensitising device]

15/0291 . . . . [corona discharge devices, e.g. wires, pointed electrodes, means for cleaning the corona discharge device]

15/04 . . . . for exposing, i.e. imagewise exposure by optically projecting the original image on a photoconductive recording material

15/04009 . . . . [by forming an intermediate temporary image projected one or more times]

15/0418 . . . . [Image composition, e.g. adding or superposing informations on the original image (composition of facsimile picture signals H04N 1/387)]

15/0427 . . . . [and forming half-tone image]

15/0436 . . . . [Details of illuminating systems, e.g. lamps, reflectors (lamp housings for copying cameras, reflex exposure lighting G03B 27/542)]

15/0445 . . . . [for exposing image information provided otherwise than by directly projecting the original image onto the photoconductive recording material, e.g. digital copiers (G03G 15/041, G03G 15/042 take precedence)]

15/04054 . . . . . (by LED arrays)

15/04063 . . . . . (by EL-bars)

15/04072 . . . . . (by laser)

15/04081 . . . . . [Exposure from behind the photoconductive surface]

15/0409 . . . . . [Details of projection optics (for projection printing apparatus G03B 27/522)]

15/041 . . . . . with variable magnification

15/0415 . . . . . [and means for controlling illumination or exposure]

15/043 . . . . . with means for controlling illumination or exposure (G03G 15/041 takes precedence)

15/0435 . . . . . [by introducing an optical element in the optical path, e.g. a filter]

15/045 . . . . . with means for charging or discharging distinct portions of the charge pattern on the recording material, e.g. for contrast enhancement or discharging non-image areas (G03G 15/356, G03G 21/06 take precedence)

15/047 . . . . . . for discharging non-image areas

15/05 . . . . . . for imagewise charging, e.g. photoconductive control screen, optically activated charging means (charging means controlled by electric image signals B41J)

15/051 . . . . . . (by modulating an ion flow through a photoconductive screen onto which a charge image has been formed)

15/052 . . . . . . [Details and conditioning means of the screen, e.g. cleaning means, ozone removing means]

15/054 . . . . . . using X-rays, e.g. electroradiography

15/0545 . . . . . . [Ionography, i.e. X-rays induced liquid or gas discharge]

15/056 . . . . . . using internal polarisation

15/06 . . . . . . for developing

15/065 . . . . . . [Arrangements for controlling the potential of the developing electrode]

15/08 . . . . . . using a solid developer, e.g. powder developer

15/0801 . . . . . . [for cascading]

15/0803 . . . . . . [in a powder cloud]

15/0805 . . . . . . [on a brush (G03G 15/09 takes precedence)]

15/0806 . . . . . . [on a donor element, e.g. belt, roller (complete developer unit G03G 15/0896)]

15/0808 . . . . . . [characterised by the developer supplying means, e.g. structure of developer supply roller]

15/081 . . . . . . [characterised by the developer handling means after the supply and before the regulating, e.g. means for preventing developer blocking]

15/0812 . . . . . . [characterised by the developer regulating means, e.g. structure of doctor blade]

15/0813 . . . . . . [characterised by means in the developing zone having an interaction with the image carrying member, e.g. distance holders]

15/0815 . . . . . . [characterised by the developer handling means after the developing zone and before the supply, e.g. developer recovering roller]

15/0817 . . . . . . [characterised by the lateral sealing at both sides of the donor member with respect to the developer carrying direction]

15/0818 . . . . . . [characterised by the structure of the donor member, e.g. surface properties]

15/082 . . . . . . [for immersion]

15/0822 . . . . . . [Arrangements for preparing, mixing, supplying or dispensing developer]

15/0844 . . . . . . [Arrangements for purging used developer from the developing unit]

15/0848 . . . . . . [Arrangements for testing or measuring developer properties or quality, e.g. charge, size, flowability]

15/0849 . . . . . . [Detection or control means for the developer concentration]

15/0851 . . . . . . [the concentration being measured by electrical means]

15/0853 . . . . . . [the concentration being measured by magnetic means]

15/0855 . . . . . . [the concentration being measured by optical means]
15/0856 . . . . . [Detection or control means for the developer level]
15/0858 . . . . . [the level being measured by mechanical means]
15/086 . . . . . . [the level being measured by electromagnetic means]
15/0862 . . . . . [the level being measured by optical means]
15/0863 . . . . . [provided with identifying means or means for storing process- or use parameters, e.g. an electronic memory]
15/0865 . . . . . [Arrangements for supplying new developer]
15/0867 . . . . . (cylindrical developer cartridges, e.g. toner bottles for the developer replenishing opening)
15/0868 . . . . . [Toner cartridges fulfilling a continuous function within the electrographic apparatus during the use of the supplied developer material, e.g. toner discharge on demand, storing residual toner, acting as an active closure for the developer replenishing opening]
15/087 . . . . . . [Developer cartridges having a longitudinal rotational axis, around which at least one part is rotated when mounting or using the cartridge]
15/0872 . . . . . . [the developer cartridges being generally horizontally mounted parallel to its longitudinal rotational axis]
15/0874 . . . . . . (non-rigid containers, e.g. foldable cartridges, bags)
15/0875 . . . . . . (cartridges having a box like shape)
15/0877 . . . . . . [Arrangements for metering and dispensing developer from a developer cartridge into the development unit]
15/0879 . . . . . . . [for dispensing developer from a developer cartridge not directly attached to the development unit]
15/0881 . . . . . . . (Sealing of developer cartridges)
15/0882 . . . . . . . [by a peelable sealing film (resealing used developer units before refilling; G03G 15/0894)]
15/0884 . . . . . . . [by a sealing film to be ruptured or cut]
15/0886 . . . . . . . [by mechanical means, e.g. shutter, plug]
15/0887 . . . . . . . [Arrangements for conveying and conditioning developer in the developing unit, e.g. agitating, removing impurities or humidity]
15/0889 . . . . . . . [for agitation or stirring]
15/0891 . . . . . . . [for conveying or circulating developer, e.g. augers]
15/0893 . . . . . . . [in a closed loop within the sump of the developing device]
15/0894 . . . . . . . [Reconditioning of the developer unit, i.e. reusing or recycling parts of the unit, e.g. rescaling of the unit before refilling with toner]
15/0896 . . . . . . . [Arrangements or disposition of the complete developer unit or parts thereof not provided for by groups G03G 15/08 - G03G 15/0894]
15/0898 . . . . . . . [for preventing toner scattering during operation, e.g. seals (sealing the donor member G03G 15/0812; sealing the magnetic brush G03G 15/0942)]
15/09 . . . . . . . using magnetic brush
15/0907 . . . . . . . [with bias voltage (G03G 15/065 takes precedence)]
15/0914 . . . . . . . [with a one-component toner]
15/0921 . . . . . . . [Details concerning the magnetic brush roller structure, e.g. magnet configuration]
15/0928 . . . . . . . [relating to the shell, e.g. structure, composition]
15/0935 . . . . . . . [relating to bearings or driving mechanism]
15/0942 . . . . . . . [with means for preventing toner scattering from the magnetic brush, e.g. magnetic seals]
15/095 . . . . . . . Removing excess solid developer, e.g. fog preventing
15/10 . . . . . . . using a liquid developer
15/101 . . . . . . . [for wetting the recording material]
15/102 . . . . . . . [for differentially wetting the recording material (developers for differentially wetting G03G 9/18)]
15/104 . . . . . . . [Preparing, mixing, transporting or dispensing developer]
15/105 . . . . . . . [Detection or control means for the toner concentration]
15/107 . . . . . . . [Condensing developer fumes (G03G 15/11 takes precedence)]
15/108 . . . . . . . [with which the recording material is brought in contact, e.g. immersion or surface immersion development]
15/11 . . . . . . . Removing excess liquid developer, e.g. by heat
15/14 . . . . . . . for transferring a pattern to a second base
15/16 . . . . . . . of a toner pattern, e.g. a powder pattern, [e.g. magnetic transfer]
15/1605 . . . . . . . [using at least one intermediate support (G03G 15/1625 takes precedence)]
15/161 . . . . . . . [with means for handling the intermediate support, e.g. heating, cleaning, coating with a transfer agent]
15/1615 . . . . . . . [relating to the driving mechanism for the intermediate support, e.g. gears, couplings, belt tensioning]
15/162 . . . . . . . [details of the intermediate support, e.g. chemical composition]
15/1625 . . . . . . . [on a base other than paper]
15/163 . . . . . . . [using the force produced by an electrostatic transfer field formed between the second base and the electrographic recording member, e.g. transfer through an air gap]
15/1635 . . . . . . . [for2the field being produced by laying down an electrostatic charge behind the base or the recording member, e.g. by a corona device]
15/164 . . . . . . . [the second base being a continuous paper band, e.g. a CFF]
15/1645 . . . . . . . [Arrangements for controlling the amount of charge]
15/165 . . . . . . . [Arrangements for supporting or transporting the second base in the transfer area, e.g. guides]
[comprising a rotatable holding member to which the second base is attached or attracted, e.g. screen transfer holding drum]

[using means for conditioning the holding member, e.g. cleaning]

[by introducing the second base in the nip formed by the recording member and at least one transfer member, e.g. in combination with bias or heat]

[at least one of the recording member or the transfer member being rotatable during the transfer]

[with means for controlling the bias applied in the transfer nip]

[with means for conditioning the transfer element, e.g. cleaning]

[Structure, details of the transfer member, e.g. chemical composition]

[with means for preconditioning the toner image before the transfer (G03G 15/095 and G03G 15/11 take precedence)]

[with means for preconditioning the paper base before the transfer]

[of a charge pattern]

[for fixing, e.g. by using heat]

[using heat]

[using radiant heat, e.g. infra-red lamps, microwave heaters]

[of high intensity and short duration, i.e. flash fusing]

[using contact heat]

[Structural details of the fixing unit in general, e.g. cooling means, heat shielding means (G03G 15/2053 takes precedence)]

[Plurality of separate fixing and/or cooling areas or units, two step fixing]

[with special means for lubricating and/or cleaning the fixing unit, e.g. applying offset preventing fluid]

[with means for handling the copy material in the fixing nip, e.g. introduction guides, stripping means]

[Retractable heating or pressure unit]

[for maintenance purposes, e.g. for removing a jammed sheet]

[with means for controlling the fixing temperature]

[specially for the axial heat partition]

[specially for the influence of heat loss, e.g. due to the contact with the copy material or other roller]

[specially for the mode of operation, e.g. standby, warming-up, error (G03G 15/2046 takes precedence)]

[Structural details of heat elements, e.g. structure of roller or belt, eddy current, induction heating]

[relating to the chemical composition of the heat element and layers thereof]

[Structural details or chemical composition of the pressure elements and layers thereof]

[combined with pressure]

[using pressure only]

[using a solvent]

[involving the combination of more than one step according to groups G03G 13/02 - G03G 13/20 (G03G 15/01 takes precedence)]

[Machines other than electrographic copiers, e.g. electrophotographic cameras, electrostatic typewriters]

[Machines for handling xeroradiographic images, e.g. xeroradiographic processors]

[Machines for handling microimages, e.g. microfilm copiers]

[Machines for forming tactile or three dimensional images by electrographic means, e.g. braille, 3d printing]

[using contact-printing]

[where the image is formed on a dielectric layer covering the photoconductive layer]

[the length of the inner surface of the dielectric layer being greater than the length of the outer surface of the photoconductive layer]

[the process involving the formation of a master, e.g. photocopy-printer machines]

[specially adapted for copying both sides of an original or for copying on both sides of a recording or image-receiving material]

[Arrangements for copying on both sides of a recording or image-receiving material]

[using a single reusable electrographic recording member]

[by inverting and refeeding the image receiving material with an image on one face to the recording member to transfer a second image on its second face, e.g. by using a duplex tray; Details of duplex trays or inverters]

[the image receiving member being preconditioned before transferring the second image, e.g. decurled, or the second image being formed with different operating parameters, e.g. a different fixing temperature]

[the image receiving member being in form of a continuous web (G03G 15/235 takes precedence)]

[using more than one reusable electrographic recording member, e.g. single pass duplex copiers]

[whereby at least two steps are performed simultaneously]

[in which the charge pattern is obtained by projection of the entire image, i.e. whole-frame projection (G03G 15/04 takes precedence)]

[using a reusable recording medium in form of a band]

[using a reusable recording medium in form of a plate or a sheet]

[in which projection is obtained by line scanning (G03G 15/04 takes precedence)]

[using a reusable recording medium in form of a band]

[using a reusable recording medium in form of a plate or a sheet]

[in which projection is formed on a drum]

[with arrangements for copying different kinds of originals, e.g. sheets, books]
Editing, i.e. producing a composite image by copying one or more original images or parts thereof

15/305 . . . . (with special means to synchronize the scanning optic to the operation of other parts of the machine, e.g. photoreceptor, copy paper)
15/307 . . . . (with more than one photoconductor revolution for each copying cycle)
15/32 . . . . in which the charge pattern is formed dotwise, e.g. by a thermal head) (G03G 15/04, G03G 15/05, G03G 15/34 take precedence)
15/321 . . . . (by charge transfer onto the recording material in accordance with the image)
15/323 . . . . (by modulating charged particles through holes or a slit)
15/325 . . . . (using a stylus or a multi-styli array)
15/326 . . . . (by application of light, e.g. using a LED array)
15/328 . . . . (using a CRT)
15/34 . . . . in which the powder image is formed directly on the recording material, e.g. by using a liquid toner
15/342 . . . . (by forming a uniform powder layer and then removing the non-image areas)
15/344 . . . . (by selectively transferring the powder to the recording medium, e.g. by using a LED array)
15/346 . . . . (by modulating the powder through holes or a slit)
15/348 . . . . (using a stylus or a multi-styli array)
15/36 . . . . Editing, i.e. producing a composite image by copying one or more original images or parts thereof

15/50 . . . . (Machine control of apparatus for electrographic processes using a charge pattern, e.g. regulating different parts of the machine, multimode copiers, microprocessor control (sequencing control G03G 21/14))
15/5004 . . . . (Power supply control, e.g. power-saving mode, automatic power turn-off)
15/5008 . . . . (Driving control for rotary photosensitive medium, e.g. speed control, stop position control)
15/5012 . . . . (Priority interrupt; Job recovery, e.g. after jamming or malfunction)
15/5016 . . . . (User-machine interface; Display panels; Control console)
15/502 . . . . (relating to the structure of the control menu, e.g. pop-up menus, help screens)
15/5025 . . . . (by measuring the original characteristics, e.g. contrast, density)
15/5029 . . . . (by measuring the copy material characteristics, e.g. weight, thickness)
15/5033 . . . . (by measuring the photoconductor characteristics, e.g. temperature, or the characteristics of an image on the photoconductor)
15/5037 . . . . (the characteristics being an electrical parameter, e.g. voltage)
15/5041 . . . . (Detecting a toner image, e.g. density, toner coverage, using a test patch (G03G 15/553 takes precedence))
15/5045 . . . . (Detecting the temperature)
15/505 . . . . (Detecting the speed, e.g. for continuous control of recording starting time)
15/6541  [Binding sets of sheets, e.g. by stapling, gluing]
15/6544  [Details about the binding means or procedure]
15/6547  [Shifting sets of sheets in the discharge tray]
15/655  [Placing job divider sheet between set of sheets]
15/6552  [Means for discharging uncollated sheet copy material, e.g. discharging rollers, exit trays]
15/6555  [Handling of sheet copy material taking place in a specific part of the copy material feeding path]
15/6558  [Feeding path after the copy sheet preparation and up to the transfer point, e.g. registering; Deskewing; Correct timing of sheet feeding to the transfer point]
15/6561  [for sheet registration]
15/6564  [with correct timing of sheet feeding]
15/6567  [for deskewing or aligning]
15/657  [Feeding path after the transfer point and up to the fixing point, e.g. guides and feeding means for handling copy material carrying an unfused toner image]
15/6573  [Feeding path after the fixing point and up to the discharge tray or the finisher, e.g. special treatment of copy material to compensate for effects from the fixing]
15/6576  [Decurling of sheet material]
15/6579  [Refeeding path for composite copying]
15/6582  [Special processing for irreversibly adding or changing the sheet copy material characteristics or its appearance, e.g. stamping, annotation printing, punching]
15/6585  [by using non-standard toners, e.g. transparent toner, gloss adding devices]
15/6588  [characterised by the copy material, e.g. postcards, large copies, multi-layered materials, coloured sheet material]
15/6591  [characterised by the recording material, e.g. plastic material, OHP, ceramics, tiles, textiles (details transferring the toner pattern onto particular materials G03G 15/1625)]
15/6594  [characterised by the format or the thickness, e.g. endless forms]
15/6597  [the imaging being conformed directly on the copy material, e.g. using photosensitive copy material, dielectric copy material for electrostatic printing]
15/70  [Detecting malfunctions relating to paper handling, e.g. jams]
15/703  [Detecting multiple sheets]
15/706  [Detecting missed stripping form xerographic drum, band or plate]
15/75  [Details relating to xerographic drum, band or plate, e.g. replacing, testing (electrographic recording members per se G03G 5/00)]
15/751  [relating to drum (G03G 15/757 takes precedence)]
15/752  [with renewable photoconductive layer]
15/754  [relating to band, e.g. tensioning (G03G 15/757 takes precedence)]
15/755  [for maintaining the lateral alignment of the band]
15/757  [Drive mechanisms for photosensitive medium, e.g. gears]
15/758  [relating to plate or sheet]
15/80  [Details relating to power supplies, circuits boards, electrical connections]
16/00  Electrographic processes using deformation of thermoplastic layers (layers for surface-deformation imaging G03G 5/022); Apparatus therefor (shaping of plastic objects with thermoplastic memory effect B29C 61/00; digital stores using thermoplastic elements G11C 11/46; television signal recording using deformable thermoplastic recording medium H04N 5/82)
17/00  Electrographic processes using patterns other than charge patterns, e.g. an electric conductivity pattern; Processes involving a migration, e.g. photoelectrophoresis, photoelectrosolography; Processes involving a selective transfer, e.g. electrophoto-adhesive processes; Apparatus essentially involving a single such process
17/005  [Radiation field photography, e.g. Kirlian photography, colour-discharge photography (recording electrical waveforms in general G01R 13/04, e.g. G01R 13/12 - G01R 13/14)]
17/02  [with electrolytic development]
17/04  [using photoelectrophoresis]
17/06  [Apparatus therefor]
17/08  [using an electrophoto-adhesive process, e.g. manifold imaging]
17/10  [using migration imaging, e.g. photoelectrosolography (G03G 17/04 takes precedence)]
19/00  Processes using magnetic patterns; Apparatus therefor (i.e. magnetography)

NOTE
This group comprises also processes and apparatus wherein magnetography and electrography are combined; magnetographic printing apparatus for data processing machines G06K 15/14; recording members therefor G03G 5/02; magnetic recording members for television G11B; recording of sound G11B; recording of electric measurements G01R 13/00; recording apparatus for measurements in general G01D
19/005  [where the image is formed by selective demagnetizing, e.g. thermomagnetic recording]
21/00  Arrangements not provided for by groups G03G 13/00 - G03G 19/00, e.g. cleaning, elimination of residual charge
21/0005  [for removing solid developer or debris from the electrographic recording medium]
21/0011  [using a blade; Details of cleaning blades, e.g. blade shape, layer forming]
21/0017  [Details relating to the internal structure or chemical composition of the blades]
21/0023  [with electric bias]
21/0029  [Details relating to the blade support]
21/0035  [using a brush; Details of cleaning brushes, e.g. fibre density (G03G 21/0064 takes precedence; magnetic brushes G03G 21/0047)]
21/0041  [using a band; Details of cleaning bands, e.g. band winding]
21/0047 . . . (using electrostatic or magnetic means; Details thereof, e.g. magnetic pole arrangement of magnetic devices (G03G 21/0064 takes precedence))
21/0052 . . . (using an air flow; Details thereof, e.g. nozzle structure)
21/0058 . . . (using a roller or a polygonal rotating cleaning member; Details thereof, e.g. surface structure (G03G 21/0064 takes precedence))
21/0064 . . . (using the developing unit, e.g. cleanerless or multi-cycle apparatus)
21/007 . . . (Arrangement or disposition of parts of the cleaning unit)
21/0076 . . . [Plural or sequential cleaning devices]
21/0082 . . . . (Separate cleaning member for toner and debris)
21/0088 . . . [removing liquid developer]
21/0094 . . . (fatigue treatment of the photoconductor)
21/02 . . . Counting the number of copies; Billing
21/04 . . . Preventing copies being made of an original
21/043 . . . . (by using an original which is not reproducible or only reproducible with a different appearance, e.g. originals with a photochromic layer or a colour background)
21/046 . . . . (by discriminating a special original, e.g. a bank note)
21/06 . . . Eliminating residual charges from a reusable imaging member
21/08 . . . using optical radiation
21/10 . . Collecting or recycling waste developer
21/105 . . . (Arrangements for conveying toner waste)
21/12 . . . Toner waste containers
21/14 . . Electronic sequencing control
21/145 . . . (wherein control pulses are generated by the mechanical movement of parts of the machine, e.g. the photoconductor)
21/16 . . . Mechanical means for facilitating the maintenance of the apparatus, e.g. modular arrangements
21/1604 . . . (Arrangement or disposition of the entire apparatus)
21/1609 . . . (for space saving, e.g. structural arrangements)
21/1614 . . . (Measures for handling of apparatus by disabled persons)
21/1619 . . . [Frame structures]
21/1623 . . . [Means to access the interior of the apparatus]
21/1628 . . . . (Clamshell type (G03G 21/1638 takes precedence))
21/1633 . . . . [using doors or covers (G03G 21/1638 takes precedence)]
21/1638 . . . . [directed to paper handling or jam treatment]
21/1642 . . . . (for connecting the different parts of the apparatus)
21/1647 . . . . [Mechanical connection means]
21/1652 . . . . [Electrical connection means]
21/1657 . . . . [Wireless connection means, e.g. RFID]
21/1661 . . . . (means for handling parts of the apparatus in the apparatus (G03G 21/1604, G03G 21/1642 take precedence))
21/1666 . . . . [for the exposure unit]
21/1671 . . . . [for the photosensitive element]
21/1676 . . . . [for the developer unit]
21/168 . . . . [for the transfer unit]
21/1685 . . . . . [for the fixing unit]
21/169 . . . . . [for the cleaning unit]
21/1695 . . . . . [for paper transport]
21/18 . . using a processing cartridge [ , whereby the process cartridge comprises at least two image processing means in a single unit]
21/1803 . . . . . [Arrangements or disposition of the complete process cartridge or parts thereof]
21/1807 . . . . . [colour]
21/181 . . . . . (Manufacturing or assembling, recycling, reuse, transportation, packaging or storage)
21/1814 . . . . . [Details of parts of process cartridge, e.g. for charging, transfer, cleaning, developing (G03G 21/1835 takes precedence)]
21/1817 . . . . . [having a submodular arrangement]
21/1821 . . . . . [means for connecting the different parts of the process cartridge, e.g. attachment, positioning of parts with each other, pressure/distance regulation (G03G 21/1825 takes precedence)]
21/1825 . . . . . [Pivotal subunit connection]
21/1828 . . . . . [Prevention of damage or soiling, e.g. mechanical abrasion (G03G 21/1839 takes precedence)]
21/1832 . . . . . [Shielding members, shutter, e.g. light, heat shielding, prevention of toner scattering]
21/1835 . . . . . [the process cartridge not comprising a photosensitive member]
21/1839 . . . . . [Means for handling the process cartridge in the apparatus body]
21/1842 . . . . . [for guiding and mounting the process cartridge, positioning, alignment, locks (G03G 21/1864 and G03G 21/1871 take precedence)]
21/1846 . . . . . [using a handle for carrying or pulling out of the main machine, legs of casings]
21/185 . . . . . [the process cartridge being mounted parallel to the axis of the photosensitive member]
21/1853 . . . . . [the process cartridge being mounted perpendicular to the axis of the photosensitive member]
21/1857 . . . . . [for transmitting mechanical drive power to the process cartridge, drive mechanisms, gears, couplings, braking mechanisms]
21/186 . . . . . . [Axial couplings]
21/1864 . . . . . [associated with a positioning function]
21/1867 . . . . . [for electrically connecting the process cartridge to the apparatus, electrical connectors, power supply]
21/1871 . . . . . [associated with a positioning function]
21/1875 . . . . . [provided with identifying means or means for storing process- or use parameters, e.g. lifetime of the cartridge]
21/1878 . . . . . [Electronically readable memory]
21/1882 . . . . . [details of the communication with memory, e.g. wireless communication, protocols]
21/1885 . . . . . [position of the memory; memory housings; electrodes]
21/1889 . . . . . [for auto-setting of process parameters, lifetime, usage]
21/1892 . . . . . [for presence detection, authentication]
Apparatus for electrophotographic processes

2215/00004
Handling of entire apparatus
2215/00008
Upright positioning for maintenance or storage
2215/00012
Upright positioning as well as horizontal positioning for image forming
2215/00016
Special arrangement of entire apparatus
2215/00021
Plural substantially independent image forming units in cooperation, e.g. for duplex, colour or high-speed simplex
2215/00025
Machine control, e.g. regulating different parts of the machine
2215/00029
Image density detection
2215/00033
on recording member
2215/00037
Toner image detection
2215/00042
Optical detection
2215/00046
Magnetical detection
2215/0005
without production of a specific test patch
2215/00054
Electrostastic image detection
2215/00059
on intermediate image carrying member, e.g. transfer belt
2215/00063
Colour
2215/00067
on recording medium
2215/00071
by measuring the photoductor or its environmental characteristics
2215/00075
the characteristic being its speed
2215/0008
for continuous control of recording starting time
2215/00084
the characteristic being the temperature
2215/00088
by using information from an external support
2215/00092
the support being an IC card
2215/00097
the support being a counter
2215/00101
the support being a magnetic card
2215/00105
the support being a payment means, e.g. a coin
2215/00109
Remote control of apparatus, e.g. by a host
2215/00113
Plurality of apparatus configured in groups each with its own host
2215/00118
using fuzzy logic
2215/00122
using speech synthesis or voice recognition
2215/00126
Multi-job machines
2215/0013
for producing copies with MICR
2215/00135
Handling of parts of the apparatus
2215/00139
Belt
2215/00143
Meandering prevention
2215/00147
using tractor sprocket holes
2215/00151
using edge limitations
2215/00156
by controlling drive mechanism
2215/0016
by mark detection, e.g. optical
2215/00164
by electronic scan control
2215/00168
by friction
2215/00172
relative to the original handling
2215/00177
for scanning
2215/00181
concerning the original's state of motion
2215/00185
original at rest
2215/00189
original moving

2215/00194
original either moving or at rest
2215/00198
where one single scanning surface is used
2215/00202
where separate scanning surfaces are used
2215/00206
Original medium
2215/0021
Plural types handled
2215/00215
Mixed types handled
2215/00219
Paper
2215/00223
Continuous web, i.e. roll
2215/00227
Fan fold, e.g. CFF, normally perforated
2215/00232
Non-standard format
2215/00236
Large sized, e.g. technical plans
2215/0024
Small sized, e.g. postcards
2215/00244
Non-standard property
2215/00248
Thick
2215/00253
Thin
2215/00257
coloured
2215/00261
Plastic
2215/00265
Overhead Transparency, i.e. OHP
2215/0027
Transparen film roll
2215/00274
Slide
2215/00278
Microfiche
2215/00282
Book
2215/00286
With punch holes or other non-image related artifacts, e.g. staples
2215/00291
Frailge, e.g. old documents
2215/00295
Valuable, e.g. cheques, passport
2215/00299
Confidential, e.g. secret documents
2215/00303
Control sheet
2215/00308
Object for which a graphic image is not of interest, e.g. medical sample
2215/00312
Other special types
2215/00316
Electronic image supplied to the apparatus
2215/0032
Original binding
2215/00324
Document property detectors
2215/00329
Document size detectors
2215/0033
detecting feeding of documents
2215/00337
Document set detector
2215/00341
Jam handling in document feeder
2215/00345
Copying machine problems
2215/0035
Document related problems, e.g. double-fed sheets
2215/00354
Specific document handling machines
2215/00358
Plural feed trays for document sets, e.g. multi-job
2215/00362
relating to the copy medium handling
2215/00367
The feeding path segment where particular handling of the copy medium occurs, segments being adjacent and non-overlapping. Each segment is identified by the most downstream point in the segment, so that for instance the segment labelled "Fixing device" is referring to the path between the "Transfer device" and the "Fixing device"
2215/00409 . . . . . . Transfer device
2215/00413 . . . . . . Fixing device
2215/00417 . . . . . . Post-fixing device
2215/00421 . . . . . . Discharging tray, e.g. devices stabilising the quality of the copy medium, postfixing-treatment, inverting, sorting
2215/00426 . . . . . . Post-treatment device adding qualities to the copy medium product (G03G 2215/00421 takes precedence)
2215/0043 . . . . . . Refeeding path (G03G 2215/00421 takes precedence)
2215/00434 . . . . . . Refeeding tray or cassette
2215/00438 . . . . . . Inverter of refeeding path
2215/00443 . . . . . . Copy medium
2215/00447 . . . . . . Plural types handled
2215/00451 . . . . . . Paper
2215/00455 . . . . . . Continuous web, i.e. roll
2215/00459 . . . . . . Fan fold, e.g. CFP, normally perforated
2215/00464 . . . . . . Non-standard format
2215/00468 . . . . . . Large sized, e.g. technical plans
2215/00472 . . . . . . Small sized, e.g. postcards
2215/00476 . . . . . . Non-standard property
2215/00481 . . . . . . Thick
2215/00485 . . . . . . Thin
2215/00489 . . . . . . coloured
2215/00493 . . . . . . Plastic
2215/00497 . . . . . . Overhead Transparency, i.e. OHP
2215/00502 . . . . . . Transparent film
2215/00506 . . . . . . Slide
2215/0051 . . . . . . Microfiche
2215/00514 . . . . . . Envelopes
2215/00518 . . . . . . Recording medium, e.g. photosensitive
2215/00523 . . . . . . Other special types, e.g. tabbed
2215/00527 . . . . . . Fabrics, e.g. textiles
2215/00531 . . . . . . transported through the apparatus for non-imaging purposes, e.g. cleaning
2215/00535 . . . . . . Stable handling of copy medium
2215/0054 . . . . . . Detachable element of feed path
2215/00544 . . . . . . Openable part of feed path
2215/00548 . . . . . . Jam, error detection, e.g. double feeding
2215/00552 . . . . . . Purge of recording medium at jam
2215/00556 . . . . . . Control of copy medium feeding
2215/00561 . . . . . . Aligning or deskewing
2215/00565 . . . . . . Mechanical details
2215/00569 . . . . . . Calibration, test runs, test prints
2215/00573 . . . . . . Recording medium stripping from image forming member
2215/00578 . . . . . . Composite print mode
2215/00582 . . . . . . Plural adjacent images on one side
2215/00586 . . . . . . duplex mode
2215/00589 . . . . . . Effect of changed recording medium size, e.g. originating from heating
2215/00594 . . . . . . Varying registration in order to produce special effect, e.g. binding margin
2215/00599 . . . . . . Timing, synchronisation
2215/00603 . . . . . . Control of other part of the apparatus according to the state of copy medium feeding
2215/00607 . . . . . . Debris handling means
2215/00611 . . . . . . Detector details, e.g. optical detector
2215/00616 . . . . . . Optical detector
2215/0062 . . . . . . infra-red
2215/00624 . . . . . . Magnetic detector or switch, e.g. reed switch
2215/00628 . . . . . . Mechanical detector or switch
2215/00632 . . . . . . Electric detector, e.g. of voltage or current
2215/00637 . . . . . . Acoustic detector
2215/00641 . . . . . . Pneumatic detector
2215/00645 . . . . . . Speedometer
2215/00649 . . . . . . Electroses close to the copy feeding path
2215/00654 . . . . . . Charging device
2215/00658 . . . . . . Brush (G03G 2215/00654 takes precedence)
2215/00662 . . . . . . Decuring device
2215/00666 . . . . . . Heating or drying device
2215/0067 . . . . . . Damping device
2215/00675 . . . . . . Mechanical copy medium guiding means, e.g. mechanical switch
2215/00679 . . . . . . Conveying means details, e.g. roller
2215/00683 . . . . . . Chemical properties
2215/00687 . . . . . . Handling details
2215/00691 . . . . . . Shredder
2215/00696 . . . . . . Turner acting in plane of recording medium, e.g. A4 to A4R change
2215/007 . . . . . . Inverter not for refeeding purposes
2215/00704 . . . . . . Curl adding, bending
2215/00708 . . . . . . Cleaning of sheet or feeding structures
2215/00713 . . . . . . Lock related to feeding device
2215/00717 . . . . . . Detection of physical properties
2215/00721 . . . . . . of sheet position
2215/00725 . . . . . . of sheet presence in input tray
2215/00729 . . . . . . of sheet amount in input tray
2215/00734 . . . . . . of sheet size
2215/00738 . . . . . . of sheet thickness or rigidity
2215/00742 . . . . . . of sheet weight
2215/00746 . . . . . . of sheet velocity
2215/00751 . . . . . . of sheet type, e.g. OHP
2215/00755 . . . . . . of sheet toner density
2215/00759 . . . . . . of sheet image, e.g. presence, type
2215/00763 . . . . . . of sheet resistivity
2215/00767 . . . . . . of sheet potential
2215/00772 . . . . . . of temperature influencing copy sheet handling
2215/00776 . . . . . . of humidity or moisture influencing copy sheet handling
2215/0078 . . . . . . of opening of structural part
2215/00784 . . . . . . of connection or pressing of structural part
2215/00789 . . . . . . Adding properties or qualities to the copy medium
2215/00793 . . . . . . Stamping device
2215/00797 . . . . . . Printing device, i.e. annotation
2215/00801 . . . . . . Coating device
2215/00805 . . . . . . Gloss adding or lowering device
2215/0081 . . . . . . Gloss level being selectable
2215/00814 . . . . . . Cutter
2215/00818 . . . . . . Punch device
2215/00822 . . . . . . Binder, e.g. glueing device
2215/00827 . . . . . . Stapler
2215/00831 . . . . . . Stitcher
2215/00835 . . . . . . Toner binding
2215/00839 . . . . . . Binding tape
2215/00843 . . . . . . Clip
2215/00848 . . . . . . Details of binding device
2215/00852 . . . . . . Temporary binding
2215/00856 . . . . . . External binding device
2215/0086 . . . . . . Manual activation of binding
2215/00864 . . . . . . Plural selectable binding modes
for producing multicoloured copies

the image forming apparatus

Electrographic recording member arranged as a carriage to be movable in a direction perpendicular to the recording sheet transport direction

Electrographic recording member

Details relating to power supplies

Compositions

Electrographic apparatus defined by the electrographic recording member

Sheet type electrographic recording members from which a toner or charge image is transferred

Sheet cartridge or tray

Electrographic recording member

Arrangements for laying down a uniform charge

by contact, friction or induction

using a magnetic brush

using a laterally vibrating brush

using contact charging means having lateral dimensions related to other apparatus means, e.g. photodrum, developing roller

by coronas

using wires

using pointed electrodes

Arrangements for exposing and producing an image

Exposure devices

Laser

Light-emitting array or panel

Light-emitting diodes, i.e. LED-array

Electroluminescent elements, i.e. EL-array

Liquid-crystal display elements, i.e. LCD-shutter array

Standard lamp used to produce a reflection or transmission image of an original

Device not using light, e.g. ion-writer

Plurality of devices for producing the image (excluding dedicated erasing means)

Using contents of CCD array to produce the image

Editing of the image, e.g. adding or deleting (correction, i.e. changing or enhancing the image)

Parameters defining the non-image area to be cleaned
Details of powder developing device not concerning the development directly

Arrangements for agitating or circulating developer material

Cleaning blade adjacent to the donor member

Donor member rotation direction

Upper part of donor member transports used developer back to the sump

Lower part of donor member transports used developer back to the sump

Agitator type

two or more agitators

with wall or blade between agitators

belt

Augers

with two opposed pitches on one shaft
Details of the fixing device or process

- Transferring device, details
- Structural features of the fixing device
- Simultaneous toner image transfer and fixing
- Transfer point
- Preconditioning of copy medium before the transfer
- Cleaning of transfer member
- Main transfer electrode
- Arrangements for detecting toner level or developing device to or from the user
- Developing device to or from the user
- Arrangements for shipping or transporting of the device
- Materials and manufacturing of the developing device
- Donor member
- Particular composition or materials
- Manufacturing
- Metering member
- Supplying member
- Housing of developing device
- Arrangements for shipping or transporting of the developing device to or from the user
- Sealing of the developing device opening, facing the image-carrying member
- Pealable sealing film
- Rupturable sealing film, e.g. tearable film
- Container for holding the whole developing device when outside the machine, e.g. box, sack
- Arrangements for detecting toner level or concentration in the developing device
- Optical detection
- through a light transmissive window in the developer container wall
- Cleaning of the light transmissive window
- Transferring device, details
- Corotron
- Transfer roll
- Transfer drum
- Transfer belt
- Blade
- Plate
- Wires
- Brush
- Cleaning of transfer member
- of transfer roll
- of transfer drum
- of transfer belt
- Preconditioning of copy medium before the transfer point
- Preheating the copy medium before the transfer point
- Simultaneous toner image transfer and fixing
- at the first transfer point
- using heat
- without heat
- at the second or higher order transfer point
- Details of the fixing device or process
- Structural features of the fixing device
- Plurality of separate fixing areas
- Pressure belt
- having an end
- Heating belt

Details of electrographic processes using patterns other than charge patterns

- Process where toner image is produced by controlling which part of the toner should move to the image-carrying member
- where the toner is conveyed over the electrode array to get a charging and then being moved
- where the toner starts moving from behind the electrode array, e.g. a mask of holes
- where the toner is held behind a gate electrode array until being released
- where the image-carrying member is always completely covered by a toner layer
- where the toner is charged before producing the toner layer on the image-carrying member
- where the toner layer is being charged
- where no specific pick-up of toner occurs before transfer of the toner image
- Process using an image-carrying member having an electrode array on its surface
- Process using a fixed electrode array behind a moving recording medium
Process comprising image exposure at the developing area

Processes not provided for by group G03G 2215/00, e.g. cleaning or residual charge elimination

- Cleaning of residual toner
- Width of cleaning device related to other parts of the apparatus, e.g. transfer belt width
- Applying vibrations to the electrographic recording medium for assisting the cleaning, e.g. ultrasonic vibration
- Cleaning of foreign matter, e.g. paper powder, from imaging member
- Type of foreign matter
  - Oil and other liquid matter
  - Paper powder and other dry foreign matter
- Type of cleaning device
  - Common container for holding cleaned foreign matter and residual toner
  - Separate cleaning members for foreign matter and residual toner
- Cleaning device for foreign matter separate from residual toner cleaning device
- Cleaning mechanism
- Mechanical means for facilitating the maintenance of the apparatus, e.g. modular arrangements and complete machine concepts
- for multicoloured copies
- for the photosensitive element
- protective arrangements for preventing damage
- plural shutters for openings of process cartridge
- being a belt
- for the cleaning unit
- re-use of cleaned toner
- transporting cleaned toner into separate vessels, e.g. photoreceptors, external containers
- Details concerning the cleaning process
- for the developer unit
- Details concerning the developing process
- for the exposure unit
- for the fixing unit
- for the transfer unit
- for conducting air through the machine, e.g. cooling
- using seals, e.g. to prevent scattering of toner (light shields for the photoreceptor G03G 2211/1609)
- for connecting the different parts
- Locks and means for positioning or alignment
- Transmitting mechanical drive power
- Electrical connectors
- having lifetime indicators
- integer lifetimes of each other
- Details about used materials
- Paper handling

Jam treatment
Frame structures
Portable machines
using extractable subframes, e.g. on rails or hinges
using opening shell type machines, e.g. pivoting assemblies
Structural door designs
for charging
for auxiliary devices, e.g. add-on modules
Cartridge systems
Transport of supply parts, e.g. process cartridges
for cleaning or developing but not being a process cartridge
Cartridges having electronically readable memory
Process cartridge
Autosetting of process parameters
using a handle for carrying or pulling out of the main machine
having a submodular arrangement
Rotational subunit connection
Cartridge holders, e.g. intermediate frames for placing cartridge parts therein
for production purposes, e.g. manufacture or mass production
Projections on process cartridge for guiding mounting thereof in main machine
Presence detection

Cartridge systems
Transport of supply parts, e.g. process cartridges
Cartridge holders, e.g. intermediate frames for placing cartridge parts therein
Projections on process cartridge for guiding mounting thereof in main machine
Presence detection

Paper handling