

CPC**COOPERATIVE PATENT CLASSIFICATION****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](#))

NOTE

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.

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](#) .

G03G 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)
G03G 5/005	. {Materials for treating the recording members, e.g. for cleaning, reactivating, polishing}
G03G 5/02	. Charge-receiving layers (G03G 5/153 takes precedence)
G03G 5/0202	.. {Dielectric layers for electrography}
G03G 5/0205	... {Macromolecular components}
G03G 5/0208	.... {obtained by reactions only involving carbon-to-carbon unsaturated bonds}
G03G 5/0211	.... {obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
G03G 5/0214	... {Organic non-macromolecular components}
G03G 5/0217	... {Inorganic components}
G03G 5/022	.. Layers for surface-deformation imaging, e.g. frost imaging
G03G 5/024	.. Photoelectret layers
G03G 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
G03G 5/028	.. Layers in which after being exposed to heat patterns electrically conductive patterns are formed in the layers, e.g. for thermoxerography
G03G 5/04	.. Photoconductive layers; Charge-generation layers or charge-transporting layers; Additives therefor; Binders therefor
G03G 5/043	... Photoconductive layers characterised by having two or more layers or characterised by their composite structure
G03G 5/0433	.... {all layers being inorganic}
G03G 5/0436	.... {combining organic and inorganic layers}
G03G 5/047	.... characterised by the charge-generation layer or charge transport layer{ G03G 5/0433 and G03G 5/0436 take precedence}
G03G 5/05	... Organic bonding materials; Methods for coating a substrate with a photoconductive layer; Inert supplements for use in photoconductive layers
G03G 5/0503	.... {Inert supplements}
G03G 5/0507	..... {Inorganic compounds}
G03G 5/051	..... {Organic non-macromolecular compounds}
G03G 5/0514	..... {not comprising cyclic groups}
G03G 5/0517	..... {comprising one or more cyclic groups consisting of carbon-atoms only}
G03G 5/0521	..... {comprising one or more heterocyclic groups}
G03G 5/0525	.... {Coating methods}
G03G 5/0528	.... {Macromolecular bonding materials}

NOTE

In groups [G03G 5/0528](#) to [G03G 5/0596](#) , in the absence of an indication to the contrary, a polymer is classified in the last appropriate place

G03G 5/0532	.....	{obtained by reactions only involving carbon-to-carbon unsaturated bonds}
G03G 5/0535	.....	{Polyolefins; Polystyrenes; Waxes}
G03G 5/0539	.....	{Halogenated polymers}
G03G 5/0542	.....	{Polyvinylalcohol, polyallylalcohol; Derivatives thereof, e.g. polyvinylesters, polyvinylethers, polyvinylamines}
G03G 5/0546	.....	{Polymers comprising at least one carboxyl radical, e.g. polyacrylic acid, polycrotonic acid, polymaleic acid; Derivatives thereof, e.g. their esters, salts, anhydrides, nitriles, amides}
G03G 5/055	.....	{Polymers containing hetero rings in the side chain}
G03G 5/0553	.....	{Polymers derived from conjugated double bonds containing monomers, e.g. polybutadiene; Rubbers}
G03G 5/0557	.....	{obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
G03G 5/056	.....	{Polyesters}
G03G 5/0564	.....	{Polycarbonates}
G03G 5/0567	.....	{Other polycondensates comprising oxygen atoms in the main chain; Phenol resins}
G03G 5/0571	.....	{Polyamides; Polyimides}
G03G 5/0575	.....	{Other polycondensates comprising nitrogen atoms with or without oxygen atoms in the main chain}
G03G 5/0578	.....	{Polycondensates comprising silicon atoms in the main chain}
G03G 5/0582	.....	{Polycondensates comprising sulfur atoms in the main chain}
G03G 5/0585	.....	{Cellulose and derivatives}
G03G 5/0589	.....	{Macromolecular compounds characterised by specific side-chain substituents or end groups}
G03G 5/0592	.....	{Macromolecular compounds characterised by their structure or by their chemical properties, e.g. block polymers, reticulated polymers, molecular weight, acidity}
G03G 5/0596	.....	{Macromolecular compounds characterised by their physical properties}
G03G 5/06	...	characterised by the photoconductive material being organic

NOTE

In groups [G03G 5/06](#) to [G03G 5/0698](#) , in the absence of an indication to the contrary, an invention is classified in the last appropriate place

G03G 5/0601	....	{Acyclic or carbocyclic compounds}
G03G 5/0603	.....	{containing halogens}
G03G 5/0605	.....	{Carbocyclic compounds}
G03G 5/0607	.....	{containing at least one non-six-membered ring}
G03G 5/0609	.....	{containing oxygen}
G03G 5/0611	.....	{Squaric acid}
G03G 5/0612	.....	{containing nitrogen}
G03G 5/0614	.....	{Amines}
G03G 5/0616	.....	{Hydrazines; Hydrazones}

G03G 5/0618	.....	{containing oxygen and nitrogen}
G03G 5/062	.....	{containing non-metal elements other than hydrogen, halogen, oxygen or nitrogen}
G03G 5/0622	....	{Heterocyclic compounds}
G03G 5/0624	.....	{containing one hetero ring}
G03G 5/0625	.....	{being three- or four-membered}
G03G 5/0627	.....	{being five-membered}
G03G 5/0629	.....	{containing one hetero atom}
G03G 5/0631	.....	{containing two hetero atoms}
G03G 5/0633	.....	{containing three hetero atoms}
G03G 5/0635	.....	{being six-membered}
G03G 5/0637	.....	{containing one hetero atom}
G03G 5/0638	.....	{containing two hetero atoms}
G03G 5/064	.....	{containing three hetero atoms}
G03G 5/0642	.....	{being more than six-membered}
G03G 5/0644	.....	{containing two or more hetero rings}
G03G 5/0646	.....	{in the same being system}
G03G 5/0648	.....	{containing two relevant rings}
G03G 5/065	.....	{containing three relevant rings}
G03G 5/0651	.....	{containing four relevant rings}
G03G 5/0653	.....	{containing five relevant rings}
G03G 5/0655	.....	{containing six relevant rings}
G03G 5/0657	.....	{containing seven relevant rings}
G03G 5/0659	.....	{containing more than seven relevant rings}
G03G 5/0661	.....	{in different ring systems, each system containing at least one hetero ring}
G03G 5/0662	....	{containing metal elements}

NOTE

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

G03G 5/0664	....	{Dyes}
G03G 5/0666	.....	{containing a methine or polymethine group}
G03G 5/0668	.....	{containing only one methine or polymethine group}
G03G 5/067	.....	{containing hetero rings}
G03G 5/0672	.....	{containing two or more methine or polymethine groups}
G03G 5/0674	.....	{containing hetero rings}
G03G 5/0675	.....	{Azo dyes}
G03G 5/0677	.....	{Monoazo dyes}
G03G 5/0679	.....	{Disazo dyes}

G03G 5/0681	.....	{containing hetero rings in the part of the molecule between the azo-groups}
G03G 5/0683	.....	{containing polymethine or anthraquinone groups}
G03G 5/0685	.....	{containing hetero rings in the part of the molecule between the azo-groups}
G03G 5/0687	.....	{Trisazo dyes}
G03G 5/0688	.....	{containing hetero rings}
G03G 5/069	.....	{containing polymethine or anthraquinone groups}
G03G 5/0692	.....	{containing hetero rings}
G03G 5/0694	.....	{containing more than three azo groups}
G03G 5/0696	.....	{Phthalocyanines}
G03G 5/0698	....	{Compounds of unspecified structure characterised by a substituent only}
G03G 5/07	....	Polymeric photoconductive materials
G03G 5/071	.....	{obtained by reactions only involving carbon-to-carbon unsaturated bonds (G03G 5/078 takes precedence)}
G03G 5/073	.....	{comprising pending carbazol groups}
G03G 5/075	.....	{obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds (G03G 5/078 takes precedence)}
G03G 5/076	.....	{having a photoconductive moiety in the polymer backbone}
G03G 5/078	.....	{comprising silicon atoms}
G03G 5/08	...	characterised by the photoconductive material being inorganic
G03G 5/082	....	and not being incorporated in a bonding material, e.g. vacuum deposited
G03G 5/08207	.....	{Selenium-based}
G03G 5/08214	.....	{Silicon-based}
G03G 5/08221	.....	{comprising one or two silicon based layers}
G03G 5/08228	.....	{at least one with varying composition}
G03G 5/08235	.....	{comprising three or four silicon-based layers}
G03G 5/08242	.....	{at least one with varying composition}
G03G 5/0825	.....	{comprising five or six silicon-based layers}
G03G 5/08257	.....	{at least one with varying composition}
G03G 5/08264	.....	{comprising seven or more silicon-based layers}
G03G 5/08271	.....	{at least one with varying composition}
G03G 5/08278	.....	{Depositing methods}
G03G 5/08285	.....	{Carbon-based (in ad mixture with Si G03G 5/08214)}
G03G 5/08292	.....	{Germanium-based (in ad mixture with Si G03G 5/08214)}
G03G 5/085	....	and being incorporated in an inorganic bonding material, e.g. glass-like layers
G03G 5/087	....	and being incorporated in an organic bonding material
G03G 5/09	...	Sensitisors or activators, e.g. dyestuffs (G03G 5/12 takes precedence)
G03G 5/10	.	Bases for charge-receiving or other layers
G03G 5/101	..	{Paper bases (G03G 5/102 , G03G 5/104 , G03G 5/105 take precedence)}

G03G 5/102	..	{consisting of or comprising metals}
G03G 5/104	..	{comprising inorganic material other than metals, e.g. salts, oxides, carbon}
G03G 5/105	..	{comprising electroconductive macromolecular compounds}
G03G 5/107	...	{the electroconductive macromolecular compounds being cationic}
G03G 5/108	...	{the electroconductive macromolecular compounds being anionic}
G03G 5/12	.	Recording members for multicolour processes
G03G 5/14	.	Inert intermediate or cover layers for charge-receiving layers (G03G 5/04 takes precedence)
G03G 5/142	..	{Inert intermediate layers}
G03G 5/144	...	{comprising inorganic material}
G03G 5/147	..	Cover layers
G03G 5/14704	...	{comprising inorganic material}
G03G 5/14708	...	{comprising organic material}
G03G 5/14713	....	{Macromolecular material}

NOTE

In groups [G03G 5/14713](#) to [G03G 5/14795](#) , in the absence of an indication to the contrary, a polymer is classified in the last appropriate place

G03G 5/14717	.....	{obtained by reactions only involving carbon-to-carbon unsaturated bonds}
G03G 5/14721	.....	{Polyolefins; Polystyrenes; Waxes}
G03G 5/14726	.....	{Halogenated polymers}
G03G 5/1473	.....	{Polyvinylalcohol, polyallylalcohol; Derivatives thereof, e.g. polyvinylesters, polyvinylethers, polyvinylamines}
G03G 5/14734	.....	{Polymers comprising at least one carboxyl radical, e.g. polyacrylic acid, polycrotonic acid, polymaleic acid; Derivatives thereof, e.g. their esters, salts, anhydrides, nitriles, amides}
G03G 5/14739	.....	{Polymers containing hereto rings in the side chain}
G03G 5/14743	.....	{Polymers derived from conjugated double bonds containing monomers, e.g. polybutadiene; Rubbers}
G03G 5/14747	.....	{obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
G03G 5/14752	.....	{Polyesters}
G03G 5/14756	.....	{Polycarbonates}
G03G 5/1476	.....	{Other polycondensates comprising oxygen atoms in the main chain; Phenol resins}
G03G 5/14765	.....	{Polyamides; Polyimides}
G03G 5/14769	.....	{Other polycondensates comprising nitrogen atoms with or without oxygen atoms in the main chain}
G03G 5/14773	.....	{Polycondensates comprising silicon atoms in the main chain}
G03G 5/14778	.....	{Polycondensates comprising sulfur atoms in the main chain}
G03G 5/14782	.....	{Cellulose and derivatives}

G03G 5/14786	.....	{Macromolecular compounds characterised by specific side-chain substituents or end groups}
G03G 5/14791	.....	{Macromolecular compounds characterised by their structure, e.g. block polymers, reticulated polymers, or by their chemical properties, e.g. by molecular weight or acidity}
G03G 5/14795	.....	{Macromolecular compounds characterised by their physical properties}
G03G 5/153	.	Charge-receiving layers combined with additional photo- or thermo-sensitive, but not photoconductive, layers, e.g. silver-salt layers
G03G 5/16	.	Layers for recording by changing the magnetic properties, e.g. for Curie-point-writing
G03G 7/00		Selection of materials for use in image-receiving members, i.e. for reversal by physical contact; Manufacture thereof (photosensitive materials for photographic purposes G03C)
G03G 7/0006	.	{Cover layers for image-receiving members; Strippable coversheets}
G03G 7/0013	..	{Inorganic components thereof}
G03G 7/002	..	{Organic components thereof}
G03G 7/0026	...	{being macromolecular}
G03G 7/0033	....	{Natural products or derivatives thereof, e.g. cellulose, proteins}
G03G 7/004	....	{obtained by reactions only involving carbon-to-carbon unsaturated bonds}
G03G 7/0046	....	{obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
G03G 7/0053	.	{Intermediate layers for image-receiving members}
G03G 7/006	.	{Substrates for image-receiving members; Image-receiving members comprising only one layer}
G03G 7/0066	..	{Inorganic components thereof}
G03G 7/0073	..	{Organic components thereof}
G03G 7/008	...	{being macromolecular}
G03G 7/0086	.	{Back layers for image-receiving members; Strippable backsheets}
G03G 7/0093	.	{Image-receiving members, based on materials other than paper or plastic sheets, e.g. textiles, metals}
G03G 8/00		Layers covering the final reproduction, e.g. for protecting, for writing thereon
G03G 9/00		Developers
G03G 9/06	.	the developer being electrolytic
G03G 9/08	.	with toner particles
G03G 9/0802	..	{Preparation methods}
G03G 9/0804	...	{whereby the components are brought together in a liquid dispersing medium}
G03G 9/0806	....	{whereby chemical synthesis of at least one of the toner components takes place}
G03G 9/0808	...	{by dry mixing the toner components in solid or softened state}
G03G 9/081	...	{by mixing the toner components in a liquefied state; melt kneading; reactive mixing}
G03G 9/0812	...	{Pretreatment of components}

G03G 9/0815	...	{Post-treatment}
G03G 9/0817	...	{Separation; Classifying}
G03G 9/0819	..	{characterised by the dimensions of the particles}
G03G 9/0821	..	{characterised by physical parameters (magnetic parameters G03G 9/083)}
G03G 9/0823	...	{Electric parameters}
G03G 9/0825	..	{characterised by their structure; characterised by non-homogeneous distribution of components (microcapsular toners G03G 9/093)}
G03G 9/0827	..	{characterised by their shape, e.g. degree of sphericity}

NOTE

In groups [G03G 9/083](#) to [G03G 9/135](#), in the absence of an indication to the contrary, classification is made in the last appropriate place

G03G 9/083	..	Magnetic toner particles
G03G 9/0831	...	{Chemical composition of the magnetic components}
G03G 9/0832	....	{Metals}
G03G 9/0833	....	{Oxides}
G03G 9/0834	....	{Non-magnetic inorganic compounds chemically incorporated in magnetic components}
G03G 9/0835	...	{Magnetic parameters of the magnetic components}
G03G 9/0836	...	{Other physical parameters of the magnetic components}
G03G 9/0837	...	{Structural characteristics of the magnetic components, e.g. shape, crystallographic structure}
G03G 9/0838	...	{Size of magnetic components}
G03G 9/0839	...	{Treatment of the magnetic components; Combination of the magnetic components with non-magnetic materials (G03G 9/0834 takes precedence)}
G03G 9/087	..	Binders for toner particles
G03G 9/08702	...	{comprising macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds}
G03G 9/08704	....	{Polyalkenes}
G03G 9/08706	....	{Polymers of alkenyl-aromatic compounds}
G03G 9/08708	.....	{Copolymers of styrene}
G03G 9/08711	.....	{with esters of acrylic or methacrylic acid}
G03G 9/08713	....	{Polyvinylhalogenides}
G03G 9/08715	.....	{containing chlorine, bromine or iodine}
G03G 9/08717	.....	{Polyvinylchloride}
G03G 9/0872	.....	{containing fluorine}
G03G 9/08722	....	{Polyvinylalcohols; Polyallylalcohols; Polyvinylethers; Polyvinylaldehydes; Polyvinylketones; Polyvinylketals}
G03G 9/08724	....	{Polyvinylesters}
G03G 9/08726	....	{Polymers of unsaturated acids or derivatives thereof}
G03G 9/08728	.....	{Polymers of esters}

G03G 9/08731	.....	{Polymers of nitriles}
G03G 9/08733	.....	{Polymers of unsaturated polycarboxylic acids}
G03G 9/08735	....	{Polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a side-chain, e.g. coumarone-indene resins}
G03G 9/08737	....	{Polymers derived from conjugated dienes}
G03G 9/0874	....	{Polymers comprising hetero rings in the side chains}
G03G 9/08742	...	{comprising macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
G03G 9/08744	....	{Polyacetals}
G03G 9/08746	....	{Condensation polymers of aldehydes or ketones}
G03G 9/08748	.....	{Phenoplasts}
G03G 9/08751	.....	{Aminoplasts}
G03G 9/08753	....	{Epoxyresins}
G03G 9/08755	....	{Polyesters}
G03G 9/08757	....	{Polycarbonates}
G03G 9/08759	....	{Polyethers}
G03G 9/08762	....	{Other polymers having oxygen as the only heteroatom in the main chain}
G03G 9/08764	....	{Polyureas; Polyurethanes}
G03G 9/08766	....	{Polyamides, e.g. polyesteramides}
G03G 9/08768	....	{Other polymers having nitrogen in the main chain, with or without oxygen or carbon only}
G03G 9/08771	....	{Polymers having sulfur in the main chain, with or without oxygen, nitrogen or carbon only}
G03G 9/08773	....	{Polymers having silicon in the main chain, with or without sulfur, oxygen, nitrogen or carbon only}
G03G 9/08775	...	{Natural macromolecular compounds or derivatives thereof}
G03G 9/08777	....	{Cellulose or derivatives thereof}
G03G 9/08779	....	{Natural rubber}
G03G 9/08782	....	{Waxes}
G03G 9/08784	...	{Macromolecular material not specially provided for in a single one of groups G03G 9/08702 to G03G 9/08775 }
G03G 9/08786	....	{Graft polymers}
G03G 9/08788	....	{Block polymers}
G03G 9/08791	....	{characterised by the presence of specified groups or side chains}
G03G 9/08793	....	{Crosslinked polymers}
G03G 9/08795	....	{characterised by their chemical properties, e.g. acidity, molecular weight, sensitivity to reactants}
G03G 9/08797	....	{characterised by their physical properties, e.g. viscosity, solubility, melting temperature, softening temperature, glass transition temperature}
G03G 9/09	..	Colouring agents for toner particles
G03G 9/0902	...	{Inorganic compounds}
G03G 9/0904	....	{Carbon black}

G03G 9/0906	...	{Organic dyes}
G03G 9/0908	....	{Anthracene dyes}
G03G 9/091	....	{Azo dyes}
G03G 9/0912	....	{Indigoid; Diaryl and Triaryl methane; Oxyketone dyes}
G03G 9/0914	....	{Acridine; Azine; Oxazine; Thiazine-;(Xanthene-) dyes}
G03G 9/0916	....	{Quinoline; Polymethine dyes}
G03G 9/0918	....	{Phthalocyanine dyes}
G03G 9/092	....	{Quinacridones}
G03G 9/0922	....	{Formazane dyes; Nitro and Nitroso dyes; Quinone imides; Azomethine dyes}
G03G 9/0924	....	{Dyes characterised by specific substituents}
G03G 9/0926	...	{characterised by physical or chemical properties}
G03G 9/0928	...	{Compounds capable to generate colouring agents by chemical reaction}
G03G 9/093	..	Encapsulated toner particles
G03G 9/09307	...	{specified by the shell material}
G03G 9/09314	....	{Macromolecular compounds}
G03G 9/09321	.....	{obtained by reactions only involving carbon-to-carbon unsaturated bonds}
G03G 9/09328	.....	{obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
G03G 9/09335	....	{Non-macromolecular organic compounds}
G03G 9/09342	....	{Inorganic compounds}
G03G 9/0935	...	{specified by the core material}
G03G 9/09357	....	{Macromolecular compounds}
G03G 9/09364	.....	{obtained by reactions only involving carbon-to-carbon unsaturated bonds}
G03G 9/09371	.....	{obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
G03G 9/09378	....	{Non-macromolecular organic compounds}
G03G 9/09385	....	{Inorganic compounds}
G03G 9/09392	...	{Preparation thereof}
G03G 9/097	..	Plasticisers; Charge controlling agents
G03G 9/09708	...	{Inorganic compounds}
G03G 9/09716	....	{treated with organic compounds}
G03G 9/09725	....	{Silicon-oxides; Silicates}
G03G 9/09733	...	{Organic compounds (G03G 9/08782 takes precedence)}
G03G 9/09741	....	{cationic}
G03G 9/0975	....	{anionic}
G03G 9/09758	....	{comprising a heterocyclic ring}
G03G 9/09766	....	{comprising fluorine}
G03G 9/09775	....	{containing atoms other than carbon, hydrogen or oxygen (G03G 9/09741 to G03G 9/09766 take precedence)}

- G03G 9/09783 . . . {Organo-metallic compounds}
- G03G 9/09791 {Metallic soaps of higher carboxylic acids}
- G03G 9/10 . . characterised by carrier particles
- G03G 9/107 . . . having magnetic components
- G03G 9/1075 {Carrier particles having a multi-layered structure; Carrier particles comprising a core}
- G03G 9/113 . . . having coatings applied thereto
- G03G 9/1131 {Coating methods; Structure of coatings}
- G03G 9/1132 {Macromolecular components of coatings}
- G03G 9/1133 {obtained by reactions only involving carbon-to-carbon unsaturated bonds}
- G03G 9/1134 {containing fluorine atoms}
- G03G 9/1135 {obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
- G03G 9/1136 {containing silicon atoms}
- G03G 9/1137 {being crosslinked}
- G03G 9/1138 {Non-macromolecular organic components of coatings}
- G03G 9/1139 {Inorganic components of coatings}
- G03G 9/12 . . in liquid developer mixtures
- G03G 9/122 . . . {characterised by the colouring agents}
- G03G 9/125 . . . characterised by the liquid
- G03G 9/13 . . . characterised by polymer components
- G03G 9/131 {obtained by reactions only involving carbon-to-carbon unsaturated bonds}
- G03G 9/132 {obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
- G03G 9/133 {Graft-or block polymers}
- G03G 9/135 . . . characterised by stabiliser or charge-controlling agents
- G03G 9/1355 {Ionic, organic compounds}
- G03G 9/16 . . Developers not provided for in groups [G03G 9/06](#) to [G03G 9/135](#) , e.g. solutions, aerosols
- G03G 9/18 . . . Differentially wetting liquid developers

G03G 11/00 Selection of substances for use as fixing agents

G03G 13/00 Electrographic processes using a charge pattern ([G03G 15/00](#) , [G03G 16/00](#) , [G03G 17/00](#) take precedence)

NOTE

Group [G03G 15/00](#) also deals with processes in so far as they are characterised by the use or manipulation of apparatus classifiable per se in group [G03G 15/00](#) and therefor takes precedence

- G03G 13/01 . . for multicoloured copies {(colour correction on photography [G03B 27/725](#) ; picture communication systems [H04N 1/46](#))}

- G03G 13/013 .. {characterised by the developing step, e.g. the properties of the colour developers}
- G03G 13/016 .. {in which the colour powder image is formed directly on the recording material, e.g. DEP methods}
- G03G 13/02 . Sensitising, i.e. laying-down a uniform charge ([devices for corona discharge per se H01T 19/00](#))
- G03G 13/025 .. {by contact, friction or induction}
- G03G 13/04 . Exposing, i.e. imagewise exposure by optically projecting the original image on a photoconductive recording material
- G03G 13/045 .. 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)
- G03G 13/05 . Imagewise charging, i.e. laying-down a charge in the configuration of an original image using a modulated stream of charged particles, e.g. of corona ions, modulated by a photoconductive control screen bearing a charge pattern or by optically activated charging means ([using charging means controlled by electric image signals B41J](#))
- G03G 13/054 . using X-rays, e.g. electroradiography
- G03G 13/056 . using internal polarisation
- G03G 13/06 . Developing
- G03G 13/08 .. using a solid developer, e.g. powder developer
- G03G 13/09 ... using magnetic brush
- G03G 13/095 ... Removing excess solid developer
- G03G 13/10 .. using a liquid developer, {e.g. liquid suspension}
- G03G 13/11 ... Removing excess liquid developer, e.g. by heat
- G03G 13/14 . Transferring a pattern to a second base
- G03G 13/16 .. of a toner pattern, e.g. a powder pattern
- G03G 13/18 .. of a charge pattern
- G03G 13/20 . Fixing, e.g. by using heat
- G03G 13/22 . Processes involving a combination of more than one step according to groups [G03G 13/02](#) to [G03G 13/20](#) ([G03G 13/01](#) takes precedence)
- G03G 13/23 .. specially adapted for copying both sides of an original or for copying on both sides of a recording or image-receiving material
- G03G 13/24 .. whereby at least two steps are performed simultaneously
- G03G 13/26 . for the production of printing plates for non-xerographic printing processes
- G03G 13/28 .. Planographic printing plates
- G03G 13/283 ... {obtained by a process including the transfer of a toned image, i.e. indirect process}
- G03G 13/286 ... {for dry lithography}
- G03G 13/30 .. Hectographic masters
- G03G 13/32 .. Relief printing plates
- G03G 13/34 . Editing, i.e. producing a composite image by copying one or more original images or parts thereof

G03G 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](#) })

- G03G 15/01 . For producing multicoloured copies {(colour correction in photography [G03C](#) ; colour correction in printing plate production)}
- G03G 15/0105 .. {Details of unit}
- G03G 15/011 ... {for exposing}
- G03G 15/0115 {and forming a half-tone image}
- G03G 15/0121 ... {for developing}
- G03G 15/0126 ... {using a solid developer}
- G03G 15/0131 ... {for transferring a pattern to a second base}
- G03G 15/0136 {transfer member separable from recording member or vice versa, mode switching}

WARNING

Group [G03G 15/0136](#) is not complete, pending reorganisation. See also [G03G 15/0131](#)

- G03G 15/0142 .. {Structure of complete machines}
- G03G 15/0147 ... {using a single reusable electrographic recording member}
- G03G 15/0152 {onto which the monocolour toner images are superposed before common transfer from the recording member}
- G03G 15/0157 {with special treatment between monocolour image formation}
- G03G 15/0163 {primary transfer to the final recording medium}

WARNING

Groups [G03G 15/0163](#) to [G03G 15/0173](#) are not complete pending reorganisation. See also [G03G 15/0147](#) - [G03G 15/0157](#)

- G03G 15/0168 {single rotation of recording member to produce multicoloured copy ([G03G 15/0163](#) takes precedence)}
- G03G 15/0173 {plural rotations of recording member to produce multicoloured copy, e.g. rotating set of developing units ([G03G 15/0163](#) takes precedence)}
- G03G 15/0178 ... {using more than one reusable electrographic recording member, e.g. one for every monocolour image}
- G03G 15/0184 {at least one recording member having plural associated developing units}

WARNING

Groups [G03G 15/0184](#) to [G03G 15/0194](#) are not complete pending reorganisation. See also [G03G 15/0178](#)

- G03G 15/0189 {primary transfer to an intermediate transfer belt ([G03G 15/0184](#) takes precedence)}
- G03G 15/0194 {primary transfer to the final recording medium ([G03G 15/0184](#) takes precedence)}

- G03G 15/02 . for laying down a uniform charge, e.g. for sensitising; Corona discharge devices ([G03G 15/14](#) takes precedence)
- G03G 15/0208 . . {by contact, friction or induction, e.g. liquid charging apparatus}
- G03G 15/0216 . . . {by bringing a charging member into contact with the member to be charged, e.g. roller, brush chargers}
- G03G 15/0225 {provided with means for cleaning the charging member}
- G03G 15/0233 {Structure, details of the charging member, e.g. chemical composition, surface properties}
- G03G 15/0241 . . . {by bringing charging powder particles into contact with the member to be charged, e.g. by means of a magnetic brush}
- G03G 15/025 . . . {by bringing a charging member in the vicinity with the member to be charged, e.g. proximity charging, forming micro gap}
- G03G 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}
- G03G 15/0266 . . {Arrangements for controlling the amount of charge}
- G03G 15/0275 . . {Arrangements for controlling the area of the photoconductor to be charged}
- G03G 15/0283 . . {Arrangements for supplying power to the sensitising device}
- G03G 15/0291 . . {corona discharge devices, e.g. wires, pointed electrodes, means for cleaning the corona discharge device}

WARNING

Groups [G03G 15/0291](#) and [G03G 15/025](#) are not complete pending reorganisation. See also [G03G 15/02](#) - [G03G 15/0258](#)

- G03G 15/04 . for exposing, i.e. imagewise exposure by optically projecting the original image on a photoconductive recording material

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

- G03G 15/04009 . . {by forming an intermediate temporary image projected one or more times}
- G03G 15/04018 . . {Image composition, e.g. adding or superposing informations on the original image (composition of facsimile picture signals [H04N 1/387](#))}
- G03G 15/04027 . . {and forming half-tone image}
- G03G 15/04036 . . {Details of illuminating systems, e.g. lamps, reflectors (lamp housings for copying cameras, reflex exposure lighting [G03B 27/542](#))}
- G03G 15/04045 . . . {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 15/043](#) take precedence)}

WARNING

G03G 15/04045

(continued)

Groups [G03G 15/04054](#) to [G03G 15/04081](#) are not complete pending reorganisation. See also [G03G 15/04](#) , [G03G 15/04036](#), [G03G 15/043](#) , [G03G 15/0435](#) and [G03G 15/326](#)

- G03G 15/04054 {by LED arrays}
- G03G 15/04063 {by EL-bars}
- G03G 15/04072 {by laser}
- G03G 15/04081 . . . {Exposure from behind the photoconductive surface}
- G03G 15/0409 . . {Details of projection optics (for projection printing apparatus [G03B 27/522](#))}
- G03G 15/041 . . with variable magnification
- G03G 15/0415 . . . {and means for controlling illumination or exposure}
- G03G 15/043 . . with means for controlling illumination or exposure ([G03G 15/041](#) takes precedence)
- G03G 15/0435 . . . {by introducing an optical element in the optical path, e.g. a filter}
- G03G 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 15/36](#) , [G03G 21/06](#) take precedence)
- G03G 15/047 . . . for discharging non-image areas
- G03G 15/05 . . for imagewise charging, e.g. photoconductive control screen, optically activated charging means (charging means controlled by electric image signals [B41J](#))
- G03G 15/051 . . {by modulating an ion flow through a photoconductive screen onto which a charge image has been formed}
- G03G 15/052 . . . {Details and conditioning means of the screen, e.g. cleaning means, ozone removing means}
- G03G 15/054 . . using X-rays, e.g. electroradiography
- G03G 15/0545 . . {Ionography, i.e. X-rays induced liquid or gas discharge}
- G03G 15/056 . . using internal polarisation
- G03G 15/06 . . for developing
- G03G 15/065 . . {Arrangements for controlling the potential of the developing electrode}
- G03G 15/08 . . using a solid developer, e.g. powder developer
- G03G 15/0801 . . . {for cascading}
- G03G 15/0803 . . . {in a powder cloud}
- G03G 15/0805 . . . {on a brush ([G03G 15/09](#) takes precedence)}
- G03G 15/0806 . . . {on a donor element, e.g. belt, roller (complete developer unit [G03G 15/0896](#))}
- G03G 15/0808 {characterised by the developer supplying means, e.g. structure of developer supply roller}
- G03G 15/081 {characterised by the developer handling means after the supply and before the regulating, e.g. means for preventing developer blocking}
- G03G 15/0812 {characterised by the developer regulating means, e.g. structure of doctor blade}
- G03G 15/0813 {characterised by means in the developing zone having an interaction with the image carrying member, e.g. distance holders}
- G03G 15/0815 {characterised by the developer handling means after the developing zone and before the supply, e.g. developer recovering roller}

G03G 15/0817	....	{characterised by the lateral sealing at both sides of the donor member with respect to the developer carrying direction}
G03G 15/0818	....	{characterised by the structure of the donor member, e.g. surface properties}
G03G 15/082	...	{for immersion}
G03G 15/0822	...	{Arrangements for preparing, mixing, supplying or dispensing developer}
G03G 15/0824	....	{Detection or control means for the toner concentration}
G03G 15/0825	.....	{the concentration being measured by electrical means}
G03G 15/0827	.....	{the concentration being measured by optical means}
G03G 15/0829	.....	{the concentration being measured by magnetic means}
G03G 15/0831	....	{Detection means for the toner level}
G03G 15/0832	....	{Arrangements for supplying new toner; Toner cartridges}
G03G 15/0834	.....	{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, not acting as a passive closure for the developer replenishing opening}
G03G 15/0836	.....	{Toner cartridges having a longitudinal rotational axis, around which at least one part is rotated when mounting or using the cartridge (G03G 15/0834 takes precedence)}
G03G 15/0837	.....	{the toner cartridges being generally horizontally mounted parallel to its longitudinal rotational axis}
G03G 15/0839	.....	{Arrangements for metering and dispensing toner into the development sump; Toner hoppers; Augers}
G03G 15/0841	.....	{Toner cartridges using a peelable sealing film (resealing used developer units before refilling G03G 15/0894)}
G03G 15/0843	.....	{Toner cartridges using a sealing film to be ruptured or cut}
G03G 15/0844	....	{Arrangements for purging used developer from the developing unit}
G03G 15/0846	....	{Arrangements for conditioning developer in the developing sump, e.g. removing impurities or humidity}
G03G 15/0848	....	{Arrangements for testing or measuring developer properties or quality, e.g. charge, size, flowability}

WARNING

[G03G 15/0848](#) to [G03G 15/0862](#) are not complete pending reorganisation. See also [G03G 15/0822](#) - [G03G 15/0831](#)

G03G 15/0849	.....	{Detection or control means for the developer concentration}
G03G 15/0851	.....	{the concentration being measured by electrical means}
G03G 15/0853	.....	{the concentration being measured by magnetic means}
G03G 15/0855	.....	{the concentration being measured by optical means}
G03G 15/0856	.....	{Detection or control means for the developer level}
G03G 15/0858	.....	{the level being measured by mechanical means}
G03G 15/086	.....	{the level being measured by electro-magnetic means}
G03G 15/0862	.....	{the level being measured by optical means}

G03G 15/0863	....	{provided with identifying means or means for storing process- or use parameters, e.g. an electronic memory}
G03G 15/0865	....	{Arrangements for supplying new developer}

WARNING

Groups [G03G 15/0877](#) to [G03G 15/0893](#) are not complete pending reorganisation. See also [G03G 15/0832](#) - [G03G 15/0843](#)

G03G 15/0867	.....	{cylindrical developer cartridges, e.g. toner bottles for the developer replenishing opening}
G03G 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}
G03G 15/087	.....	{Developer cartridges having a longitudinal rotational axis, around which at least one part is rotated when mounting or using the cartridge (G03G 15/0834 takes precedence)}
G03G 15/0872	.....	{the developer cartridges being generally horizontally mounted parallel to its longitudinal rotational axis}
G03G 15/0874	.....	{non-rigid containers, e.g. foldable cartridges, bags}
G03G 15/0875	.....	{cartridges having a box like shape}
G03G 15/0877	....	{Arrangements for metering and dispensing developer from a developer cartridge into the development unit}
G03G 15/0879	.....	{for dispensing developer from a developer cartridge not directly attached to the development unit}
G03G 15/0881	.....	{Sealing of developer cartridges}
G03G 15/0882	.....	{by a peelable sealing film (resealing used developer units before refilling: G03G 15/0894)}
G03G 15/0884	.....	{by a sealing film to be ruptured or cut}
G03G 15/0886	.....	{by mechanical means, e.g. shutter, plug}
G03G 15/0887	....	{Arrangements for conveying and conditioning developer in the developing unit, e.g. agitating, removing impurities or humidity}

WARNING

Groups [G03G 15/0887](#) - [G03G 15/0893](#) is not complete pending reorganisation. See also [G03G 15/0846](#)

G03G 15/0889	.....	{for agitation or stirring}
G03G 15/0891	.....	{for conveying or circulating developer, e.g. augers}
G03G 15/0893	.....	{in a closed loop within the sump of the developing device}
G03G 15/0894	...	{Reconditioning of the developer unit, i.e. reusing or recycling parts of the unit, e.g. resealing of the unit before refilling with toner}
G03G 15/0896	...	{Arrangements or disposition of the complete developer unit or parts thereof not provided for by groups G03G 15/08 to G03G 15/0894 }
G03G 15/0898	....	{for preventing toner scattering during operation, e.g. seals (sealing the donor member G03G 15/0817 ; sealing the magnetic brush G03G 15/0942)}

G03G 15/09	...	using magnetic brush
G03G 15/0907	....	{with bias voltage (G03G 15/065 takes precedence)}
G03G 15/0914	....	{with a one-component toner}
G03G 15/0921	....	{Details concerning the magnetic brush roller structure, e.g. magnet configuration}
G03G 15/0928	.....	{relating to the shell, e.g. structure, composition}
G03G 15/0935	.....	{relating to bearings or driving mechanism}
G03G 15/0942	....	{with means for preventing toner scattering from the magnetic brush, e.g. magnetic seals}
G03G 15/095	...	Removing excess solid developer{,e.g. fog preventing}
G03G 15/10	..	using a liquid developer
G03G 15/101	...	{for wetting the recording material}
G03G 15/102	....	{for differentially wetting the recording material (developers for differentially wetting G03G 9/18)}
G03G 15/104	...	{Preparing, mixing, transporting or dispensing developer}
G03G 15/105	....	{Detection or control means for the toner concentration}
G03G 15/107	...	{Condensing developer fumes (G03G 15/11 takes precedence)}
G03G 15/108	...	{with which the recording material is brought in contact, e.g. immersion or surface immersion development}
G03G 15/11	...	Removing excess liquid developer, e.g. by heat
G03G 15/14	.	for transferring a pattern to a second base
G03G 15/16	..	of a toner pattern, e.g. a powder pattern,{e.g. magnetic transfer}
G03G 15/1605	...	{using at least one intermediate support (G03G 15/1625 takes precedence)}
G03G 15/161	....	{with means for handling the intermediate support, e.g. heating, cleaning, coating with a transfer agent}
G03G 15/1615	....	{relating to the driving mechanism for the intermediate support, e.g. gears, couplings, belt tensioning}

WARNING

Groups [G03G 15/1615](#) and [G03G 15/162](#) are not complete pending reorganisation. See also [G03G 15/1605](#) - [G03G 15/161](#)

G03G 15/162	....	{details of the the intermediate support, e.g. chemical composition}
G03G 15/1625	...	{on a base other than paper}
G03G 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}
G03G 15/1635	....	{the field being produced by laying down an electrostatic charge behind the base or the recording member, e.g. by a corona device}
G03G 15/164	.....	{the second base being a continuous paper band, e.g. a CFF}
G03G 15/1645	.....	{Arrangements for controlling the amount of charge}
G03G 15/165	.....	{Arrangements for supporting or transporting the second base in the transfer area, e.g. guides}

G03G 15/1655	.....	{comprising a rotatable holding member to which the second base is attached or attracted, e.g. screen transfer holding drum}
G03G 15/166	.....	{with means for conditioning the holding member, e.g. cleaning}
G03G 15/1665	...	{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}
G03G 15/167	....	{at least one of the recording member or the transfer member being rotatable during the transfer}
G03G 15/1675	.....	{with means for controlling the bias applied in the transfer nip}
G03G 15/168	.....	{with means for conditioning the transfer element, e.g. cleaning}
G03G 15/1685	.....	{Structure, details of the transfer member, e.g. chemical composition}
G03G 15/169	...	{with means for preconditioning the toner image before the transfer (G03G 15/095 and G03G 15/11 take precedence)}
G03G 15/1695	...	{with means for preconditioning the paper base before the transfer}
G03G 15/18	..	of a charge pattern
G03G 15/20	.	for fixing, e.g. by using heat
G03G 15/2003	..	{using heat}
G03G 15/2007	...	{using radiant heat, e.g. infra-red lamps, microwave heaters}
G03G 15/201	....	{of high intensity and short duration, i.e. flash fusing}
G03G 15/2014	...	{using contact heat}
G03G 15/2017	....	{Structural details of the fixing unit in general, e.g. cooling means, heat shielding means (G03G 15/2053 takes precedence)}

WARNING

Groups [G03G 15/2017](#) to [G03G 15/205](#) are not complete pending reorganisation. See also [G03G 15/2064](#) - [G03G 15/2089](#)

G03G 15/2021	.....	{Plurality of separate fixing and/or cooling areas or units, two step fixing}
G03G 15/2025	.....	{with special means for lubricating and/or cleaning the fixing unit, e.g. applying offset preventing fluid}
G03G 15/2028	.....	{with means for handling the copy material in the fixing nip, e.g. introduction guides, stripping means}
G03G 15/2032	.....	{Retractable heating or pressure unit}
G03G 15/2035	.....	{for maintenance purposes, e.g. for removing a jammed sheet}
G03G 15/2039	....	{with means for controlling the fixing temperature}
G03G 15/2042	.....	{specially for the axial heat partition}
G03G 15/2046	.....	{specially for the influence of heat loss, e.g. due to the contact with the copy material or other roller}
G03G 15/205	.....	{specially for the mode of operation, e.g. standby, warming-up, error (G03G 15/2046 takes precedence)}
G03G 15/2053	....	{Structural details of heat elements, e.g. structure of roller or belt, eddy current, induction heating}
G03G 15/2057	.....	{relating to the chemical composition of the heat element and layers thereof}

G03G 15/206	....	{Structural details or chemical composition of the pressure elements and layers thereof}
G03G 15/2064	....	{combined with pressure}
G03G 15/2067	.....	{with retractable fixing or pressure unit}
G03G 15/2071	.....	{for maintenance purpose, e.g. for removing a jammed sheet}
G03G 15/2075	.....	{with special means for lubricating and/or cleaning the fuser unit, e.g. applying offset preventing fluid}
G03G 15/2078	.....	{with means for controlling and/or regulating the fixing temperature}
G03G 15/2082	.....	{specially the axial heat repartition}
G03G 15/2085	.....	{with means for handling the copy material in the fuser nip, e.g. introduction guides, stripping means}
G03G 15/2089	.....	{Details of pressure units, e.g. structure}
G03G 15/2092	..	{using pressure only}
G03G 15/2096	..	{using a solvent}
G03G 15/22	.	involving the combination of more than one step according to groups G03G 13/02 to G03G 13/20 (G03G 15/01 takes precedence)
G03G 15/221	..	{Machines other than electrographic copiers, e.g. electrophotographic cameras, electrostatic typewriters}
G03G 15/222	...	{Machines for handling xeroradiographic images, e.g. xeroradiographic processors}
G03G 15/223	...	{Machines for handling microimages, e.g. microfilm copiers}
G03G 15/224	...	{Machines for forming tactile or three dimensional images by electrographic means, e.g. braille, 3d printing}

WARNING

Group [G03G 15/224](#) is not complete pending reorganisation. See also [G03G 15/221](#)

G03G 15/225	..	{using contact-printing}
G03G 15/226	..	{where the image is formed on a dielectric layer covering the photoconductive layer}
G03G 15/227	...	{the length of the inner surface of the dielectric layer being greater than the length of the outer surface of the photoconductive layer}
G03G 15/228	..	{the process involving the formation of a master, e.g. photocopy-printer machines}
G03G 15/23	..	specially adapted for copying both sides of an original or for copying on both sides of a recording or image-receiving material
G03G 15/231	...	{Arrangements for copying on both sides of a recording or image-receiving material}
G03G 15/232	....	{using a single reusable electrographic recording member}
G03G 15/234	.....	{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}

G03G 15/235	.....	{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}
G03G 15/237	.....	{the image receiving member being in form of a continuous web (G03G 15/235 takes precedence)}
G03G 15/238	....	{using more than one reusable electrographic recording member, e.g. single pass duplex copiers}
G03G 15/24	..	whereby at least two steps are performed simultaneously
G03G 15/26	..	in which the charge pattern is obtained by projection of the entire image, i.e. whole-frame projection (G03G 15/04 takes precedence)
G03G 15/263	...	{using a reusable recording medium in form of a band}
G03G 15/266	...	{using a reusable recording medium in form of a plate or a sheet}
G03G 15/28	..	in which projection is obtained by line scanning (G03G 15/04 takes precedence)
G03G 15/283	...	{using a reusable recording medium in form of a band}
G03G 15/286	...	{using a reusable recording medium in form of a plate or a sheet}
G03G 15/30	...	in which projection is formed on a drum
G03G 15/302	....	{with arrangements for copying different kinds of originals, e.g. sheets, books}
G03G 15/305	....	{with special means to synchronize the scanning optic to the operation of other parts of the machine, e.g. photoreceptor, copy paper}
G03G 15/307	....	{with more than one photoconductor revolution for each copying cycle}
G03G 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)
G03G 15/321	...	{by charge transfer onto the recording material in accordance with the image}
G03G 15/323	....	{by modulating charged particles through holes or a slit}
G03G 15/325	....	{using a stylus or a multi-styli array}
G03G 15/326	...	{by application of light, e.g. using a LED array}
G03G 15/328	....	{using a CRT}
G03G 15/34	..	in which the powder image is formed directly on the recording material,{e.g. by using a liquid toner}
G03G 15/342	...	{by forming a uniform powder layer and then removing the non-image areas}
G03G 15/344	...	{by selectively transferring the powder to the recording medium, e.g. by using a LED array}
G03G 15/346	....	{by modulating the powder through holes or a slit}
G03G 15/348	....	{using a stylus or a multi-styli array}
G03G 15/36	.	Editing, i.e. producing a composite image by copying one or more original images or parts thereof
G03G 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)}
G03G 15/5004	..	{Power supply control, e.g. power-saving mode, automatic power turn-off}
G03G 15/5008	..	{Driving control for rotary photosensitive medium, e.g. speed control, stop position control}
G03G 15/5012	..	{Priority interrupt; Job recovery, e.g. after jamming or malfunction}

- G03G 15/5016 .. {User-machine interface; Display panels; Control console}
- G03G 15/502 ... {relating to the structure of the control menu, e.g. pop-up menus, help screens}
- G03G 15/5025 .. {by measuring the original characteristics, e.g. contrast, density}
- G03G 15/5029 .. {by measuring the copy material characteristics, e.g. weight, thickness}
- G03G 15/5033 .. {by measuring the photoconductor characteristics, e.g. temperature, or the characteristics of an image on the photoconductor}
- G03G 15/5037 ... {the characteristics being an electrical parameter, e.g. voltage}
- G03G 15/5041 ... {Detecting a toner image, e.g. density, toner coverage, using a test patch ([G03G 15/553](#) takes precedence)}

WARNING

Groups [G03G 15/5041](#) to [G03G 15/505](#) are not complete, pending reorganisation. See also [G03G 15/5033](#)

- G03G 15/5045 ... {Detecting the temperature}
- G03G 15/505 ... {Detecting the speed, e.g. for continuous control of recording starting time}
- G03G 15/5054 .. {by measuring the characteristics of an intermediate image carrying member or the characteristics of an image on an intermediate image carrying member, e.g. intermediate transfer belt or drum, conveyor belt}

WARNING

Groups [G03G 15/5054](#) - [G03G 15/5058](#) are not complete, see also [G03G 15/50](#)

- G03G 15/5058 ... {using a test patch}
- G03G 15/5062 .. {by measuring the characteristics of an image on the copy material}
- G03G 15/5066 .. {by using information from an external support, e.g. magnetic card}
- G03G 15/507 ... {being interleaved with the original or directly written on the original, e.g. using a control sheet}
- G03G 15/5075 .. {Remote control machines, e.g. by a host}
- G03G 15/5079 ... {for maintenance}
- G03G 15/5083 ... {for scheduling}
- G03G 15/5087 ... {for receiving image data}
- G03G 15/5091 ... {for user-identification or authorisation}
- G03G 15/5095 .. {Matching the image with the size of the copy material, e.g. by calculating the magnification or selecting the adequate copy material size}
- G03G 15/55 . {Self-diagnostics; Malfunction or lifetime display}
- G03G 15/553 .. {Monitoring or warning means for exhaustion or lifetime end of consumables, e.g. indication of insufficient copy sheet quantity for a job}
- G03G 15/556 ... {for toner consumption, e.g. pixel counting, toner coverage detection, toner density measurement ([detectors G03G 15/0831](#))}

WARNING

G03G 15/556

(continued)

Group [G03G 15/556](#) is not complete. See also
[G03G 15/55](#) - [G03G 15/553](#)

- G03G 15/60 . {Apparatus which relate to the handling of originals (for photographic purposes in general [G03B](#))}
- G03G 15/602 . . {for transporting}
- G03G 15/605 . . {Holders for originals or exposure platens (for photographic purposes in general [G03B](#))}
- G03G 15/607 . . {for detecting size, presence or position of original}
- G03G 15/65 . {Apparatus which relate to the handling of copy material (handling sheets or webs in general [B65H](#); for photographic purposes in general [G03B](#))}
- G03G 15/6502 . . {Supplying of sheet copy material; Cassettes therefor}
- G03G 15/6505 . . . {for copy sheets in ream}
- G03G 15/6508 . . . {Automatic supply devices interacting with the rest of the apparatus, e.g. selection of a specific cassette (matching the image with the size of the copy material [G03G 15/5095](#))}
- G03G 15/6511 . . . {Feeding devices for picking up or separation of copy sheets}
- G03G 15/6514 . . . {Manual supply devices}
- G03G 15/6517 . . {Apparatus for continuous web copy material of plain paper, e.g. supply rolls; Roll holders therefor}
- G03G 15/652 . . . {Feeding a copy material originating from a continuous web roll}
- G03G 15/6523 . . . {Cutting}
- G03G 15/6526 . . . {Computer form folded [CFF] continuous web, e.g. having sprocket holes or perforations}
- G03G 15/6529 . . {Transporting ([G03G 15/6555](#) takes precedence)}
- G03G 15/6532 . . {Removing a copy sheet form a xerographic drum, band or plate (removing sheets from printing cylinders [B65H29/6](#))}
- G03G 15/6535 . . . {using electrostatic means, e.g. a separating corona}
- G03G 15/6538 . . {Devices for collating sheet copy material, e.g. sorters, control, copies in staples form}
- G03G 15/6541 . . . {Binding sets of sheets, e.g. by stapling, glueing}
- G03G 15/6544 {Details about the binding means or procedure}
- G03G 15/6547 . . . {Shifting sets of sheets in the discharge tray}
- G03G 15/655 . . . {Placing job divider sheet between set of sheets}
- G03G 15/6552 . . {Means for discharging uncollated sheet copy material, e.g. discharging rollers, exit trays}
- G03G 15/6555 . . {Handling of sheet copy material taking place in a specific part of the copy material feeding path}
- G03G 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}
- G03G 15/6561 {for sheet registration}

WARNING

G03G 15/6561

(continued)

Groups [G03G 15/6561](#) - [G03G 15/6567](#) are not complete, pending reorganisation. See also [G03G 15/6558](#)

- G03G 15/6564 {with correct timing of sheet feeding}
- G03G 15/6567 {for deskewing or aligning}
- G03G 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}
- G03G 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}
- G03G 15/6576 {Decurling of sheet material}
- G03G 15/6579 ... {Refeeding path for composite copying}
- G03G 15/6582 .. {Special processing for irreversibly adding or changing the sheet copy material characteristics or its appearance, e.g. stamping, annotation printing, punching}
- G03G 15/6585 ... {by using non-standard toners, e.g. transparent toner, gloss adding devices}

WARNING

Group [G03G 15/6585](#) is not complete, pending reorganisation. See also [G03G 15/6582](#)

- G03G 15/6588 .. {characterised by the copy material, e.g. postcards, large copies, multi-layered materials, coloured sheet material}
- G03G 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](#))}

WARNING

Groups [G03G 15/6591](#) to [G03G 15/6594](#) are not complete, pending reorganisation. See also [G03G 15/6588](#)

- G03G 15/6594 ... {characterised by the format or the thickness, e.g. endless forms}
- G03G 15/6597 .. {the imaging being conformed directly on the copy material, e.g. using photosensitive copy material, dielectric copy material for electrostatic printing}
- G03G 15/70 . {Detecting malfunctions relating to paper handling, e.g. jams}
- G03G 15/703 .. {Detecting multiple sheets}
- G03G 15/706 .. {Detecting missed stripping from xerographic drum, band or plate}
- G03G 15/75 . {Details relating to xerographic drum, band or plate, e.g. replacing, testing (electrographic recording members per se [G03G 5/00](#))}
- G03G 15/751 .. {relating to drum ([G03G 15/757](#) takes precedence)}
- G03G 15/752 ... {with renewable photoconductive layer}
- G03G 15/754 .. {relating to band, e.g. tensioning ([G03G 15/757](#) takes precedence)}
- G03G 15/755 ... {for maintaining the lateral alignment of the band}
- G03G 15/757 .. {Drive mechanisms for photosensitive medium, e.g. gears}
- G03G 15/758 .. {relating to plate or sheet}
- G03G 15/80 . {Details relating to power supplies, circuits boards, electrical connections}

- G03G 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](#))}
- G03G 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**
- [G03G 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](#) to [G01R 13/14](#))}
- [G03G 17/02](#) . with electrolytic development
- [G03G 17/04](#) . using photoelectrophoresis
- [G03G 17/06](#) . . . Apparatus therefor
- [G03G 17/08](#) . using an electrophoto-adhesive process, e.g. manifold imaging
- [G03G 17/10](#) . using migration imaging, e.g. photoelectrosolography ([G03G 17/04](#) takes precedence)
- G03G 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 5/00](#) ; magnetic recording members for television [G11B](#); recording of sound [G11B](#); recording of electric measurements [G01R 13/00](#) ; recording apparatus for measurements in general [G01D](#)
- [G03G 19/005](#) . {where the image is formed by selective demagnetizing, e.g. thermomagnetic recording}
- G03G 21/00** **Arrangements not provided for by groups [G03G 13/00](#) to [G03G 19/00](#) , e.g. cleaning, elimination of residual charge**
- [G03G 21/0005](#) . {for removing solid developer or debris from the electrographic recording medium}
- [G03G 21/0011](#) . . . {using a blade; Details of cleaning blades, e.g. blade shape, layer forming}
- [G03G 21/0017](#) {Details relating to the internal structure or chemical composition of the blades}
- [G03G 21/0023](#) {with electric bias}
- [G03G 21/0029](#) {Details relating to the blade support}
- [G03G 21/0035](#) . . {using a brush; Details of cleaning brushes, e.g. fibre density ([G03G 21/0064](#) takes precedence; magnetic brushes [G03G 21/0047](#))}
- [G03G 21/0041](#) . . {using a band; Details of cleaning bands, e.g. band winding}
- [G03G 21/0047](#) . . {using electrostatic or magnetic means; Details thereof, e.g. magnetic pole arrangement of magnetic devices ([G03G 21/0064](#) takes precedence)}
- [G03G 21/0052](#) . . {using an air flow; Details thereof, e.g. nozzle structure}

- G03G 21/0058 .. {using a roller or a polygonal rotating cleaning member; Details thereof, e.g. surface structure ([G03G 21/0064](#) takes precedence)}
- G03G 21/0064 .. {using the developing unit, e.g. cleanerless or multi-cycle apparatus}
- G03G 21/007 .. {Arrangement or disposition of parts of the cleaning unit}
- G03G 21/0076 ... {Plural or sequential cleaning devices}

WARNING

Groups [G03G 21/0076](#) to [G03G 21/0082](#) are not complete pending reorganisation. See also [G03G 21/007](#)

- G03G 21/0082 {Separate cleaning member for toner and debris}
- G03G 21/0088 . {removing liquid developer}
- G03G 21/0094 . {fatigue treatment of the photoconductor}
- G03G 21/02 . Counting the number of copies; Billing
- G03G 21/04 . Preventing copies being made of an original
- G03G 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}
- G03G 21/046 .. {by discriminating a special original, e.g. a bank note}
- G03G 21/06 . Eliminating residual charges from a reusable imaging member
- G03G 21/08 .. using optical radiation
- G03G 21/10 . Collecting or recycling waste developer
- G03G 21/105 .. {Arrangements for conveying toner waste}

WARNING

Group [G03G 21/105](#) is not complete pending reorganisation. See also [G03G 21/10](#) - [G03G 21/12](#)

- G03G 21/12 .. Toner waste containers
- G03G 21/14 . Electronic sequencing control
- G03G 21/145 .. {wherein control pulses are generated by the mechanical movement of parts of the machine, e.g. the photoconductor}
- G03G 21/16 . Mechanical means for facilitating the maintenance of the apparatus, e.g. modular arrangements
- G03G 21/1604 .. {Arrangement or disposition of the entire apparatus}
- G03G 21/1609 ... {for space saving, e.g. structural arrangements}
- G03G 21/1614 ... {Measures for handling of apparatus by disabled persons}
- G03G 21/1619 ... {Frame structures}
- G03G 21/1623 ... {Means to access the interior of the apparatus}
- G03G 21/1628 {Clamshell type ([G03G 21/1638](#) takes precedence)}
- G03G 21/1633 {using doors or covers ([G03G 21/1638](#) takes precedence)}
- G03G 21/1638 {directed to paper handling or jam treatment}
- G03G 21/1642 .. {for connecting the different parts of the apparatus}
- G03G 21/1647 ... {Mechanical connection means}

G03G 21/1652	...	{Electrical connection means}
G03G 21/1657	...	{Wireless connection means, e.g. RFID}
G03G 21/1661	..	{means for handling parts of the apparatus in the apparatus (G03G 21/1604 , G03G 21/1642 take precedence)}
G03G 21/1666	...	{for the exposure unit}
G03G 21/1671	...	{for the photosensitive element}
G03G 21/1676	...	{for the developer unit}
G03G 21/168	...	{for the transfer unit}
G03G 21/1685	...	{for the fixing unit}
G03G 21/169	...	{for the cleaning unit}
G03G 21/1695	...	{for paper transport}
G03G 21/18	..	using a processing cartridge,{whereby the process cartridge comprises at least two image processing means in a single unit}

WARNING

Groups [G03G 21/1803](#) to [G03G 21/1896](#) are not complete pending reorganisation. See also this group

G03G 21/1803	...	{Arrangements or disposition of the complete process cartridge or parts thereof}
G03G 21/1807	....	{colour}
G03G 21/181	....	{Manufacturing or assembling, recycling, reuse, transportation, packaging or storage}
G03G 21/1814	....	{Details of parts of process cartridge, e.g. for charging, transfer, cleaning, developing (G021/18C6 takes precedence)}
G03G 21/1817	....	{having a submodular arrangement}
G03G 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)}
G03G 21/1825	.....	{Pivotable subunit connection}
G03G 21/1828	....	{Prevention of damage or soiling, e.g. mechanical abrasion (G03G 21/1839 takes precedence)}
G03G 21/1832	.....	{Shielding members, shutter, e.g. light, heat shielding, prevention of toner scattering}
G03G 21/1835	....	{the process cartridge not comprising a photosensitive member}
G03G 21/1839	...	{Means for handling the process cartridge in the apparatus body}
G03G 21/1842	....	{for guiding and mounting the process cartridge, positioning, alignment, locks (G03G 21/1864 and G03G 21/1871 take precedence)}
G03G 21/1846	.....	{using a handle for carrying or pulling out of the main machine, legs of casings}
G03G 21/185	.....	{the process cartridge being mounted parallel to the axis of the photosensitive member}
G03G 21/1853	.....	{the process cartridge being mounted perpendicular to the axis of the photosensitive member}

G03G 21/1857	....	{for transmitting mechanical drive power to the process cartridge, drive mechanisms, gears, couplings, braking mechanisms}
G03G 21/186	.....	{Axial couplings}
G03G 21/1864	.....	{associated with a positioning function}
G03G 21/1867	....	{for electrically connecting the process cartridge to the apparatus, electrical connectors, power supply}
G03G 21/1871	.....	{associated with a positioning function}
G03G 21/1875	...	{provided with identifying means or means for storing process- or use parameters, e.g. lifetime of the cartridge}
G03G 21/1878	....	{Electronically readable memory}
G03G 21/1882	.....	{details of the communication with memory, e.g. wireless communication, protocols}
G03G 21/1885	.....	{position of the memory; memory housings; electrodes}
G03G 21/1889	.....	{for auto-setting of process parameters, lifetime, usage}
G03G 21/1892	.....	{for presence detection, authentication}
G03G 21/1896	....	{mechanical or optical identification means, e.g. protrusions, bar codes}
G03G 21/20	.	Humidity or temperature control {also ozone evacuation; Internal apparatus environment control}
G03G 21/203	..	{Humidity}

WARNING

Groups [G03G 21/203](#) and [G03G 21/206](#) are not complete pending reorganisation. See also [G03G 21/20](#)

G03G 21/206	..	{Conducting air through the machine e.g. for cooling, filtering, removing gases like ozone}
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G03G 2215/00 Apparatus for electrophotographic processes (not used)

G03G 2215/00004	.	Handling of entire apparatus
G03G 2215/00008	..	Upright positioning for maintenance or storage
G03G 2215/00012	..	Upright positioning as well as horizontal positioning for image forming
G03G 2215/00016	.	Special arrangement of entire apparatus
G03G 2215/00021	..	Plural substantially independent image forming units in cooperation, e.g. for duplex, colour or high-speed simplex
G03G 2215/00025	.	Machine control, e.g. regulating different parts of the machine (not used)
G03G 2215/00029	..	Image density detection
G03G 2215/00033	...	on recording member
G03G 2215/00037	....	Toner image detection
G03G 2215/00042	.....	Optical detection
G03G 2215/00046	.....	Magnetical detection
G03G 2215/0005	.....	without production of a specific test patch
G03G 2215/00054	....	Electrostatic image detection
G03G 2215/00059	...	on intermediate image carrying member, e.g. transfer belt

G03G 2215/00063	...	Colour
G03G 2215/00067	...	on recording medium
G03G 2215/00071	..	by measuring the photoconductor or its environmental characteristics (not used)
G03G 2215/00075	...	the characteristic being its speed
G03G 2215/0008	....	for continuous control of recording starting time
G03G 2215/00084	...	the characteristic being the temperature
G03G 2215/00088	..	by using information from an external support (not used)
G03G 2215/00092	...	the support being an IC card
G03G 2215/00097	...	the support being a counter
G03G 2215/00101	...	the support being a magnetic card
G03G 2215/00105	...	the support being a payment means, e.g. a coin
G03G 2215/00109	..	Remote control of apparatus, e.g. by a host
G03G 2215/00113	...	Plurality of apparatus configured in groups each with its own host
G03G 2215/00118	..	using fuzzy logic
G03G 2215/00122	..	using speech synthesis or voice recognition
G03G 2215/00126	..	Multi-job machines
G03G 2215/0013	..	for producing copies with MICR
G03G 2215/00135	.	Handling of parts of the apparatus
G03G 2215/00139	..	Belt
G03G 2215/00143	...	Meandering prevention
G03G 2215/00147	....	using tractor sprocket holes
G03G 2215/00151	....	using edge limitations
G03G 2215/00156	....	by controlling drive mechanism
G03G 2215/0016	....	by mark detection, e.g. optical
G03G 2215/00164	....	by electronic scan control
G03G 2215/00168	....	by friction
G03G 2215/00172	.	relative to the original handling
G03G 2215/00177	..	for scanning
G03G 2215/00181	...	concerning the original's state of motion (not used)
G03G 2215/00185	....	original at rest
G03G 2215/00189	....	original moving
G03G 2215/00194	....	original either moving or at rest
G03G 2215/00198	.....	where one single scanning surface is used
G03G 2215/00202	.....	where separate scanning surfaces are used
G03G 2215/00206	..	Original medium (not used)
G03G 2215/0021	...	Plural types handled
G03G 2215/00215	....	Mixed types handled
G03G 2215/00219	...	Paper
G03G 2215/00223	....	Continuous web, i.e. roll
G03G 2215/00227	.....	Fan fold, e.g. CFF, normally perforated

G03G 2215/00232	....	Non-standard format
G03G 2215/00236	.....	Large sized, e.g. technical plans
G03G 2215/0024	.....	Small sized, e.g. postcards
G03G 2215/00244	....	Non-standard property
G03G 2215/00248	.....	Thick
G03G 2215/00253	.....	Thin
G03G 2215/00257	.....	coloured
G03G 2215/00261	...	Plastic
G03G 2215/00265	....	Overhead Transparency, i.e. OHP
G03G 2215/0027	....	Transparent film roll
G03G 2215/00274	....	Slide
G03G 2215/00278	....	Micro-fiche
G03G 2215/00282	...	Book
G03G 2215/00286	...	With punch holes or other non-image related artifacts, e.g. staples
G03G 2215/00291	...	Fragile, e.g. old documents
G03G 2215/00295	...	Valuable, e.g. cheques, passport
G03G 2215/00299	...	Confidential, e.g. secret documents
G03G 2215/00303	...	Control sheet
G03G 2215/00308	...	Object for which a graphic image is not of interest, e.g. medical sample
G03G 2215/00312	...	Other special types
G03G 2215/00316	...	Electronic image supplied to the apparatus
G03G 2215/0032	..	Original binding
G03G 2215/00324	..	Document property detectors
G03G 2215/00329	...	Document size detectors
G03G 2215/00333	.....	detecting feeding of documents
G03G 2215/00337	..	Document set detector
G03G 2215/00341	..	Jam handling in document feeder
G03G 2215/00345	...	Copying machine problems
G03G 2215/0035	...	Document related problems, e.g. double-fed sheets
G03G 2215/00354	..	Specific document handling machines (not used)
G03G 2215/00358	...	Plural feed trays for document sets, e.g. multi-job
G03G 2215/00362	.	relating to the copy medium handling (not used)
G03G 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" (not used)
G03G 2215/00371	...	General use over the entire feeding path
G03G 2215/00375	...	Package, e.g. a ream
G03G 2215/00379	...	Copy medium holder (not used)
G03G 2215/00383	.....	Cassette

G03G 2215/00388	.....	rotatable
G03G 2215/00392	....	Manual input tray
G03G 2215/00396	...	Pick-up device
G03G 2215/004	...	Separation device
G03G 2215/00405	...	Registration device
G03G 2215/00409	...	Transfer device
G03G 2215/00413	...	Fixing device
G03G 2215/00417	...	Post-fixing device (not used)
G03G 2215/00421	....	Discharging tray, e.g. devices stabilising the quality of the copy medium, postfixing-treatment, inverting, sorting
G03G 2215/00426	....	Post-treatment device adding qualities to the copy medium product (G03G 2215/00421 takes precedence)
G03G 2215/0043	....	Refeeding path (G03G 2215/00421 takes precedence)
G03G 2215/00434	.....	Refeeding tray or cassette
G03G 2215/00438	.....	Inverter of refeding path
G03G 2215/00443	..	Copy medium (not used)
G03G 2215/00447	...	Plural types handled
G03G 2215/00451	...	Paper
G03G 2215/00455	....	Continuous web, i.e. roll
G03G 2215/00459	.....	Fan fold, e.g. CFF, normally perforated
G03G 2215/00464	....	Non-standard format
G03G 2215/00468	.....	Large sized, e.g. technical plans
G03G 2215/00472	.....	Small sized, e.g. postcards
G03G 2215/00476	....	Non-standard property
G03G 2215/00481	.....	Thick
G03G 2215/00485	.....	Thin
G03G 2215/00489	.....	coloured
G03G 2215/00493	...	Plastic
G03G 2215/00497	....	Overhead Transparency, i.e. OHP
G03G 2215/00502	....	Transparent film
G03G 2215/00506	....	Slide
G03G 2215/0051	....	Micro-fiche
G03G 2215/00514	...	Envelopes
G03G 2215/00518	...	Recording medium, e.g. photosensitive
G03G 2215/00523	...	Other special types, e.g. tabbed
G03G 2215/00527	.....	Fabrics, e.g. textiles
G03G 2215/00531	...	transported through the apparatus for non-imaging purposes, e.g. cleaning
G03G 2215/00535	..	Stable handling of copy medium (not used)
G03G 2215/0054	...	Detachable element of feed path
G03G 2215/00544	...	Openable part of feed path

G03G 2215/00548	...	Jam, error detection, e.g. double feeding
G03G 2215/00552	....	Purge of recording medium at jam
G03G 2215/00556	...	Control of copy medium feeding
G03G 2215/00561	....	Aligning or deskewing
G03G 2215/00565	.....	Mechanical details
G03G 2215/00569	....	Calibration, test runs, test prints
G03G 2215/00573	....	Recording medium stripping from image forming member
G03G 2215/00578	....	Composite print mode
G03G 2215/00582	.....	Plural adjacent images on one side
G03G 2215/00586	....	duplex mode
G03G 2215/0059	....	Effect of changed recording medium size, e.g. originating from heating
G03G 2215/00594	....	Varying registration in order to produce special effect, e.g. binding margin
G03G 2215/00599	....	Timing, synchronisation
G03G 2215/00603	...	Control of other part of the apparatus according to the state of copy medium feeding
G03G 2215/00607	...	Debris handling means
G03G 2215/00611	...	Detector details, e.g. optical detector
G03G 2215/00616	....	Optical detector
G03G 2215/0062	.....	infra-red
G03G 2215/00624	....	Magnetic detector or switch, e.g. reed switch
G03G 2215/00628	....	Mechanical detector or switch
G03G 2215/00632	....	Electric detector, e.g. of voltage or current
G03G 2215/00637	....	Acoustic detector
G03G 2215/00641	....	Pneumatic detector
G03G 2215/00645	....	Speedometer
G03G 2215/00649	...	Electrodes close to the copy feeding path
G03G 2215/00654	...	Charging device
G03G 2215/00658	...	Brush (G03G 2215/00654 takes precedence)
G03G 2215/00662	...	Decurling device
G03G 2215/00666	...	Heating or drying device
G03G 2215/0067	...	Damping device
G03G 2215/00675	...	Mechanical copy medium guiding means, e.g. mechanical switch
G03G 2215/00679	...	Conveying means details, e.g. roller
G03G 2215/00683	....	Chemical properties
G03G 2215/00687	...	Handling details (not used)
G03G 2215/00691	....	Shredder
G03G 2215/00696	....	Turner acting in plane of recording medium, e.g. A4 to A4R change
G03G 2215/007	....	Inverter not for refeeding purposes
G03G 2215/00704	....	Curl adding, bending
G03G 2215/00708	....	Cleaning of sheet or feeding structures

G03G 2215/00713	....	Lock related to feeding device
G03G 2215/00717	...	Detection of physical properties (not used)
G03G 2215/00721	....	of sheet position
G03G 2215/00725	....	of sheet presence in input tray
G03G 2215/00729	....	of sheet amount in input tray
G03G 2215/00734	....	of sheet size
G03G 2215/00738	....	of sheet thickness or rigidity
G03G 2215/00742	....	of sheet weight
G03G 2215/00746	....	of sheet velocity
G03G 2215/00751	....	of sheet type, e.g. OHP
G03G 2215/00755	....	of sheet toner density
G03G 2215/00759	....	of sheet image, e.g. presence, type
G03G 2215/00763	....	of sheet resistivity
G03G 2215/00767	....	of sheet potential
G03G 2215/00772	....	of temperature influencing copy sheet handling
G03G 2215/00776	....	of humidity or moisture influencing copy sheet handling
G03G 2215/0078	....	of opening of structural part
G03G 2215/00784	....	of connection or pressing of structural part
G03G 2215/00789	..	Adding properties or qualities to the copy medium
G03G 2215/00793	...	Stamping device
G03G 2215/00797	...	Printing device, i.e annotation
G03G 2215/00801	...	Coating device
G03G 2215/00805	...	Gloss adding or lowering device
G03G 2215/0081	....	Gloss level being selectable
G03G 2215/00814	...	Cutter
G03G 2215/00818	...	Punch device
G03G 2215/00822	...	Binder, e.g. glueing device
G03G 2215/00827	....	Stapler
G03G 2215/00831	....	Stitcher
G03G 2215/00835	....	Toner binding
G03G 2215/00839	....	Binding tape
G03G 2215/00843	....	Clip
G03G 2215/00848	....	Details of binding device
G03G 2215/00852	....	Temporary binding
G03G 2215/00856	....	External binding device
G03G 2215/0086	....	Manual activation of binding
G03G 2215/00864	....	Plural selectable binding modes
G03G 2215/00869	...	Cover sheet adding means
G03G 2215/00873	...	Tape adding means
G03G 2215/00877	...	Folding device

G03G 2215/00881	...	Magnetic information
G03G 2215/00886	..	Sorting or discharging (not used)
G03G 2215/0089	...	Shifting jobs
G03G 2215/00894	...	Placing job divider sheet
G03G 2215/00898	...	Mechanical separator between jobs
G03G 2215/00902	...	Sorting marks of jobs, e.g. on the sheet edges
G03G 2215/00907	...	Electronically addressable mailing bins
G03G 2215/00911	...	Detection of copy amount or presence in discharge tray
G03G 2215/00915	....	Detection of weight of copies
G03G 2215/00919	..	Special copy medium handling apparatus (not used)
G03G 2215/00924	...	two or more parallel feed paths
G03G 2215/00928	...	Copies and originals use a common part of the copy medium handling apparatus
G03G 2215/00932	...	Security copies
G03G 2215/00936	...	Bookbinding
G03G 2215/0094	...	Copy produced and used as original
G03G 2215/00945	...	Copy material feeding speed varied over the feed path
G03G 2215/00949	...	Copy material feeding speed switched according to current mode of the apparatus, e.g. colour mode
G03G 2215/00953	.	Electrographic recording members (not used)
G03G 2215/00957	..	Compositions
G03G 2215/00962	..	Electrographic apparatus defined by the electrographic recording member
G03G 2215/00966	...	Sheet type electrographic recording members from which a toner or charge image is transferred
G03G 2215/0097	....	Sheet cartridge or tray
G03G 2215/00974	...	Electrographic recording member arranged as a carriage to be movable in a direction perpendicular to the recording sheet transport direction
G03G 2215/00978	.	Details relating to power supplies (not used)
G03G 2215/00983	..	using batteries
G03G 2215/00987	.	Remanufacturing, i.e. reusing or recycling parts of the image forming apparatus
G03G 2215/00991	..	Inserting seal through a gap
G03G 2215/00995	...	Insertion tool used
G03G 2215/01	.	for producing multicoloured copies (not used)
G03G 2215/0103	..	Plural electrographic recording members
G03G 2215/0106	...	At least one recording member having plural associated developing units
G03G 2215/0109	...	Single transfer point used by plural recording members
G03G 2215/0112	....	Linearly moving set of recording members
G03G 2215/0116	....	Rotating set of recording members
G03G 2215/0119	...	Linear arrangement adjacent plural transfer points
G03G 2215/0122	....	primary transfer to an intermediate transfer belt
G03G 2215/0125	.....	the linear arrangement being horizontal or slanted

G03G 2215/0129	.....	horizontal medium transport path at the secondary transfer
G03G 2215/0132	.....	vertical medium transport path at the secondary transfer
G03G 2215/0135	.....	the linear arrangement being vertical
G03G 2215/0138	....	primary transfer to a recording medium carried by a transport belt
G03G 2215/0141	.....	the linear arrangement being horizontal
G03G 2215/0145	.....	the linear arrangement being vertical
G03G 2215/0148	.....	the linear arrangement being slanted
G03G 2215/0151	..	characterised by the technical problem (not used)
G03G 2215/0154	...	Vibrations and positional disturbances when one member abuts or contacts another member
G03G 2215/0158	...	Colour registration
G03G 2215/0161	....	Generation of registration marks
G03G 2215/0164	...	Uniformity control of the toner density at separate colour transfers
G03G 2215/0167	..	single electrographic recording member
G03G 2215/017	...	single rotation of recording member to produce multicoloured copy
G03G 2215/0174	...	plural rotations of recording member to produce multicoloured copy
G03G 2215/0177	....	Rotating set of developing units
G03G 2215/018	....	Linearly moving set of developing units, one at a time adjacent the recording member
G03G 2215/0183	....	Reciprocal movement of transfer member across transfer point
G03G 2215/0187	...	Multicoloured toner image formed on the recording member
G03G 2215/019	..	Structural features of the multicolour image forming apparatus (not used)
G03G 2215/0193	...	transfer member separable from recording member
G03G 2215/0196	...	Recording medium carrying member with speed switching
G03G 2215/02	.	Arrangements for laying down a uniform charge
G03G 2215/021	..	by contact, friction or induction
G03G 2215/022	...	using a magnetic brush
G03G 2215/023	...	using a laterally vibrating brush
G03G 2215/025	...	using contact charging means having lateral dimensions related to other apparatus means, e.g. photodrum, developing roller
G03G 2215/026	..	by coronas
G03G 2215/027	...	using wires
G03G 2215/028	...	using pointed electrodes
G03G 2215/04	.	Arrangements for exposing and producing an image
G03G 2215/0402	..	Exposure devices
G03G 2215/0404	...	Laser
G03G 2215/0407	...	Light-emitting array or panel
G03G 2215/0409	....	Light-emitting diodes, i.e. LED-array
G03G 2215/0412	....	Electroluminescent elements, i.e. EL-array
G03G 2215/0414	....	Liquid-crystal display elements, i.e. LCD-shutter array
G03G 2215/0417	...	Standard lamp used to produce a reflection or transmission image of an original

G03G 2215/0419	...	Device not using light, e.g. ion-writer
G03G 2215/0421	...	Plurality of devices for producing the image (excluding dedicated erasing means)
G03G 2215/0424	...	Using contents of CCD array to produce the image
G03G 2215/0426	..	Editing of the image, e.g. adding or deleting (correction, i.e. changing or enhancing the image G03G 2215/0429)
G03G 2215/0429	..	Changing or enhancing the image
G03G 2215/0431	...	Producing a clean non-image area, i.e. avoiding show-around effects
G03G 2215/0434	....	Parameters defining the non-image area to be cleaned (not used)
G03G 2215/0436	.....	Document properties at the scanning position, e.g. position and density
G03G 2215/0439	.....	Automatic detection of properties
G03G 2215/0441	.....	Manual input of properties
G03G 2215/0443	.....	Copy medium outline relative to the charge image
G03G 2215/0446	.....	Magnification degree
G03G 2215/0448	....	Charge-erasing means for the non-image area
G03G 2215/0451	.....	Light-emitting array or panel
G03G 2215/0453	.....	Light-emitting diodes, i.e. LED-array
G03G 2215/0456	.....	Electroluminescent elements, i.e. EL-array
G03G 2215/0458	.....	Liquid-crystal display elements, i.e. LCD-shutter array
G03G 2215/046	.....	Charger
G03G 2215/0463	.....	Exposure lamp used for scanning
G03G 2215/0465	....	Developing conditions changed to produce a clean non-image area
G03G 2215/0468	...	Image area information changed (default is the charge image)
G03G 2215/047	....	Image corrections
G03G 2215/0473	.....	due to document imperfections, e.g. punchholes, books
G03G 2215/0475	.....	due to cover imperfection, i.e. show-through problem
G03G 2215/0478	.....	due to image carrier variations, e.g. ageing
G03G 2215/048	....	Technical-purpose-oriented image area changes
G03G 2215/0482	.....	Toner-free areas produced
G03G 2215/0485	.....	Avoiding problems in standard processing steps, such as transfer and fixing
G03G 2215/0487	.....	Adapted to post-processing step, e.g. binding
G03G 2215/049	.....	Hiding of information contained in the image
G03G 2215/0492	....	Without changing the charge image
G03G 2215/0495	..	Plural charge levels of latent image produced, e.g. trilevel
G03G 2215/0497	..	Exposure from behind the image carrying surface
G03G 2215/06	.	Developing structures, details
G03G 2215/0602	..	Developer

NOTE

G03G 2215/0602

(continued)

Indexing codes of group [G03G 2215/0602](#) and subgroups can be followed by additional symbols preceded by a "," sign and relating to additional characteristics.

G03G 2215/0604	...	solid type
G03G 2215/0607	....	two-component
G03G 2215/0609	.....	magnetic brush
G03G 2215/0612	.....	cascade
G03G 2215/0614	....	one-component
G03G 2215/0617	.....	contact development (i.e. the developer layer on the donor member contacts the latent image carrier)
G03G 2215/0619	.....	non-contact (flying development)
G03G 2215/0621	.....	powder cloud
G03G 2215/0624	....	plural systems represented (e.g. in a multicolour device or for optimising photo line development)
G03G 2215/0626	...	liquid type (at developing position)
G03G 2215/0629	....	liquid at room temperature
G03G 2215/0631	....	melted, or otherwise made liquid
G03G 2215/0634	..	Developing device

NOTE

Indexing codes of group [G03G 2215/0634](#) and subgroups can be followed by additional symbols preceded by a "," sign and relating to additional characteristics.

G03G 2215/0636	...	Specific type of dry developer device
G03G 2215/0639	....	Without donor member (i.e. developing housing slides on latent image-carrying member)
G03G 2215/0641	....	Without separate supplying member (i.e. with developing housing sliding on donor member)
G03G 2215/0643	....	Electrodes in developing area, e.g. wires, not belonging to the main donor part
G03G 2215/0646	.....	Electrodes only acting from one side of the developing area, e.g. plate electrode
G03G 2215/0648	....	Two or more donor members
G03G 2215/0651	....	Electrodes in donor member surface
G03G 2215/0653	.....	Microelectrodes in donor member surface, e.g. floating
G03G 2215/0656	....	Fixed electrodes behind moving donor member surface
G03G 2215/0658	...	Liquid developer devices
G03G 2215/066	..	Toner cartridge or other attachable and detachable container for supplying developer material to replace the used material
G03G 2215/0663	...	having a longitudinal rotational axis, around which at least one part is rotated when mounting or using the cartridge
G03G 2215/0665	....	Generally horizontally mounting of said toner cartridge parallel to its longitudinal rotational axis

G03G 2215/0668	.....	Toner discharging opening at one axial end
G03G 2215/067	.....	Toner discharging opening covered by arcuate shutter
G03G 2215/0673	....	Generally vertically mounting of said toner cartridge parallel to its longitudinal rotational axis
G03G 2215/0675	....	Generally cylindrical container shape having two ends
G03G 2215/0678	....	Bottle shaped container having a bottle neck for toner discharge
G03G 2215/068	...	having a box like shape
G03G 2215/0682	...	Bag-type non-rigid container
G03G 2215/0685	...	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, not acting as a passive closure for the developer replenishing opening
G03G 2215/0687	...	using a peelable sealing film
G03G 2215/069	...	using a sealing member to be ruptured or cut
G03G 2215/0692	...	using a slidable sealing member, e.g. shutter
G03G 2215/0695	...	using identification means or means for storing process or use parameters
G03G 2215/0697	....	being an electronically readable memory
G03G 2215/08	.	Details of powder developing device not concerning the development directly (not used)
G03G 2215/0802	..	Arrangements for agitating or circulating developer material
G03G 2215/0805	...	Cleaning blade adjacent to the donor member
G03G 2215/0808	...	Donor member rotation direction (not used)
G03G 2215/0811	....	Upper part of donor member transports used developer back to the sump
G03G 2215/0813	....	Lower part of donor member transports used developer back to the sump
G03G 2215/0816	...	Agitator type (not used)
G03G 2215/0819	....	two or more agitators
G03G 2215/0822	.....	with wall or blade between agitators
G03G 2215/0825	....	belt
G03G 2215/0827	....	Augers
G03G 2215/083	.....	with two opposed pitches on one shaft
G03G 2215/0833	.....	with varying pitch on one shaft
G03G 2215/0836	...	Way of functioning of agitator means (not used)
G03G 2215/0838	....	Circulation of developer in a closed loop within the sump of the developing device
G03G 2215/0841	....	Presentation of developer to donor member
G03G 2215/0844	.....	by upward movement of agitator member
G03G 2215/0847	.....	by downward movement of agitator member
G03G 2215/085	...	Stirring member in developer container
G03G 2215/0852	....	reciprocating
G03G 2215/0855	..	Materials and manufacturing of the developing device
G03G 2215/0858	...	Donor member (not used)
G03G 2215/0861	....	Particular composition or materials

G03G 2215/0863	....	Manufacturing
G03G 2215/0866	...	Metering member
G03G 2215/0869	...	Supplying member
G03G 2215/0872	...	Housing of developing device
G03G 2215/0875	..	Arrangements for shipping or transporting of the developing device to or from the user
G03G 2215/0877	...	Sealing of the developing device opening, facing the image-carrying member
G03G 2215/088	....	Peelable sealing film
G03G 2215/0883	....	Rupturable sealing film, e.g. tearable film
G03G 2215/0886	...	Container for holding the whole developing device when outside the machine, e.g. box, sack
G03G 2215/0888	..	Arrangements for detecting toner level or concentration in the developing device
G03G 2215/0891	...	Optical detection
G03G 2215/0894	....	through a light transmissive window in the developer container wall
G03G 2215/0897	.....	Cleaning of the light transmissive window
G03G 2215/16	.	Transferring device, details
G03G 2215/1604	..	Main transfer electrode (not used)
G03G 2215/1609	...	Corotron
G03G 2215/1614	...	Transfer roll
G03G 2215/1619	...	Transfer drum
G03G 2215/1623	...	Transfer belt
G03G 2215/1628	...	Blade
G03G 2215/1633	...	Plate
G03G 2215/1638	...	Wires
G03G 2215/1642	...	Brush
G03G 2215/1647	..	Cleaning of transfer member
G03G 2215/1652	...	of transfer roll
G03G 2215/1657	...	of transfer drum
G03G 2215/1661	...	of transfer belt
G03G 2215/1666	..	Preconditioning of copy medium before the transfer point
G03G 2215/1671	...	Preheating the copy medium before the transfer point
G03G 2215/1676	..	Simultaneous toner image transfer and fixing
G03G 2215/168	...	at the first transfer point
G03G 2215/1685	....	using heat
G03G 2215/169	....	without heat
G03G 2215/1695	...	at the second or higher order transfer point
G03G 2215/20	.	Details of the fixing device or process

NOTE

G03G 2215/20

(continued)

Indexing codes of group [G03G 2215/20](#) can be followed by additional symbols preceded by a "+" sign and relating to additional characteristics. The indexing codes have the meaning as indicated below.

+H Using heat to fix

+P Using pressure to fix

+Pl where the pressure is changed

+PlA being adapted to the current toner-carrying medium treated (e.g. duplex copy, colour copy, OHP sheet, envelope)

+PlB compensating for temperature or other technical condition variations (e.g. sheet skewing) occurring

+PlC when being in a non-fixing or waiting mode

+PlM for maintenance purpose or abnormal situations (e.g. power cut-off)

G03G 2215/2003	..	Structural features of the fixing device (not used)
G03G 2215/2006	...	Plurality of separate fixing areas
G03G 2215/2009	...	Pressure belt
G03G 2215/2012	....	having an end
G03G 2215/2016	...	Heating belt
G03G 2215/2019	....	the belt not heating the toner or medium directly, e.g. heating a heating roller
G03G 2215/2022	....	the fixing nip having both a stationary and a rotating belt support member opposing a pressure member
G03G 2215/2025	....	the fixing nip having a rotating belt support member opposing a pressure member
G03G 2215/2029	.....	the belt further entrained around one or more stationary belt support members, the latter not being a cooling device
G03G 2215/2032	.....	the belt further entrained around additional rotating belt support members
G03G 2215/2035	....	the fixing nip having a stationary belt support member opposing a pressure member
G03G 2215/2038	.....	the belt further entrained around one or more rotating belt support members
G03G 2215/2041	....	the fixing nip being formed by tensioning the belt over a surface portion of a pressure member
G03G 2215/2045	...	Variable fixing speed
G03G 2215/2048	...	Surface layer material
G03G 2215/2051	....	Silicone rubber
G03G 2215/2054	....	Inorganic filler, e.g. silica powder
G03G 2215/2058	...	Shape of roller along rotational axis
G03G 2215/2061	....	concave
G03G 2215/2064	....	convex
G03G 2215/2067	....	Shape of roller core
G03G 2215/207	..	Type of toner image to be fixed (not used)
G03G 2215/2074	...	colour

- G03G 2215/2077 Fixing between separate colour toner transfers]
- G03G 2215/208 black and white
- G03G 2215/2083 duplex
- G03G 2215/2087 simplex
- G03G 2215/209 plural types of toner image handled by the fixing device
- G03G 2215/2093 Release agent handling devices
- G03G 2215/2096 using porous fluoropolymers for wicking the release agent

G03G 2217/00 **Details of electrographic processes using patterns other than charge patterns**

- G03G 2217/0008 Process where toner image is produced by controlling which part of the toner should move to the image- carrying member
- G03G 2217/0016 where the toner is conveyed over the electrode array to get a charging and then being moved
- G03G 2217/0025 where the toner starts moving from behind the electrode array, e.g. a mask of holes
- G03G 2217/0033 where the toner is held behind a gate electrode array until being released
- G03G 2217/0041 Process where the image-carrying member is always completely covered by a toner layer
- G03G 2217/005 where the toner is charged before producing the toner layer on the image-carrying member
- G03G 2217/0058 where the toner layer is being charged
- G03G 2217/0066 where no specific pick-up of toner occurs before transfer of the toner image
- G03G 2217/0075 Process using an image-carrying member having an electrode array on its surface
- G03G 2217/0083 Process using a fixed electrode array behind a moving recording medium
- G03G 2217/0091 Process comprising image exposure at the developing area

G03G 2221/00 **Processes not provided for by group [G03G 2215/00](#) , e.g. cleaning or residual charge elimination**

- G03G 2221/0005 Cleaning of residual toner

NOTE

Indexing codes of group [G03G 2221/0005](#) and subgroups can be followed by additional symbols preceded by a "+" sign and relating to additional characteristics. The additional symbols have the meaning as indicated below.

- +A performed by the developing device (so called cleanerless)
- +B performed by a separate dedicated cleaning device
- +B1 using magnetic brush
- +B2 using mechanical means (also powders)
- +B2C with magnetic support
- +B2D with electrostatic support (also AC-voltage)
- +B3 using magnetic means (not m. brush as in +B1; +B2C takes precedence)
- +B3C with electrostatic support (also AC-voltage)
- +B4 using electrostatic means only

G03G 2221/0005

(continued)

+B4C with AC
 +B4D only DC
 +B5 including suction or air pressure
 +C Precleaning treatment to enhance cleaning action to come
 +C1 discharging the toner with electrodes (corona or the like)
 +C1D with AC
 +C1E with DC only
 +C2 discharging with lamps (normally to neutralise the photoconductor so the residual toner can more easily be removed)
 +C3 Mechanical means for redistributing the residual toner (also magnetic brush)
 +C3C simultaneously acting as the main charger of the photosensitive member
 +C3D with magnetic support
 +C3E with electrostatic support
 +C3E1 including AC
 +C3P plural sequential mechanical means
 +C4 magnetic means
 +C4D with electrostatic support (also AC-voltage)
 +C5 electrostatic means (not charging as in +C1)
 +C5D with AC
 +C5E with DC only

- G03G 2221/001 .. Plural sequential cleaning devices
- G03G 2221/0015 .. Width of cleaning device related to other parts of the apparatus, e.g. transfer belt width
- G03G 2221/0021 .. applying vibrations to the electrographic recording medium for assisting the cleaning, e.g. ultrasonic vibration
- G03G 2221/0026 . Cleaning of foreign matter, e.g. paper powder, from imaging member
- G03G 2221/0031 .. Type of foreign matter (not used)
- G03G 2221/0036 ... Oil and other liquid matter
- G03G 2221/0042 ... Paper powder and other dry foreign matter
- G03G 2221/0047 .. Type of cleaning device
- G03G 2221/0052 ... Common container for holding cleaned foreign matter and residual toner
- G03G 2221/0057 Separate cleaning members for foreign matter and residual toner
- G03G 2221/0063 ... Cleaning device for foreign matter separate from residual toner cleaning device
- G03G 2221/0068 .. Cleaning mechanism
- G03G 2221/0073 ... Electrostatic
- G03G 2221/0078 ... Magnetic

G03G 2221/0084	...	Liquid
G03G 2221/0089	...	Mechanical
G03G 2221/0094	...	Suction
G03G 2221/16	.	Mechanical means for facilitating the maintenance of the apparatus, e.g. modular arrangements and complete machine concepts
G03G 2221/1603	..	for multicoloured copies
G03G 2221/1606	..	for the photosensitive element
G03G 2221/1609	...	protective arrangements for preventing damage
G03G 2221/1612	....	plural shutters for openings of process cartridge
G03G 2221/1615	...	being a belt
G03G 2221/1618	..	for the cleaning unit
G03G 2221/1621	...	re-use of cleaned toner
G03G 2221/1624	...	transporting cleaned toner into separate vessels, e.g. photoreceptors, external containers
G03G 2221/1627	...	Details concerning the cleaning process
G03G 2221/163	..	for the developer unit
G03G 2221/1633	...	Details concerning the developing process
G03G 2221/1636	..	for the exposure unit
G03G 2221/1639	..	for the fixing unit
G03G 2221/1642	..	for the transfer unit
G03G 2221/1645	..	for conducting air through the machine, e.g. cooling
G03G 2221/1648	..	using seals, e.g. to prevent scattering of toner (light shields for the photoreceptor G03G 2221/1609)
G03G 2221/1651	..	for connecting the different parts
G03G 2221/1654	...	Locks and means for positioning or alignment
G03G 2221/1657	...	transmitting mechanical drive power
G03G 2221/166	...	Electrical connectors
G03G 2221/1663	..	having lifetime indicators
G03G 2221/1666	...	integer lifetimes of each other
G03G 2221/1669	..	Details about used materials
G03G 2221/1672	..	Paper handling
G03G 2221/1675	...	jam treatment
G03G 2221/1678	..	Frame structures
G03G 2221/1681	...	Portable machines
G03G 2221/1684	...	using extractable subframes, e.g. on rails or hinges
G03G 2221/1687	...	using opening shell type machines, e.g. pivoting assemblies
G03G 2221/169	...	Structural door designs
G03G 2221/1693	..	for charging
G03G 2221/1696	..	for auxiliary devices, e.g. add-on modules
G03G 2221/18	..	Cartridge systems
G03G 2221/1807	...	Transport of supply parts, e.g. process cartridges

G03G 2221/1815	...	for cleaning or developing but not being a process cartridge
G03G 2221/1823	...	Cartridges having electronically readable memory
G03G 2221/183	...	Process cartridge
G03G 2221/1838	....	Autosetting of process parameters
G03G 2221/1846	....	using a handle for carrying or pulling out of the main machine
G03G 2221/1853	....	having a submodular arrangement
G03G 2221/1861	.....	Rotational subunit connection
G03G 2221/1869	.....	Cartridge holders, e.g. intermediate frames for placing cartridge parts therein
G03G 2221/1876	.....	for production purposes, e.g. manufacture or mass production
G03G 2221/1884	....	Projections on process cartridge for guiding mounting thereof in main machine
G03G 2221/1892	....	Presence detection