

# 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](#))

## NOTES

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

<b>5/00</b>	<b>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 <a href="#">G01D 15/34</a>; photosensitive materials for photographic purposes <a href="#">G03C</a>)</b>	<b>5/047</b>	. . . . characterised by the charge-generation layer or charge transport layer {( <a href="#">G03G 5/0433</a> and <a href="#">G03G 5/0436</a> take precedence)}
<b>5/005</b>	. {Materials for treating the recording members, e.g. for cleaning, reactivating, polishing}	<b>5/05</b>	. . . Organic bonding materials; Methods for coating a substrate with a photoconductive layer; Inert supplements for use in photoconductive layers
<b>5/02</b>	. Charge-receiving layers ( <a href="#">G03G 5/153</a> takes precedence)	<b>5/0503</b>	. . . . {Inert supplements}
<b>5/0202</b>	. . {Dielectric layers for electrography}	<b>5/0507</b>	. . . . {Inorganic compounds}
<b>5/0205</b>	. . . {Macromolecular components}	<b>5/051</b>	. . . . {Organic non-macromolecular compounds}
<b>5/0208</b>	. . . . {obtained by reactions only involving carbon-to-carbon unsaturated bonds}	<b>5/0514</b>	. . . . . {not comprising cyclic groups}
<b>5/0211</b>	. . . . {obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}	<b>5/0517</b>	. . . . . {comprising one or more cyclic groups consisting of carbon-atoms only}
<b>5/0214</b>	. . . {Organic non-macromolecular components}	<b>5/0521</b>	. . . . . {comprising one or more heterocyclic groups}
<b>5/0217</b>	. . . {Inorganic components}	<b>5/0525</b>	. . . . {Coating methods}
<b>5/022</b>	. . Layers for surface-deformation imaging, e.g. frost imaging	<b>5/0528</b>	. . . . {Macromolecular bonding materials}
<b>5/024</b>	. . Photoelectret layers	<b>NOTE</b> In groups <a href="#">G03G 5/0528</a> - <a href="#">G03G 5/0596</a> , in the absence of an indication to the contrary, a polymer is classified in the last appropriate place	
<b>5/026</b>	. . Layers in which during the irradiation a chemical reaction occurs whereby electrically conductive patterns are formed in the layers, e.g. for chemixerography		
<b>5/028</b>	. . Layers in which after being exposed to heat patterns electrically conductive patterns are formed in the layers, e.g. for thermoxerography	<b>5/0532</b>	. . . . . {obtained by reactions only involving carbon-to-carbon unsaturated bonds}
<b>5/04</b>	. . Photoconductive layers; Charge-generation layers or charge-transporting layers; Additives therefor; Binders therefor	<b>5/0535</b>	. . . . . {Polyolefins; Polystyrenes; Waxes}
<b>5/043</b>	. . . Photoconductive layers characterised by having two or more layers or characterised by their composite structure	<b>5/0539</b>	. . . . . {Halogenated polymers}
<b>5/0433</b>	. . . . {all layers being inorganic}	<b>5/0542</b>	. . . . . {Polyvinylalcohol, polyallylalcohol; Derivatives thereof, e.g. polyvinylesters, polyvinylethers, polyvinylamines}
<b>5/0436</b>	. . . . {combining organic and inorganic layers}	<b>5/0546</b>	. . . . . {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}

5/055	. . . . .	{Polymers containing hetero rings in the side chain}
5/0553	. . . . .	{Polymers derived from conjugated double bonds containing monomers, e.g. polybutadiene; Rubbers}
5/0557	. . . . .	{obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
5/056	. . . . .	{Polyesters}
5/0564	. . . . .	{Polycarbonates}
5/0567	. . . . .	{Other polycondensates comprising oxygen atoms in the main chain; Phenol resins}
5/0571	. . . . .	{Polyamides; Polyimides}
5/0575	. . . . .	{Other polycondensates comprising nitrogen atoms with or without oxygen atoms in the main chain}
5/0578	. . . . .	{Polycondensates comprising silicon atoms in the main chain}
5/0582	. . . . .	{Polycondensates comprising sulfur atoms in the main chain}
5/0585	. . . . .	{Cellulose and derivatives}
5/0589	. . . . .	{Macromolecular compounds characterised by specific side-chain substituents or end groups}
5/0592	. . . . .	{Macromolecular compounds characterised by their structure or by their chemical properties, e.g. block polymers, reticulated polymers, molecular weight, acidity}
5/0596	. . . . .	{Macromolecular compounds characterised by their physical properties}
5/06	. . .	characterised by the photoconductive material being organic

**NOTE**

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

5/0601	. . . . .	{Acyclic or carbocyclic compounds}
5/0603	. . . . .	{containing halogens}
5/0605	. . . . .	{Carbocyclic compounds}
5/0607	. . . . .	{containing at least one non-six-membered ring}
5/0609	. . . . .	{containing oxygen}
5/0611	. . . . .	{Squaric acid}
5/0612	. . . . .	{containing nitrogen}
5/0614	. . . . .	{Amines}
5/0616	. . . . .	{Hydrazines; Hydrazones}
5/0618	. . . . .	{containing oxygen and nitrogen}
5/062	. . . . .	{containing non-metal elements other than hydrogen, halogen, oxygen or nitrogen}
5/0622	. . . . .	{Heterocyclic compounds}
5/0624	. . . . .	{containing one hetero ring}
5/0625	. . . . .	{being three- or four-membered}
5/0627	. . . . .	{being five-membered}
5/0629	. . . . .	{containing one hetero atom}
5/0631	. . . . .	{containing two hetero atoms}
5/0633	. . . . .	{containing three hetero atoms}
5/0635	. . . . .	{being six-membered}
5/0637	. . . . .	{containing one hetero atom}
5/0638	. . . . .	{containing two hetero atoms}

5/064	. . . . .	{containing three hetero atoms}
5/0642	. . . . .	{being more than six-membered}
5/0644	. . . . .	{containing two or more hetero rings}
5/0646	. . . . .	{in the same ring system}
5/0648	. . . . .	{containing two relevant rings}
5/065	. . . . .	{containing three relevant rings}
5/0651	. . . . .	{containing four relevant rings}
5/0653	. . . . .	{containing five relevant rings}
5/0655	. . . . .	{containing six relevant rings}
5/0657	. . . . .	{containing seven relevant rings}
5/0659	. . . . .	{containing more than seven relevant rings}
5/0661	. . . . .	{in different ring systems, each system containing at least one hetero ring}
5/0662	. . . . .	{containing metal elements}

**NOTE**

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

5/0664	. . . . .	{Dyes}
5/0666	. . . . .	{containing a methine or polymethine group}
5/0668	. . . . .	{containing only one methine or polymethine group}
5/067	. . . . .	{containing hetero rings}
5/0672	. . . . .	{containing two or more methine or polymethine groups}
5/0674	. . . . .	{containing hetero rings}
5/0675	. . . . .	{Azo dyes}
5/0677	. . . . .	{Monoazo dyes}
5/0679	. . . . .	{Disazo dyes}
5/0681	. . . . .	{containing hetero rings in the part of the molecule between the azo-groups}
5/0683	. . . . .	{containing polymethine or anthraquinone groups}
5/0685	. . . . .	{containing hetero rings in the part of the molecule between the azo-groups}
5/0687	. . . . .	{Trisazo dyes}
5/0688	. . . . .	{containing hetero rings}
5/069	. . . . .	{containing polymethine or anthraquinone groups}
5/0692	. . . . .	{containing hetero rings}
5/0694	. . . . .	{containing more than three azo groups}
5/0696	. . . . .	{Phthalocyanines}
5/0698	. . . . .	{Compounds of unspecified structure characterised by a substituent only}
5/07	. . . . .	Polymeric photoconductive materials
5/071	. . . . .	{obtained by reactions only involving carbon-to-carbon unsaturated bonds ( <a href="#">G03G 5/078 takes precedence</a> )}
5/073	. . . . .	{comprising pending carbazol groups}
5/075	. . . . .	{obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds ( <a href="#">G03G 5/078 takes precedence</a> )}
5/076	. . . . .	{having a photoconductive moiety in the polymer backbone}
5/078	. . . . .	{comprising silicon atoms}
5/08	. . .	characterised by the photoconductive material being inorganic
5/082	. . . . .	and not being incorporated in a bonding material, e.g. vacuum deposited

- 5/08207 . . . . . {Selenium-based}  
 5/08214 . . . . . {Silicon-based}  
 5/08221 . . . . . {comprising one or two silicon based layers}  
 5/08228 . . . . . {at least one with varying composition}  
 5/08235 . . . . . {comprising three or four silicon-based layers}  
 5/08242 . . . . . {at least one with varying composition}  
 5/0825 . . . . . {comprising five or six silicon-based layers}  
 5/08257 . . . . . {at least one with varying composition}  
 5/08264 . . . . . {comprising seven or more silicon-based layers}  
 5/08271 . . . . . {at least one with varying composition}  
 5/08278 . . . . . {Depositing methods}  
 5/08285 . . . . . {Carbon-based (in ad mixture with Si [G03G 5/08214](#))}  
 5/08292 . . . . . {Germanium-based (in ad mixture with Si [G03G 5/08214](#))}  
 5/085 . . . . . and being incorporated in an inorganic bonding material, e.g. glass-like layers  
 5/087 . . . . . and being incorporated in an organic bonding material  
 5/09 . . . Sensitisors or activators, e.g. dyestuffs ([G03G 5/12 takes precedence](#))  
 5/10 . Bases for charge-receiving or other layers  
 5/101 . . {Paper bases ([G03G 5/102](#), [G03G 5/104](#), [G03G 5/105 take precedence](#))}  
 5/102 . . {consisting of or comprising metals}  
 5/104 . . {comprising inorganic material other than metals, e.g. salts, oxides, carbon}  
 5/105 . . {comprising electroconductive macromolecular compounds}  
 5/107 . . . {the electroconductive macromolecular compounds being cationic}  
 5/108 . . . {the electroconductive macromolecular compounds being anionic}  
 5/12 . Recording members for multicolour processes  
 5/14 . Inert intermediate or cover layers for charge-receiving layers ([G03G 5/04 takes precedence](#))  
 5/142 . . {Inert intermediate layers}  
 5/144 . . . {comprising inorganic material}  
 5/147 . . Cover layers  
 5/14704 . . . {comprising inorganic material}  
 5/14708 . . . {comprising organic material}  
 5/14713 . . . {Macromolecular material}
- NOTE**  
 In groups [G03G 5/14713](#) - [G03G 5/14795](#), in the absence of an indication to the contrary, a polymer is classified in the last appropriate place
- 5/14717 . . . . . {obtained by reactions only involving carbon-to-carbon unsaturated bonds}  
 5/14721 . . . . . {Polyolefins; Polystyrenes; Waxes}  
 5/14726 . . . . . {Halogenated polymers}
- 5/1473 . . . . . {Polyvinylalcohol, polyallyl alcohol; Derivatives thereof, e.g. polyvinylesters, polyvinylethers, polyvinylamines}  
 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}  
 5/14739 . . . . . {Polymers containing hereto rings in the side chain}  
 5/14743 . . . . . {Polymers derived from conjugated double bonds containing monomers, e.g. polybutadiene; Rubbers}  
 5/14747 . . . . . {obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}  
 5/14752 . . . . . {Polyesters}  
 5/14756 . . . . . {Polycarbonates}  
 5/1476 . . . . . {Other polycondensates comprising oxygen atoms in the main chain; Phenol resins}  
 5/14765 . . . . . {Polyamides; Polyimides}  
 5/14769 . . . . . {Other polycondensates comprising nitrogen atoms with or without oxygen atoms in the main chain}  
 5/14773 . . . . . {Polycondensates comprising silicon atoms in the main chain}  
 5/14778 . . . . . {Polycondensates comprising sulfur atoms in the main chain}  
 5/14782 . . . . . {Cellulose and derivatives}  
 5/14786 . . . . . {Macromolecular compounds characterised by specific side-chain substituents or end groups}  
 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}  
 5/14795 . . . . . {Macromolecular compounds characterised by their physical properties}
- 5/153 . Charge-receiving layers combined with additional photo- or thermo-sensitive, but not photoconductive, layers, e.g. silver-salt layers  
 5/16 . Layers for recording by changing the magnetic properties, e.g. for Curie-point-writing
- 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](#))**
- 7/0006 . {Cover layers for image-receiving members; Strippable coversheets}  
 7/0013 . . {Inorganic components thereof}  
 7/002 . . {Organic components thereof}  
 7/0026 . . . {being macromolecular}  
 7/0033 . . . . {Natural products or derivatives thereof, e.g. cellulose, proteins}  
 7/004 . . . . {obtained by reactions only involving carbon-to-carbon unsaturated bonds}  
 7/0046 . . . . {obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}  
 7/0053 . {Intermediate layers for image-receiving members}  
 7/006 . {Substrates for image-receiving members; Image-receiving members comprising only one layer}

7/0066	. . {Inorganic components thereof}	9/08702	. . . {comprising macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds}
7/0073	. . {Organic components thereof}	9/08704	. . . . {Polyalkenes}
7/008	. . . {being macromolecular}	9/08706	. . . . {Polymers of alkenyl-aromatic compounds}
7/0086	. {Back layers for image-receiving members; Strippable backsheets}	9/08708	. . . . . {Copolymers of styrene}
7/0093	. {Image-receiving members, based on materials other than paper or plastic sheets, e.g. textiles, metals}	9/08711	. . . . . {with esters of acrylic or methacrylic acid}
<b>8/00</b>	<b>Layers covering the final reproduction, e.g. for protecting, for writing thereon</b>	9/08713	. . . . . {Polyvinylhalogenides}
<b>9/00</b>	<b>Developers</b>	9/08715	. . . . . {containing chlorine, bromine or iodine}
9/06	. the developer being electrolytic	9/08717	. . . . . {Polyvinylchloride}
9/08	. with toner particles	9/0872	. . . . . {containing fluorine}
9/0802	. . {Preparation methods}	9/08722	. . . . . {Polyvinylalcohols; Polyallyl alcohols; Polyvinylethers; Polyvinylaldehydes; Polyvinylketones; Polyvinylketals}
9/0804	. . . {whereby the components are brought together in a liquid dispersing medium}	9/08724	. . . . . {Polyvinylesters}
9/0806	. . . . {whereby chemical synthesis of at least one of the toner components takes place}	9/08726	. . . . . {Polymers of unsaturated acids or derivatives thereof}
9/0808	. . . {by dry mixing the toner components in solid or softened state}	9/08728	. . . . . {Polymers of esters}
9/081	. . . {by mixing the toner components in a liquefied state; melt kneading; reactive mixing}	9/08731	. . . . . {Polymers of nitriles}
9/0812	. . . {Pretreatment of components}	9/08733	. . . . . {Polymers of unsaturated polycarboxylic acids}
9/0815	. . . {Post-treatment}	9/08735	. . . . . {Polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a side-chain, e.g. coumarone-indene resins}
9/0817	. . . {Separation; Classifying}	9/08737	. . . . . {Polymers derived from conjugated dienes}
9/0819	. . {characterised by the dimensions of the particles}	9/0874	. . . . . {Polymers comprising hetero rings in the side chains}
9/0821	. . {characterised by physical parameters ( <a href="#">magnetic parameters G03G 9/083</a> )}	9/08742	. . . {comprising macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
9/0823	. . . {Electric parameters}	9/08744	. . . . . {Polyacetals}
9/0825	. . {characterised by their structure; characterised by non-homogeneous distribution of components ( <a href="#">microcapsular toners G03G 9/093</a> )}	9/08746	. . . . . {Condensation polymers of aldehydes or ketones}
9/0827	. . {characterised by their shape, e.g. degree of sphericity}	9/08748	. . . . . {Phenoplasts}
<b>NOTE</b>		9/08751	. . . . . {Aminoplasts}
In groups <a href="#">G03G 9/083</a> - <a href="#">G03G 9/135</a> , in the absence of an indication to the contrary, classification is made in the last appropriate place		9/08753	. . . . . {Epoxyresins}
9/083	. . Magnetic toner particles	9/08755	. . . . . {Polyesters}
9/0831	. . . {Chemical composition of the magnetic components}	9/08757	. . . . . {Polycarbonates}
9/0832	. . . . {Metals}	9/08759	. . . . . {Polyethers}
9/0833	. . . . {Oxides}	9/08762	. . . . . {Other polymers having oxygen as the only heteroatom in the main chain}
9/0834	. . . . {Non-magnetic inorganic compounds chemically incorporated in magnetic components}	9/08764	. . . . . {Polyureas; Polyurethanes}
9/0835	. . . {Magnetic parameters of the magnetic components}	9/08766	. . . . . {Polyamides, e.g. polyesteramides}
9/0836	. . . {Other physical parameters of the magnetic components}	9/08768	. . . . . {Other polymers having nitrogen in the main chain, with or without oxygen or carbon only}
9/0837	. . . {Structural characteristics of the magnetic components, e.g. shape, crystallographic structure}	9/08771	. . . . . {Polymers having sulfur in the main chain, with or without oxygen, nitrogen or carbon only}
9/0838	. . . {Size of magnetic components}	9/08773	. . . . . {Polymers having silicon in the main chain, with or without sulfur, oxygen, nitrogen or carbon only}
9/0839	. . . {Treatment of the magnetic components; Combination of the magnetic components with non-magnetic materials ( <a href="#">G03G 9/0834</a> takes precedence)}	9/08775	. . . {Natural macromolecular compounds or derivatives thereof}
9/087	. . Binders for toner particles	9/08777	. . . . . {Cellulose or derivatives thereof}
		9/08779	. . . . . {Natural rubber}
		9/08782	. . . . . {Waxes}
		9/08784	. . . {Macromolecular material not specially provided for in a single one of groups <a href="#">G03G 9/08702</a> - <a href="#">G03G 9/08775</a> }
		9/08786	. . . . . {Graft polymers}
		9/08788	. . . . . {Block polymers}



- 9/08791 . . . . {characterised by the presence of specified groups or side chains}
- 9/08793 . . . . {Crosslinked polymers}
- 9/08795 . . . . {characterised by their chemical properties, e.g. acidity, molecular weight, sensitivity to reactants}
- 9/08797 . . . . {characterised by their physical properties, e.g. viscosity, solubility, melting temperature, softening temperature, glass transition temperature}
- 9/09 . . Colouring agents for toner particles
- 9/0902 . . . {Inorganic compounds}
- 9/0904 . . . . {Carbon black}
- 9/0906 . . . {Organic dyes}
- 9/0908 . . . . {Anthracene dyes}
- 9/091 . . . . {Azo dyes}
- 9/0912 . . . . {Indigoid; Diaryl and Triaryl methane; Oxyketone dyes}
- 9/0914 . . . . {Acridine; Azine; Oxazine; Thiazine; (Xanthene-) dyes}
- 9/0916 . . . . {Quinoline; Polymethine dyes}
- 9/0918 . . . . {Phthalocyanine dyes}
- 9/092 . . . . {Quinacridones}
- 9/0922 . . . . {Formazane dyes; Nitro and Nitroso dyes; Quinone imides; Azomethine dyes}
- 9/0924 . . . . {Dyes characterised by specific substituents}
- 9/0926 . . . {characterised by physical or chemical properties}
- 9/0928 . . . {Compounds capable to generate colouring agents by chemical reaction}
- 9/093 . . Encapsulated toner particles
- 9/09307 . . . {specified by the shell material}
- 9/09314 . . . . {Macromolecular compounds}
- 9/09321 . . . . {obtained by reactions only involving carbon-to-carbon unsaturated bonds}
- 9/09328 . . . . {obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
- 9/09335 . . . . {Non-macromolecular organic compounds}
- 9/09342 . . . . {Inorganic compounds}
- 9/0935 . . . {specified by the core material}
- 9/09357 . . . . {Macromolecular compounds}
- 9/09364 . . . . {obtained by reactions only involving carbon-to-carbon unsaturated bonds}
- 9/09371 . . . . {obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
- 9/09378 . . . . {Non-macromolecular organic compounds}
- 9/09385 . . . . {Inorganic compounds}
- 9/09392 . . . {Preparation thereof}
- 9/097 . . Plasticisers; Charge controlling agents
- 9/09708 . . . {Inorganic compounds}
- 9/09716 . . . . {treated with organic compounds}
- 9/09725 . . . . {Silicon-oxides; Silicates}
- 9/09733 . . . {Organic compounds ([G03G 9/08782](#) takes precedence)}
- 9/09741 . . . . {cationic}
- 9/0975 . . . . {anionic}
- 9/09758 . . . . {comprising a heterocyclic ring}
- 9/09766 . . . . {comprising fluorine}
- 9/09775 . . . . {containing atoms other than carbon, hydrogen or oxygen ([G03G 9/09741](#) - [G03G 9/09766](#) take precedence)}
- 9/09783 . . . {Organo-metallic compounds}
- 9/09791 . . . . {Metallic soaps of higher carboxylic acids}
- 9/10 . . characterised by carrier particles
- 9/107 . . . having magnetic components
- 9/1075 . . . . {Carrier particles having a multi-layered structure; Carrier particles comprising a core}
- 9/113 . . . having coatings applied thereto
- 9/1131 . . . . {Coating methods; Structure of coatings}
- 9/1132 . . . . {Macromolecular components of coatings}
- 9/1133 . . . . {obtained by reactions only involving carbon-to-carbon unsaturated bonds}
- 9/1134 . . . . . {containing fluorine atoms}
- 9/1135 . . . . . {obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
- 9/1136 . . . . . {containing silicon atoms}
- 9/1137 . . . . . {being crosslinked}
- 9/1138 . . . . {Non-macromolecular organic components of coatings}
- 9/1139 . . . . {Inorganic components of coatings}
- 9/12 . . in liquid developer mixtures
- 9/122 . . . {characterised by the colouring agents}
- 9/125 . . . characterised by the liquid
- 9/13 . . . characterised by polymer components
- 9/131 . . . . {obtained by reactions only involving carbon-to-carbon unsaturated bonds}
- 9/132 . . . . {obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
- 9/133 . . . . {Graft-or block polymers}
- 9/135 . . . characterised by stabiliser or charge-controlling agents
- 9/1355 . . . . {Ionic, organic compounds}
- 9/16 . Developers not provided for in groups [G03G 9/06](#) - [G03G 9/135](#), e.g. solutions, aerosols
- 9/18 . . Differentially wetting liquid developers
- 11/00 Selection of substances for use as fixing agents**
- 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
- 13/01 . for multicoloured copies ({colour correction on photography [G03B 27/725](#); picture communication systems [H04N 1/46](#))}
- 13/013 . . {characterised by the developing step, e.g. the properties of the colour developers}
- 13/016 . . {in which the colour powder image is formed directly on the recording material, e.g. DEP methods}
- 13/02 . Sensitising, i.e. laying-down a uniform charge ([devices for corona discharge per se](#) [H01T 19/00](#))
- 13/025 . . {by contact, friction or induction}

- 13/04 . . . Exposing, i.e. imagewise exposure by optically projecting the original image on a photoconductive recording material
- 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)
- 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](#))
- 13/054 . . . using X-rays, e.g. electroradiography
- 13/056 . . . using internal polarisation
- 13/06 . . . Developing
- 13/08 . . . using a solid developer, e.g. powder developer
- 13/09 . . . using magnetic brush
- 13/095 . . . Removing excess solid developer
- 13/10 . . . using a liquid developer, {e.g. [liquid suspension](#)}
- 13/11 . . . Removing excess liquid developer, e.g. by heat
- 13/14 . . . Transferring a pattern to a second base
- 13/16 . . . of a toner pattern, e.g. a powder pattern
- 13/18 . . . of a charge pattern
- 13/20 . . . Fixing, e.g. by using heat
- 13/22 . . . Processes involving a combination of more than one step according to groups [G03G 13/02](#) - [G03G 13/20](#) ([G03G 13/01](#) takes precedence)
- 13/23 . . . specially adapted for copying both sides of an original or for copying on both sides of a recording or image-receiving material
- 13/24 . . . whereby at least two steps are performed simultaneously
- 13/26 . . . for the production of printing plates for non-xerographic printing processes
- 13/28 . . . Planographic printing plates
- 13/283 . . . {obtained by a process including the transfer of a toned image, i.e. indirect process}
- 13/286 . . . {for dry lithography}
- 13/30 . . . Hectographic masters
- 13/32 . . . Relief printing plates
- 13/34 . . . Editing, i.e. producing a composite image by copying one or more original images or parts thereof
- 15/00 Apparatus for electrographic processes using a charge pattern** ([G03G 16/00](#), [G03G 17/00](#) take precedence; {xerographic printers for data processors per se [G06K 15/14](#)})
- 15/01 . . . For producing multicoloured copies {(colour correction in photography [G03C](#); colour correction in printing plate production)}
- 15/0105 . . . {Details of unit}
- 15/011 . . . {for exposing}
- 15/0115 . . . . . {and forming a half-tone image}
- 15/0121 . . . . . {for developing}
- 15/0126 . . . . . {using a solid developer}
- 15/0131 . . . . . {for transferring a pattern to a second base}
- 15/0136 . . . . . {transfer member separable from recording member or [vice versa](#), mode switching}
- 15/0142 . . . {Structure of complete machines}
- 15/0147 . . . . . {using a single reusable electrographic recording member}
- 15/0152 . . . . . {onto which the monocolour toner images are superposed before common transfer from the recording member}
- 15/0157 . . . . . {with special treatment between monocolour image formation}
- 15/0163 . . . . . {primary transfer to the final recording medium}
- 15/0168 . . . . . {single rotation of recording member to produce multicoloured copy ([G03G 15/0163](#) takes precedence)}
- 15/0173 . . . . . {plural rotations of recording member to produce multicoloured copy, e.g. rotating set of developing units ([G03G 15/0163](#) takes precedence)}
- 15/0178 . . . . . {using more than one reusable electrographic recording member, e.g. one for every monocolour image}
- 15/0184 . . . . . {at least one recording member having plural associated developing units}
- 15/0189 . . . . . {primary transfer to an intermediate transfer belt ([G03G 15/0184](#) takes precedence)}
- 15/0194 . . . . . {primary transfer to the final recording medium ([G03G 15/0184](#) takes precedence)}
- 15/02 . . . for laying down a uniform charge, e.g. for sensitising; Corona discharge devices ([G03G 15/14](#) takes precedence)
- 15/0208 . . . . . {by contact, friction or induction, e.g. liquid charging apparatus}
- 15/0216 . . . . . {by bringing a charging member into contact with the member to be charged, e.g. roller, brush chargers}
- 15/0225 . . . . . {provided with means for cleaning the charging member}
- 15/0233 . . . . . {Structure, details of the charging member, e.g. chemical composition, surface properties}
- 15/0241 . . . . . {by bringing charging powder particles into contact with the member to be charged, e.g. by means of a magnetic brush}
- 15/025 . . . . . {by bringing a charging member in the vicinity with the member to be charged, e.g. proximity charging, forming micro gap}
- 15/0258 . . . . . {provided with means for the maintenance of the charging apparatus, e.g. cleaning devices, ozone removing devices [G03G 15/0225](#), [G03G 15/0291](#) takes precedence}
- 15/0266 . . . . . {Arrangements for controlling the amount of charge}
- 15/0275 . . . . . {Arrangements for controlling the area of the photoconductor to be charged}
- 15/0283 . . . . . {Arrangements for supplying power to the sensitising device}
- 15/0291 . . . . . {corona discharge devices, e.g. wires, pointed electrodes, means for cleaning the corona discharge device}
- 15/04 . . . for exposing, i.e. imagewise exposure by optically projecting the original image on a photoconductive recording material

**NOTE**

The original image is obtained by direct optical projection or received from other sources, e.g. by

## G03G

G03G 15/04

(continued)

- computer modified or generated image data, by scanning , e.g. digital copiers
- 15/04009 . . {by forming an intermediate temporary image projected one or more times}
- 15/04018 . . {Image composition, e.g. adding or superposing informations on the original image ([composition of facsimile picture signals H04N 1/387](#))}
- 15/04027 . . {and forming half-tone image}
- 15/04036 . . {Details of illuminating systems, e.g. lamps, reflectors ([lamp housings for copying cameras, reflex exposure lighting G03B 27/542](#))}
- 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](#))}
- 15/04054 . . . . {by LED arrays}
- 15/04063 . . . . {by EL-bars}
- 15/04072 . . . . {by laser}
- 15/04081 . . . {Exposure from behind the photoconductive surface}
- 15/0409 . . {Details of projection optics ([for projection printing apparatus G03B 27/522](#))}
- 15/041 . . with variable magnification
- 15/0415 . . . {and means for controlling illumination or exposure}
- 15/043 . . with means for controlling illumination or exposure ([G03G 15/041 takes precedence](#))
- 15/0435 . . . {by introducing an optical element in the optical path, e.g. a filter}
- 15/045 . . with means for charging or discharging distinct portions of the charge pattern on the recording material, e.g. for contrast enhancement or discharging non-image areas ([G03G 15/36](#), [G03G 21/06 take precedence](#))
- 15/047 . . . for discharging non-image areas
- 15/05 . . for imagewise charging, e.g. photoconductive control screen, optically activated charging means ([charging means controlled by electric image signals B41J](#))
- 15/051 . . {by modulating an ion flow through a photoconductive screen onto which a charge image has been formed}
- 15/052 . . . {Details and conditioning means of the screen, e.g. cleaning means, ozone removing means}
- 15/054 . . using X-rays, e.g. electroradiography
- 15/0545 . . {Ionography, i.e. X-rays induced liquid or gas discharge}
- 15/056 . . using internal polarisation
- 15/06 . . for developing
- 15/065 . . {Arrangements for controlling the potential of the developing electrode}
- 15/08 . . using a solid developer, e.g. powder developer
- 15/0801 . . . {for cascading}
- 15/0803 . . . {in a powder cloud}
- 15/0805 . . . {on a brush ([G03G 15/09 takes precedence](#))}
- 15/0806 . . . {on a donor element, e.g. belt, roller ([complete developer unit G03G 15/0896](#))}
- 15/0808 . . . . {characterised by the developer supplying means, e.g. structure of developer supply roller}
- 15/081 . . . . {characterised by the developer handling means after the supply and before the regulating, e.g. means for preventing developer blocking}
- 15/0812 . . . . {characterised by the developer regulating means, e.g. structure of doctor blade}
- 15/0813 . . . . {characterised by means in the developing zone having an interaction with the image carrying member, e.g. distance holders}
- 15/0815 . . . . {characterised by the developer handling means after the developing zone and before the supply, e.g. developer recovering roller}
- 15/0817 . . . . {characterised by the lateral sealing at both sides of the donor member with respect to the developer carrying direction}
- 15/0818 . . . . {characterised by the structure of the donor member, e.g. surface properties}
- 15/082 . . . {for immersion}
- 15/0822 . . . {Arrangements for preparing, mixing, supplying or dispensing developer}
- 15/0824 . . . . {Detection or control means for the toner concentration}
- 15/0825 . . . . . {the concentration being measured by electrical means}
- 15/0827 . . . . . {the concentration being measured by optical means}
- 15/0829 . . . . . {the concentration being measured by magnetic means}
- 15/0831 . . . . {Detection means for the toner level}
- 15/0832 . . . . {Arrangements for supplying new toner; Toner cartridges}
- 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}
- 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](#))}
- 15/0837 . . . . . {the toner cartridges being generally horizontally mounted parallel to its longitudinal rotational axis}
- 15/0839 . . . . . {Arrangements for metering and dispensing toner into the development sump; Toner hoppers; Augers}
- 15/0841 . . . . . {Toner cartridges using a peelable sealing film ([resealing used developer units before refilling G03G 15/0894](#))}
- 15/0843 . . . . . {Toner cartridges using a sealing film to be ruptured or cut}
- 15/0844 . . . . {Arrangements for purging used developer from the developing unit}
- 15/0846 . . . . {Arrangements for conditioning developer in the developing sump, e.g. removing impurities or humidity}
- 15/0848 . . . . {Arrangements for testing or measuring developer properties or quality, e.g. charge, size, flowability}
- 15/0849 . . . . . {Detection or control means for the developer concentration}

15/0851	. . . . .	{the concentration being measured by electrical means}	15/0894	. . .	{Reconditioning of the developer unit, i.e. reusing or recycling parts of the unit, e.g. resealing of the unit before refilling with toner}
15/0853	. . . . .	{the concentration being measured by magnetic means}	15/0896	. . .	{Arrangements or disposition of the complete developer unit or parts thereof not provided for by groups <a href="#">G03G 15/08</a> - <a href="#">G03G 15/0894</a> }
15/0855	. . . . .	{the concentration being measured by optical means}	15/0898	. . . .	{for preventing toner scattering during operation, e.g. seals ( <a href="#">sealing the donor member G03G 15/0817</a> ; <a href="#">sealing the magnetic brush G03G 15/0942</a> )}
15/0856	. . . . .	{Detection or control means for the developer level}	15/09	. . .	using magnetic brush
15/0858	. . . . .	{the level being measured by mechanical means}	15/0907	. . . .	{with bias voltage ( <a href="#">G03G 15/065</a> takes precedence)}
15/086	. . . . .	{the level being measured by electro-magnetic means}	15/0914	. . . .	{with a one-component toner}
15/0862	. . . . .	{the level being measured by optical means}	15/0921	. . . .	{Details concerning the magnetic brush roller structure, e.g. magnet configuration}
15/0863	. . . .	{provided with identifying means or means for storing process- or use parameters, e.g. an electronic memory}	15/0928	. . . . .	{relating to the shell, e.g. structure, composition}
15/0865	. . . .	{Arrangements for supplying new developer}	15/0935	. . . . .	{relating to bearings or driving mechanism}
15/0867	. . . . .	{cylindrical developer cartridges, e.g. toner bottles for the developer replenishing opening}	15/0942	. . . .	{with means for preventing toner scattering from the magnetic brush, e.g. magnetic seals}
15/0868	. . . . .	{Toner cartridges fulfilling a continuous function within the electrographic apparatus during the use of the supplied developer material, e.g. toner discharge on demand, storing residual toner, acting as an active closure for the developer replenishing opening}	15/095	. . .	Removing excess solid developer {, e.g. fog preventing}
15/087	. . . . .	{Developer cartridges having a longitudinal rotational axis, around which at least one part is rotated when mounting or using the cartridge ( <a href="#">G03G 15/0834</a> takes precedence)}	15/10	. .	using a liquid developer
15/0872	. . . . .	{the developer cartridges being generally horizontally mounted parallel to its longitudinal rotational axis}	15/101	. . .	{for wetting the recording material}
15/0874	. . . . .	{non-rigid containers, e.g. foldable cartridges, bags}	15/102	. . . .	{for differentially wetting the recording material ( <a href="#">developers for differentially wetting G03G 9/18</a> )}
15/0875	. . . . .	{cartridges having a box like shape}	15/104	. . .	{Preparing, mixing, transporting or dispensing developer}
15/0877	. . . .	{Arrangements for metering and dispensing developer from a developer cartridge into the development unit}	15/105	. . . .	{Detection or control means for the toner concentration}
15/0879	. . . . .	{for dispensing developer from a developer cartridge not directly attached to the development unit}	15/107	. . .	{Condensing developer fumes ( <a href="#">G03G 15/11</a> takes precedence)}
15/0881	. . . . .	{Sealing of developer cartridges}	15/108	. . .	{with which the recording material is brought in contact, e.g. immersion or surface immersion development}
15/0882	. . . . .	{by a peelable sealing film ( <a href="#">resealing used developer units before refilling: G03G 15/0894</a> )}	15/11	. . .	Removing excess liquid developer, e.g. by heat
15/0884	. . . . .	{by a sealing film to be ruptured or cut}	15/14	. .	for transferring a pattern to a second base
15/0886	. . . . .	{by mechanical means, e.g. shutter, plug}	15/16	. .	of a toner pattern, e.g. a powder pattern, {e.g. magnetic transfer}
15/0887	. . . .	{Arrangements for conveying and conditioning developer in the developing unit, e.g. agitating, removing impurities or humidity}	15/1605	. . .	{using at least one intermediate support ( <a href="#">G03G 15/1625</a> takes precedence)}
15/0889	. . . . .	{for agitation or stirring}	15/161	. . . .	{with means for handling the intermediate support, e.g. heating, cleaning, coating with a transfer agent}
15/0891	. . . . .	{for conveying or circulating developer, e.g. augers}	15/1615	. . . .	{relating to the driving mechanism for the intermediate support, e.g. gears, couplings, belt tensioning}
15/0893	. . . . .	{in a closed loop within the sump of the developing device}	15/162	. . . .	{details of the intermediate support, e.g. chemical composition}
			15/1625	. . .	{on a base other than paper}
			15/163	. . .	{using the force produced by an electrostatic transfer field formed between the second base and the electrographic recording member, e.g. transfer through an air gap}
			15/1635	. . . .	{the field being produced by laying down an electrostatic charge behind the base or the recording member, e.g. by a corona device}
			15/164	. . . . .	{the second base being a continuous paper band, e.g. a CFF}



15/1645	. . . . .	{Arrangements for controlling the amount of charge}	15/2057	. . . . .	{relating to the chemical composition of the heat element and layers thereof}
15/165	. . . . .	{Arrangements for supporting or transporting the second base in the transfer area, e.g. guides}	15/206	. . . . .	{Structural details or chemical composition of the pressure elements and layers thereof}
15/1655	. . . . .	{comprising a rotatable holding member to which the second base is attached or attracted, e.g. screen transfer holding drum}	15/2064	. . . . .	{combined with pressure}
15/166	. . . . .	{with means for conditioning the holding member, e.g. cleaning}	15/2067	. . . . .	{with retractable fixing or pressure unit}
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}	15/2071	. . . . .	{for maintenance purpose, e.g. for removing a jammed sheet}
15/167	. . . .	{at least one of the recording member or the transfer member being rotatable during the transfer}	15/2075	. . . . .	{with special means for lubricating and/or cleaning the fuser unit, e.g. applying offset preventing fluid}
15/1675	. . . . .	{with means for controlling the bias applied in the transfer nip}	15/2078	. . . . .	{with means for controlling and/or regulating the fixing temperature}
15/168	. . . . .	{with means for conditioning the transfer element, e.g. cleaning}	15/2082	. . . . .	{specially the axial heat repartition}
15/1685	. . . . .	{Structure, details of the transfer member, e.g. chemical composition}	15/2085	. . . . .	{with means for handling the copy material in the fuser nip, e.g. introduction guides, stripping means}
15/169	. . .	{with means for preconditioning the toner image before the transfer ( <a href="#">G03G 15/095</a> and <a href="#">G03G 15/11</a> take precedence)}	15/2089	. . . . .	{Details of pressure units, e.g. structure}
15/1695	. . .	{with means for preconditioning the paper base before the transfer}	15/2092	. .	{using pressure only}
15/18	. .	of a charge pattern	15/2096	. .	{using a solvent}
15/20	. .	for fixing, e.g. by using heat	15/22	. .	involving the combination of more than one step according to groups <a href="#">G03G 13/02</a> - <a href="#">G03G 13/20</a> ( <a href="#">G03G 15/01</a> takes precedence)
15/2003	. .	{using heat}	15/221	. .	{Machines other than electrographic copiers, e.g. electrophotographic cameras, electrostatic typewriters}
15/2007	. . .	{using radiant heat, e.g. infra-red lamps, microwave heaters}	15/222	. . .	{Machines for handling xeroradiographic images, e.g. xeroradiographic processors}
15/201	. . . .	{of high intensity and short duration, i.e. flash fusing}	15/223	. . .	{Machines for handling microimages, e.g. microfilm copiers}
15/2014	. . .	{using contact heat}	15/224	. . .	{Machines for forming tactile or three dimensional images by electrographic means, e.g. braille, 3d printing}
15/2017	. . . .	{Structural details of the fixing unit in general, e.g. cooling means, heat shielding means ( <a href="#">G03G 15/2053</a> takes precedence)}	15/225	. .	{using contact-printing}
15/2021	. . . . .	{Plurality of separate fixing and/or cooling areas or units, two step fixing}	15/226	. .	{where the image is formed on a dielectric layer covering the photoconductive layer}
15/2025	. . . . .	{with special means for lubricating and/or cleaning the fixing unit, e.g. applying offset preventing fluid}	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}
15/2028	. . . . .	{with means for handling the copy material in the fixing nip, e.g. introduction guides, stripping means}	15/228	. .	{the process involving the formation of a master, e.g. photocopy-printer machines}
15/2032	. . . . .	{Retractable heating or pressure unit}	15/23	. .	specially adapted for copying both sides of an original or for copying on both sides of a recording or image-receiving material
15/2035	. . . . .	{for maintenance purposes, e.g. for removing a jammed sheet}	15/231	. . .	{Arrangements for copying on both sides of a recording or image-receiving material}
15/2039	. . . . .	{with means for controlling the fixing temperature}	15/232	. . . .	{using a single reusable electrographic recording member}
15/2042	. . . . .	{specially for the axial heat partition}	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}
15/2046	. . . . .	{specially for the influence of heat loss, e.g. due to the contact with the copy material or other roller}	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}
15/205	. . . . .	{specially for the mode of operation, e.g. standby, warming-up, error ( <a href="#">G03G 15/2046</a> takes precedence)}	15/237	. . . . .	{the image receiving member being in form of a continuous web ( <a href="#">G03G 15/235</a> takes precedence)}
15/2053	. . . .	{Structural details of heat elements, e.g. structure of roller or belt, eddy current, induction heating}			

- 15/238 . . . . {using more than one reusable electrographic recording member, e.g. single pass duplex copiers}
- 15/24 . . whereby at least two steps are performed simultaneously
- 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](#))
- 15/263 . . . . {using a reusable recording medium in form of a band}
- 15/266 . . . . {using a reusable recording medium in form of a plate or a sheet}
- 15/28 . . in which projection is obtained by line scanning ([G03G 15/04 takes precedence](#))
- 15/283 . . . . {using a reusable recording medium in form of a band}
- 15/286 . . . . {using a reusable recording medium in form of a plate or a sheet}
- 15/30 . . . . in which projection is formed on a drum
- 15/302 . . . . {with arrangements for copying different kinds of originals, e.g. sheets, books}
- 15/305 . . . . {with special means to synchronize the scanning optic to the operation of other parts of the machine, e.g. photoreceptor, copy paper}
- 15/307 . . . . {with more than one photoconductor revolution for each copying cycle}
- 15/32 . . in which the charge pattern is formed dotwise, {e.g. by a thermal head} ([G03G 15/04](#), [G03G 15/05](#), [G03G 15/34 take precedence](#))
- 15/321 . . . . {by charge transfer onto the recording material in accordance with the image}
- 15/323 . . . . {by modulating charged particles through holes or a slit}
- 15/325 . . . . {using a stylus or a multi-styli array}
- 15/326 . . . . {by application of light, e.g. using a LED array}
- 15/328 . . . . {using a CRT}
- 15/34 . . in which the powder image is formed directly on the recording material, {e.g. by using a liquid toner}
- 15/342 . . . . {by forming a uniform powder layer and then removing the non-image areas}
- 15/344 . . . . {by selectively transferring the powder to the recording medium, e.g. by using a LED array}
- 15/346 . . . . {by modulating the powder through holes or a slit}
- 15/348 . . . . {using a stylus or a multi-styli array}
- 15/36 . Editing, i.e. producing a composite image by copying one or more original images or parts thereof
- 15/50 . {Machine control of apparatus for electrographic processes using a charge pattern, e.g. regulating different parts of the machine, multimode copiers, microprocessor control ([sequencing control G03G 21/14](#))}
- 15/5004 . . {Power supply control, e.g. power-saving mode, automatic power turn-off}
- 15/5008 . . {Driving control for rotary photosensitive medium, e.g. speed control, stop position control}
- 15/5012 . . {Priority interrupt; Job recovery, e.g. after jamming or malfunction}
- 15/5016 . . {User-machine interface; Display panels; Control console}
- 15/502 . . . . {relating to the structure of the control menu, e.g. pop-up menus, help screens}
- 15/5025 . . {by measuring the original characteristics, e.g. contrast, density}
- 15/5029 . . {by measuring the copy material characteristics, e.g. weight, thickness}
- 15/5033 . . {by measuring the photoconductor characteristics, e.g. temperature, or the characteristics of an image on the photoconductor}
- 15/5037 . . . . {the characteristics being an electrical parameter, e.g. voltage}
- 15/5041 . . . . {Detecting a toner image, e.g. density, toner coverage, using a test patch ([G03G 15/553 takes precedence](#))}
- 15/5045 . . . . {Detecting the temperature}
- 15/505 . . . . {Detecting the speed, e.g. for continuous control of recording starting time}
- 15/5054 . . {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}
- 15/5058 . . . . {using a test patch}
- 15/5062 . . {by measuring the characteristics of an image on the copy material}
- 15/5066 . . {by using information from an external support, e.g. magnetic card}
- 15/507 . . . . {being interleaved with the original or directly written on the original, e.g. using a control sheet}
- 15/5075 . . {Remote control machines, e.g. by a host}
- 15/5079 . . . . {for maintenance}
- 15/5083 . . . . {for scheduling}
- 15/5087 . . . . {for receiving image data}
- 15/5091 . . . . {for user-identification or authorisation}
- 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}
- 15/55 . {Self-diagnostics; Malfunction or lifetime display}
- 15/553 . . {Monitoring or warning means for exhaustion or lifetime end of consumables, e.g. indication of insufficient copy sheet quantity for a job}
- 15/556 . . . . {for toner consumption, e.g. pixel counting, toner coverage detection, toner density measurement ([detectors G03G 15/0831](#))}
- 15/60 . {Apparatus which relate to the handling of originals ([for photographic purposes in general G03B](#))}
- 15/602 . . {for transporting}
- 15/605 . . {Holders for originals or exposure platens ([for photographic purposes in general G03B](#))}
- 15/607 . . {for detecting size, presence or position of original}
- 15/65 . {Apparatus which relate to the handling of copy material ([handling sheets or webs in general B65H](#); [for photographic purposes in general G03B](#))}
- 15/6502 . . {Supplying of sheet copy material; Cassettes therefor}
- 15/6505 . . . . {for copy sheets in ream}
- 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](#))}
- 15/6511 . . . . {Feeding devices for picking up or separation of copy sheets}

- 15/6514 . . . {Manual supply devices}
- 15/6517 . . {Apparatus for continuous web copy material of plain paper, e.g. supply rolls; Roll holders therefor}
- 15/652 . . . {Feeding a copy material originating from a continuous web roll}
- 15/6523 . . . {Cutting}
- 15/6526 . . . {Computer form folded [CFF] continuous web, e.g. having sprocket holes or perforations}
- 15/6529 . . {Transporting ([G03G 15/6555](#) takes precedence)}
- 15/6532 . . {Removing a copy sheet from a xerographic drum, band or plate ([removing sheets from printing cylinders B65H 29/02](#))}
- 15/6535 . . . {using electrostatic means, e.g. a separating corona}
- 15/6538 . . {Devices for collating sheet copy material, e.g. sorters, control, copies in staples form}
- 15/6541 . . . {Binding sets of sheets, e.g. by stapling, glueing}
- 15/6544 . . . . {Details about the binding means or procedure}
- 15/6547 . . . {Shifting sets of sheets in the discharge tray}
- 15/655 . . . {Placing job divider sheet between set of sheets}
- 15/6552 . . {Means for discharging uncollated sheet copy material, e.g. discharging rollers, exit trays}
- 15/6555 . . {Handling of sheet copy material taking place in a specific part of the copy material feeding path}
- 15/6558 . . . {Feeding path after the copy sheet preparation and up to the transfer point, e.g. registering; Deskewing; Correct timing of sheet feeding to the transfer point}
- 15/6561 . . . . {for sheet registration}
- 15/6564 . . . . {with correct timing of sheet feeding}
- 15/6567 . . . . {for deskewing or aligning}
- 15/657 . . . {Feeding path after the transfer point and up to the fixing point, e.g. guides and feeding means for handling copy material carrying an unfused toner image}
- 15/6573 . . . {Feeding path after the fixing point and up to the discharge tray or the finisher, e.g. special treatment of copy material to compensate for effects from the fixing}
- 15/6576 . . . . {Decurling of sheet material}
- 15/6579 . . . {Refeeding path for composite copying}
- 15/6582 . . {Special processing for irreversibly adding or changing the sheet copy material characteristics or its appearance, e.g. stamping, annotation printing, punching}
- 15/6585 . . . {by using non-standard toners, e.g. transparent toner, gloss adding devices}
- 15/6588 . . {characterised by the copy material, e.g. postcards, large copies, multi-layered materials, coloured sheet material}
- 15/6591 . . . {characterised by the recording material, e.g. plastic material, OHP, ceramics, tiles, textiles ([details transferring the toner pattern onto particular materials G03G 15/1625](#))}
- 15/6594 . . . {characterised by the format or the thickness, e.g. endless forms}
- 15/6597 . . {the imaging being conformed directly on the copy material, e.g. using photosensitive copy material, dielectric copy material for electrostatic printing}
- 15/70 . . {Detecting malfunctions relating to paper handling, e.g. jams}
- 15/703 . . {Detecting multiple sheets}
- 15/706 . . {Detecting missed stripping from xerographic drum, band or plate}
- 15/75 . . {Details relating to xerographic drum, band or plate, e.g. replacing, testing ([electrographic recording members per se G03G 5/00](#))}
- 15/751 . . {relating to drum ([G03G 15/757](#) takes precedence)}
- 15/752 . . . {with renewable photoconductive layer}
- 15/754 . . {relating to band, e.g. tensioning ([G03G 15/757](#) takes precedence)}
- 15/755 . . . {for maintaining the lateral alignment of the band}
- 15/757 . . {Drive mechanisms for photosensitive medium, e.g. gears}
- 15/758 . . {relating to plate or sheet}
- 15/80 . . {Details relating to power supplies, circuits boards, electrical connections}
- 16/00** **Electrographic processes using deformation of thermoplastic layers** ([layers for surface-deformation imaging G03G 5/022](#)); **Apparatus therefor** {([shaping of plastic objects with thermoplastic memory effect B29C 61/00](#); [digital stores using thermoplastic elements G11C 11/46](#); [television signal recording using deformable thermoplastic recording medium H04N 5/82](#))}
- 17/00** **Electrographic processes using patterns other than charge patterns, e.g. an electric conductivity pattern; Processes involving a migration, e.g. photoelectrophoresis, photoelectrosology; Processes involving a selective transfer, e.g. electrophoto-adhesive processes; Apparatus essentially involving a single such process**
- 17/005 . . {Radiation field photography, e.g. Kirlian photography, colour-discharge photography ([recording electrical waveforms in general G01R 13/04](#), e.g. [G01R 13/12](#) - [G01R 13/14](#))}
- 17/02 . . with electrolytic development
- 17/04 . . using photoelectrophoresis
- 17/06 . . . Apparatus therefor
- 17/08 . . using an electrophoto-adhesive process, e.g. manifold imaging
- 17/10 . . using migration imaging, e.g. photoelectrosology ([G03G 17/04](#) takes precedence)
- 19/00** **Processes using magnetic patterns; Apparatus therefor, {i.e. magnetography}**
- NOTE**  
This group comprises also processes and apparatus wherein magnetography and electrography are combined; magnetographic printing apparatus for data processing machines [G06K 15/14](#); recording members therefor [G03G 5/00](#); magnetic recording members for television [G11B](#); recording of sound [G11B](#); recording of electric measurements [G01R 13/00](#); recording apparatus for measurements in general [G01D](#)
- 19/005 . . {where the image is formed by selective demagnetizing, e.g. thermomagnetic recording}

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



21/1867	. . . . {for electrically connecting the process cartridge to the apparatus, electrical connectors, power supply}	2215/00122	. . using speech synthesis or voice recognition
21/1871	. . . . {associated with a positioning function}	2215/00126	. . Multi-job machines
21/1875	. . . {provided with identifying means or means for storing process- or use parameters, e.g. lifetime of the cartridge}	2215/0013	. . for producing copies with MICR
21/1878	. . . . {Electronically readable memory}	2215/00135	. Handling of parts of the apparatus
21/1882	. . . . {details of the communication with memory, e.g. wireless communication, protocols}	2215/00139	. . Belt
21/1885	. . . . . {position of the memory; memory housings; electrodes}	2215/00143	. . . Meandering prevention
21/1889	. . . . . {for auto-setting of process parameters, lifetime, usage}	2215/00147	. . . . using tractor sprocket holes
21/1892	. . . . . {for presence detection, authentication}	2215/00151	. . . . using edge limitations
21/1896	. . . . {mechanical or optical identification means, e.g. protrusions, bar codes}	2215/00156	. . . . by controlling drive mechanism
21/20	. Humidity or temperature control {also ozone evacuation; Internal apparatus environment control}	2215/0016	. . . . by mark detection, e.g. optical
21/203	. . {Humidity}	2215/00164	. . . . by electronic scan control
21/206	. . {Conducting air through the machine, e.g. for cooling, filtering, removing gases like ozone}	2215/00168	. . . . by friction
<b>2215/00</b>	<b>Apparatus for electrophotographic processes (not used)</b>	2215/00172	. relative to the original handling
2215/00004	. Handling of entire apparatus	2215/00177	. . for scanning
2215/00008	. . Upright positioning for maintenance or storage	2215/00181	. . . concerning the original's state of motion (not used)
2215/00012	. . Upright positioning as well as horizontal positioning for image forming	2215/00185	. . . . original at rest
2215/00016	. Special arrangement of entire apparatus	2215/00189	. . . . original moving
2215/00021	. . Plural substantially independent image forming units in cooperation, e.g. for duplex, colour or high-speed simplex	2215/00194	. . . . original either moving or at rest
2215/00025	. Machine control, e.g. regulating different parts of the machine (not used)	2215/00198	. . . . . where one single scanning surface is used
2215/00029	. . Image density detection	2215/00202	. . . . . where separate scanning surfaces are used
2215/00033	. . . on recording member	2215/00206	. . Original medium (not used)
2215/00037	. . . . Toner image detection	2215/0021	. . . Plural types handled
2215/00042	. . . . . Optical detection	2215/00215	. . . . Mixed types handled
2215/00046	. . . . . Magnetical detection	2215/00219	. . . . Paper
2215/0005	. . . . . without production of a specific test patch	2215/00223	. . . . Continuous web, i.e. roll
2215/00054	. . . . . Electrostatic image detection	2215/00227	. . . . . Fan fold, e.g. CFF, normally perforated
2215/00059	. . . on intermediate image carrying member, e.g. transfer belt	2215/00232	. . . . . Non-standard format
2215/00063	. . . Colour	2215/00236	. . . . . Large sized, e.g. technical plans
2215/00067	. . . on recording medium	2215/0024	. . . . . Small sized, e.g. postcards
2215/00071	. . by measuring the photoconductor or its environmental characteristics (not used)	2215/00244	. . . . . Non-standard property
2215/00075	. . . the characteristic being its speed	2215/00248	. . . . . Thick
2215/0008	. . . . for continuous control of recording starting time	2215/00253	. . . . . Thin
2215/00084	. . . the characteristic being the temperature	2215/00257	. . . . . coloured
2215/00088	. . by using information from an external support (not used)	2215/00261	. . . Plastic
2215/00092	. . . the support being an IC card	2215/00265	. . . . Overhead Transparency, i.e. OHP
2215/00097	. . . the support being a counter	2215/0027	. . . . Transparent film roll
2215/00101	. . . the support being a magnetic card	2215/00274	. . . . Slide
2215/00105	. . . the support being a payment means, e.g. a coin	2215/00278	. . . . Micro-fiche
2215/00109	. . Remote control of apparatus, e.g. by a host	2215/00282	. . . Book
2215/00113	. . . Plurality of apparatus configured in groups each with its own host	2215/00286	. . . With punch holes or other non-image related artifacts, e.g. staples
2215/00118	. . using fuzzy logic	2215/00291	. . . Fragile, e.g. old documents
		2215/00295	. . . Valuable, e.g. cheques, passport
		2215/00299	. . . Confidential, e.g. secret documents
		2215/00303	. . . Control sheet
		2215/00308	. . . Object for which a graphic image is not of interest, e.g. medical sample
		2215/00312	. . . Other special types
		2215/00316	. . . Electronic image supplied to the apparatus
		2215/0032	. . Original binding
		2215/00324	. . Document property detectors
		2215/00329	. . . Document size detectors
		2215/00333	. . . . detecting feeding of documents
		2215/00337	. . . Document set detector
		2215/00341	. . Jam handling in document feeder
		2215/00345	. . . Copying machine problems
		2215/0035	. . . Document related problems, e.g. double-fed sheets
		2215/00354	. . Specific document handling machines (not used)
		2215/00358	. . . Plural feed trays for document sets, e.g. multi-job

- 2215/00362 . relating to the copy medium handling (not used)
- 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)
- 2215/00371 . . . General use over the entire feeding path
- 2215/00375 . . . Package, e.g. a ream
- 2215/00379 . . . Copy medium holder (not used)
- 2215/00383 . . . . Cassette
- 2215/00388 . . . . . rotatable
- 2215/00392 . . . . Manual input tray
- 2215/00396 . . . . Pick-up device
- 2215/004 . . . . Separation device
- 2215/00405 . . . . Registration device
- 2215/00409 . . . . Transfer device
- 2215/00413 . . . . Fixing device
- 2215/00417 . . . . Post-fixing device (not used)
- 2215/00421 . . . . Discharging tray, e.g. devices stabilising the quality of the copy medium, postfixing-treatment, inverting, sorting
- 2215/00426 . . . . Post-treatment device adding qualities to the copy medium product ([G03G 2215/00421 takes precedence](#))
- 2215/0043 . . . . Refeeding path ([G03G 2215/00421 takes precedence](#))
- 2215/00434 . . . . . Refeeding tray or cassette
- 2215/00438 . . . . . Inverter of refeeding path
- 2215/00443 . . . Copy medium (not used)
- 2215/00447 . . . Plural types handled
- 2215/00451 . . . Paper
- 2215/00455 . . . . Continuous web, i.e. roll
- 2215/00459 . . . . Fan fold, e.g. CFF, normally perforated
- 2215/00464 . . . . Non-standard format
- 2215/00468 . . . . . Large sized, e.g. technical plans
- 2215/00472 . . . . . Small sized, e.g. postcards
- 2215/00476 . . . . Non-standard property
- 2215/00481 . . . . . Thick
- 2215/00485 . . . . . Thin
- 2215/00489 . . . . . coloured
- 2215/00493 . . . Plastic
- 2215/00497 . . . . Overhead Transparency, i.e. OHP
- 2215/00502 . . . . Transparent film
- 2215/00506 . . . . Slide
- 2215/0051 . . . . Micro-fiche
- 2215/00514 . . . Envelopes
- 2215/00518 . . . Recording medium, e.g. photosensitive
- 2215/00523 . . . Other special types, e.g. tabbed
- 2215/00527 . . . . Fabrics, e.g. textiles
- 2215/00531 . . . transported through the apparatus for non-imaging purposes, e.g. cleaning
- 2215/00535 . . Stable handling of copy medium (not used)
- 2215/0054 . . . Detachable element of feed path
- 2215/00544 . . . Openable part of feed path
- 2215/00548 . . . Jam, error detection, e.g. double feeding
- 2215/00552 . . . . Purge of recording medium at jam
- 2215/00556 . . . Control of copy medium feeding
- 2215/00561 . . . . Aligning or deskewing
- 2215/00565 . . . . . Mechanical details
- 2215/00569 . . . . Calibration, test runs, test prints
- 2215/00573 . . . . Recording medium stripping from image forming member
- 2215/00578 . . . . Composite print mode
- 2215/00582 . . . . . Plural adjacent images on one side
- 2215/00586 . . . . duplex mode
- 2215/0059 . . . . Effect of changed recording medium size, e.g. originating from heating
- 2215/00594 . . . . Varying registration in order to produce special effect, e.g. binding margin
- 2215/00599 . . . . Timing, synchronisation
- 2215/00603 . . . Control of other part of the apparatus according to the state of copy medium feeding
- 2215/00607 . . . Debris handling means
- 2215/00611 . . . Detector details, e.g. optical detector
- 2215/00616 . . . . Optical detector
- 2215/0062 . . . . . infra-red
- 2215/00624 . . . . Magnetic detector or switch, e.g. reed switch
- 2215/00628 . . . . Mechanical detector or switch
- 2215/00632 . . . . Electric detector, e.g. of voltage or current
- 2215/00637 . . . . Acoustic detector
- 2215/00641 . . . . Pneumatic detector
- 2215/00645 . . . . Speedometer
- 2215/00649 . . . Electrodes close to the copy feeding path
- 2215/00654 . . . Charging device
- 2215/00658 . . . Brush ([G03G 2215/00654 takes precedence](#))
- 2215/00662 . . . Decurling device
- 2215/00666 . . . Heating or drying device
- 2215/0067 . . . Damping device
- 2215/00675 . . . Mechanical copy medium guiding means, e.g. mechanical switch
- 2215/00679 . . . Conveying means details, e.g. roller
- 2215/00683 . . . . Chemical properties
- 2215/00687 . . . Handling details (not used)
- 2215/00691 . . . . Shredder
- 2215/00696 . . . . Turner acting in plane of recording medium, e.g. A4 to A4R change
- 2215/007 . . . . Inverter not for refeeding purposes
- 2215/00704 . . . . Curl adding, bending
- 2215/00708 . . . . Cleaning of sheet or feeding structures
- 2215/00713 . . . . Lock related to feeding device
- 2215/00717 . . . Detection of physical properties (not used)
- 2215/00721 . . . . of sheet position
- 2215/00725 . . . . of sheet presence in input tray
- 2215/00729 . . . . of sheet amount in input tray
- 2215/00734 . . . . of sheet size
- 2215/00738 . . . . of sheet thickness or rigidity
- 2215/00742 . . . . of sheet weight
- 2215/00746 . . . . of sheet velocity
- 2215/00751 . . . . of sheet type, e.g. OHP
- 2215/00755 . . . . of sheet toner density
- 2215/00759 . . . . of sheet image, e.g. presence, type
- 2215/00763 . . . . of sheet resistivity
- 2215/00767 . . . . of sheet potential
- 2215/00772 . . . . of temperature influencing copy sheet handling
- 2215/00776 . . . . of humidity or moisture influencing copy sheet handling
- 2215/0078 . . . . of opening of structural part
- 2215/00784 . . . . of connection or pressing of structural part
- 2215/00789 . . . Adding properties or qualities to the copy medium

2215/00793	. . .	Stamping device	2215/01	. .	for producing multicoloured copies (not used)
2215/00797	. . .	Printing device, i.e. annotation	2215/0103	. .	Plural electrographic recording members
2215/00801	. . .	Coating device	2215/0106	. . .	At least one recording member having plural associated developing units
2215/00805	. . .	Gloss adding or lowering device	2215/0109	. . .	Single transfer point used by plural recording members
2215/0081	. . . .	Gloss level being selectable	2215/0112	. . . .	Linearly moving set of recording members
2215/00814	. . .	Cutter	2215/0116	. . . .	Rotating set of recording members
2215/00818	. . .	Punch device	2215/0119	. . .	Linear arrangement adjacent plural transfer points
2215/00822	. . .	Binder, e.g. glueing device	2215/0122	. . . .	primary transfer to an intermediate transfer belt
2215/00827	. . . .	Stapler	2215/0125	. . . . .	the linear arrangement being horizontal or slanted
2215/00831	. . . .	Stitcher	2215/0129	. . . . .	horizontal medium transport path at the secondary transfer
2215/00835	. . . .	Toner binding	2215/0132	. . . . .	vertical medium transport path at the secondary transfer
2215/00839	. . . .	Binding tape	2215/0135	. . . . .	the linear arrangement being vertical
2215/00843	. . . .	Clip	2215/0138	. . . .	primary transfer to a recording medium carried by a transport belt
2215/00848	. . . .	Details of binding device	2215/0141	. . . . .	the linear arrangement being horizontal
2215/00852	. . . .	Temporary binding	2215/0145	. . . . .	the linear arrangement being vertical
2215/00856	. . . .	External binding device	2215/0148	. . . . .	the linear arrangement being slanted
2215/0086	. . . .	Manual activation of binding	2215/0151	. .	characterised by the technical problem (not used)
2215/00864	. . . .	Plural selectable binding modes	2215/0154	. . .	Vibrations and positional disturbances when one member abuts or contacts another member
2215/00869	. . .	Cover sheet adding means	2215/0158	. . .	Colour registration
2215/00873	. . .	Tape adding means	2215/0161	. . . .	Generation of registration marks
2215/00877	. . .	Folding device	2215/0164	. . .	Uniformity control of the toner density at separate colour transfers
2215/00881	. . .	Magnetic information	2215/0167	. .	single electrographic recording member
2215/00886	. .	Sorting or discharging (not used)	2215/017	. . .	single rotation of recording member to produce multicoloured copy
2215/0089	. . .	Shifting jobs	2215/0174	. . .	plural rotations of recording member to produce multicoloured copy
2215/00894	. . .	Placing job divider sheet	2215/0177	. . . .	Rotating set of developing units
2215/00898	. . .	Mechanical separator between jobs	2215/018	. . . .	Linearly moving set of developing units, one at a time adjacent the recording member
2215/00902	. . .	Sorting marks of jobs, e.g. on the sheet edges	2215/0183	. . . .	Reciprocal movement of transfer member across transfer point
2215/00907	. . .	Electronically addressable mailing bins	2215/0187	. . .	Multicoloured toner image formed on the recording member
2215/00911	. . .	Detection of copy amount or presence in discharge tray	2215/019	. .	Structural features of the multicolour image forming apparatus (not used)
2215/00915	. . . .	Detection of weight of copies	2215/0193	. . .	transfer member separable from recording member
2215/00919	. .	Special copy medium handling apparatus (not used)	2215/0196	. . .	Recording medium carrying member with speed switching
2215/00924	. . . .	two or more parallel feed paths	2215/02	. .	Arrangements for laying down a uniform charge
2215/00928	. . .	Copies and originals use a common part of the copy medium handling apparatus	2215/021	. .	by contact, friction or induction
2215/00932	. . .	Security copies	2215/022	. . .	using a magnetic brush
2215/00936	. . .	Bookbinding	2215/023	. . .	using a laterally vibrating brush
2215/0094	. . .	Copy produced and used as original	2215/025	. . .	using contact charging means having lateral dimensions related to other apparatus means, e.g. photodrum, developing roller
2215/00945	. . .	Copy material feeding speed varied over the feed path	2215/026	. .	by coronas
2215/00949	. . .	Copy material feeding speed switched according to current mode of the apparatus, e.g. colour mode	2215/027	. . .	using wires
2215/00953	. .	Electrographic recording members (not used)	2215/028	. . .	using pointed electrodes
2215/00957	. .	Compositions	2215/04	. .	Arrangements for exposing and producing an image
2215/00962	. .	Electrographic apparatus defined by the electrographic recording member	2215/0402	. .	Exposure devices
2215/00966	. . .	Sheet type electrographic recording members from which a toner or charge image is transferred	2215/0404	. . .	Laser
2215/0097	. . . .	Sheet cartridge or tray	2215/0407	. . .	Light-emitting array or panel
2215/00974	. . .	Electrographic recording member arranged as a carriage to be movable in a direction perpendicular to the recording sheet transport direction			
2215/00978	. .	Details relating to power supplies (not used)			
2215/00983	. .	using batteries			
2215/00987	. .	Remanufacturing, i.e. reusing or recycling parts of the image forming apparatus			
2215/00991	. .	Inserting seal through a gap			
2215/00995	. . .	Insertion tool used			

2215/0409	. . . .	Light-emitting diodes, i.e. LED-array	2215/0602	. .	Developer
2215/0412	. . . .	Electroluminescent elements, i.e. EL-array	<b>NOTE</b>		
2215/0414	. . . .	Liquid-crystal display elements, i.e. LCD-shutter array	Indexing codes of group <a href="#">G03G 2215/0602</a> and subgroups can be followed by additional symbols preceded by a "," sign and relating to additional characteristics.		
2215/0417	. . .	Standard lamp used to produce a reflection or transmission image of an original	2215/0604	. . .	solid type
2215/0419	. . .	Device not using light, e.g. ion-writer	2215/0607	. . . .	two-component
2215/0421	. . .	Plurality of devices for producing the image (excluding dedicated erasing means)	2215/0609	. . . . .	magnetic brush
2215/0424	. . .	Using contents of CCD array to produce the image	2215/0612	. . . . .	cascade
2215/0426	. .	Editing of the image, e.g. adding or deleting ( <a href="#">correction, i.e. changing or enhancing the image G03G 2215/0429</a> )	2215/0614	. . . .	one-component
2215/0429	. .	Changing or enhancing the image	2215/0617	. . . . .	contact development (i.e. the developer layer on the donor member contacts the latent image carrier)
2215/0431	. . .	Producing a clean non-image area, i.e. avoiding show-around effects	2215/0619	. . . . .	non-contact (flying development)
2215/0434	. . . .	Parameters defining the non-image area to be cleaned ( <a href="#">not used</a> )	2215/0621	. . . . .	powder cloud
2215/0436	. . . . .	Document properties at the scanning position, e.g. position and density	2215/0624	. . . .	plural systems represented (e.g. in a multicolour device or for optimising photo line development)
2215/0439	. . . . .	Automatic detection of properties	2215/0626	. . .	liquid type (at developing position)
2215/0441	. . . . .	Manual input of properties	2215/0629	. . . .	liquid at room temperature
2215/0443	. . . . .	Copy medium outline relative to the charge image	2215/0631	. . . .	melted, or otherwise made liquid
2215/0446	. . . . .	Magnification degree	2215/0634	. .	Developing device
2215/0448	. . . .	Charge-erasing means for the non-image area	<b>NOTE</b>		
2215/0451	. . . . .	Light-emitting array or panel	Indexing codes of group <a href="#">G03G 2215/0634</a> and subgroups can be followed by additional symbols preceded by a "," sign and relating to additional characteristics.		
2215/0453	. . . . .	Light-emitting diodes, i.e. LED-array	2215/0636	. . .	Specific type of dry developer device
2215/0456	. . . . .	Electroluminescent elements, i.e. EL-array	2215/0639	. . . .	Without donor member (i.e. developing housing slides on latent image-carrying member)
2215/0458	. . . . .	Liquid-crystal display elements, i.e. LCD-shutter array	2215/0641	. . . .	Without separate supplying member (i.e. with developing housing sliding on donor member)
2215/046	. . . . .	Charger	2215/0643	. . . .	Electrodes in developing area, e.g. wires, not belonging to the main donor part
2215/0463	. . . . .	Exposure lamp used for scanning	2215/0646	. . . . .	Electrodes only acting from one side of the developing area, e.g. plate electrode
2215/0465	. . . .	Developing conditions changed to produce a clean non-image area	2215/0648	. . . .	Two or more donor members
2215/0468	. . .	Image area information changed (default is the charge image)	2215/0651	. . . .	Electrodes in donor member surface
2215/047	. . . .	Image corrections	2215/0653	. . . . .	Microelectrodes in donor member surface, e.g. floating
2215/0473	. . . . .	due to document imperfections, e.g. punchholes, books	2215/0656	. . . .	Fixed electrodes behind moving donor member surface
2215/0475	. . . . .	due to cover imperfection, i.e. show-through problem	2215/0658	. . .	Liquid developer devices
2215/0478	. . . . .	due to image carrier variations, e.g. ageing	2215/066	. .	Toner cartridge or other attachable and detachable container for supplying developer material to replace the used material
2215/048	. . . .	Technical-purpose-oriented image area changes	2215/0663	. . .	having a longitudinal rotational axis, around which at least one part is rotated when mounting or using the cartridge
2215/0482	. . . . .	Toner-free areas produced	2215/0665	. . . .	Generally horizontally mounting of said toner cartridge parallel to its longitudinal rotational axis
2215/0485	. . . . .	Avoiding problems in standard processing steps, such as transfer and fixing	2215/0668	. . . . .	Toner discharging opening at one axial end
2215/0487	. . . . .	Adapted to post-processing step, e.g. binding	2215/067	. . . . .	Toner discharging opening covered by arcuate shutter
2215/049	. . . . .	Hiding of information contained in the image			
2215/0492	. . . .	Without changing the charge image			
2215/0495	. .	Plural charge levels of latent image produced, e.g. trilevel			
2215/0497	. .	Exposure from behind the image carrying surface			
2215/06	. .	Developing structures, details			



2215/0673	. . . .	Generally vertically mounting of said toner cartridge parallel to its longitudinal rotational axis	2215/0886	. . . .	Container for holding the whole developing device when outside the machine, e.g. box, sack
2215/0675	. . . .	Generally cylindrical container shape having two ends	2215/0888	. . . .	Arrangements for detecting toner level or concentration in the developing device
2215/0678	. . . .	Bottle shaped container having a bottle neck for toner discharge	2215/0891	. . . .	Optical detection
2215/068	. . . .	having a box like shape	2215/0894	. . . .	through a light transmissive window in the developer container wall
2215/0682	. . . .	Bag-type non-rigid container	2215/0897	. . . . .	Cleaning of the light transmissive window
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	2215/16	. . . .	Transferring device, details
2215/0687	. . . .	using a peelable sealing film	2215/1604	. . . .	Main transfer electrode ( <b>not used</b> )
2215/069	. . . .	using a sealing member to be ruptured or cut	2215/1609	. . . .	Corotron
2215/0692	. . . .	using a slidable sealing member, e.g. shutter	2215/1614	. . . .	Transfer roll
2215/0695	. . . .	using identification means or means for storing process or use parameters	2215/1619	. . . .	Transfer drum
2215/0697	. . . . .	being an electronically readable memory	2215/1623	. . . .	Transfer belt
2215/08	. . . .	Details of powder developing device not concerning the development directly ( <b>not used</b> )	2215/1628	. . . .	Blade
2215/0802	. . . .	Arrangements for agitating or circulating developer material	2215/1633	. . . .	Plate
2215/0805	. . . .	Cleaning blade adjacent to the donor member	2215/1638	. . . .	Wires
2215/0808	. . . .	Donor member rotation direction ( <b>not used</b> )	2215/1642	. . . .	Brush
2215/0811	. . . .	Upper part of donor member transports used developer back to the sump	2215/1647	. . . .	Cleaning of transfer member
2215/0813	. . . .	Lower part of donor member transports used developer back to the sump	2215/1652	. . . .	of transfer roll
2215/0816	. . . .	Agitator type ( <b>not used</b> )	2215/1657	. . . .	of transfer drum
2215/0819	. . . .	two or more agitators	2215/1661	. . . .	of transfer belt
2215/0822	. . . . .	with wall or blade between agitators	2215/1666	. . . .	Preconditioning of copy medium before the transfer point
2215/0825	. . . .	belt	2215/1671	. . . .	Preheating the copy medium before the transfer point
2215/0827	. . . .	Augers	2215/1676	. . . .	Simultaneous toner image transfer and fixing
2215/083	. . . . .	with two opposed pitches on one shaft	2215/168	. . . .	at the first transfer point
2215/0833	. . . . .	with varying pitch on one shaft	2215/1685	. . . . .	using heat
2215/0836	. . . .	Way of functioning of agitator means ( <b>not used</b> )	2215/169	. . . . .	without heat
2215/0838	. . . .	Circulation of developer in a closed loop within the sump of the developing device	2215/1695	. . . .	at the second or higher order transfer point
2215/0841	. . . .	Presentation of developer to donor member	2215/20	. . . .	Details of the fixing device or porcess
2215/0844	. . . . .	by upward movement of agitator member			<b>NOTE</b>
2215/0847	. . . . .	by downward movement of agitator member			Indexing codes of group <b>G03G 2215/20</b> can be followed by additional symbols preceded by a "+" sign and relating to additional characteristics. The indexing codes have the meaning as indicated below.
2215/085	. . . .	Stirring member in developer container			<b>+H</b> Using heat to fix
2215/0852	. . . .	reciprocating			<b>+P</b> Using pressure to fix
2215/0855	. . . .	Materials and manufacturing of the developing device			<b>+PI</b> where the pressure is changed
2215/0858	. . . .	Donor member ( <b>not used</b> )			<b>+PIA</b> being adapted to the current toner-carrying medium treated (e.g. duplex copy, colour copy, OHP sheet, envelope)
2215/0861	. . . .	Particular composition or materials			<b>+PIB</b> compensating for temperature or other technical condition variations (e.g. sheet skewing) occurring
2215/0863	. . . .	Manufacturing			<b>+PIC</b> when being in a non-fixing or waiting mode
2215/0866	. . . .	Metering member			<b>+PIM</b> for maintenance purpose or abnormal situations (e.g. power cut-off)
2215/0869	. . . .	Supplying member	2215/2003	. . . .	Structural features of the fixing device ( <b>not used</b> )
2215/0872	. . . .	Housing of developing device	2215/2006	. . . .	Plurality of separate fixing areas
2215/0875	. . . .	Arrangements for shipping or transporting of the developing device to or from the user			
2215/0877	. . . .	Sealing of the developing device opening, facing the image-carrying member			
2215/088	. . . .	Peelable sealing film			
2215/0883	. . . .	Rupturable sealing film, e.g. tearable film			

## NOTE

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

- +**P1** where the pressure is changed
- +**P1A** being adapted to the current toner-carrying

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medium treated (e.g. duplex copy,
colour copy,
OHP sheet, envelope)
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+**P1B** compensating for temperature or other technical

condition variations (e.g. sheet skewing) occurring

+**P1C** when being in a non-fixing  
or waiting mode

+**P1M** for maintenance purpose or abnormal situations  
(e.g. power cut-off)

2215/2003	. .	Structural features of the fixing device (not used)
2215/2006	. . .	Plurality of separate fixing areas
2215/2009	. . .	Pressure belt

2215/2012	. . . . having an end	2217/0091	. Process comprising image exposure at the developing area
2215/2016	. . . Heating belt		
2215/2019	. . . . the belt not heating the toner or medium directly, e.g. heating a heating roller	<b>2221/00</b>	<b>Processes not provided for by group <a href="#">G03G 2215/00</a>, e.g. cleaning or residual charge elimination</b>
2215/2022	. . . . the fixing nip having both a stationary and a rotating belt support member opposing a pressure member	2221/0005	. Cleaning of residual toner
2215/2025	. . . . the fixing nip having a rotating belt support member opposing a pressure member	2221/001	. . Plural sequential cleaning devices
2215/2029	. . . . . the belt further entrained around one or more stationary belt support members, the latter not being a cooling device	2221/0015	. . Width of cleaning device related to other parts of the apparatus, e.g. transfer belt width
2215/2032	. . . . . the belt further entrained around additional rotating belt support members	2221/0021	. . applying vibrations to the electrographic recording medium for assisting the cleaning, e.g. ultrasonic vibration
2215/2035	. . . . the fixing nip having a stationary belt support member opposing a pressure member	2221/0026	. Cleaning of foreign matter, e.g. paper powder, from imaging member
2215/2038	. . . . . the belt further entrained around one or more rotating belt support members	2221/0031	. . Type of foreign matter ( <b>not used</b> )
2215/2041	. . . . the fixing nip being formed by tensioning the belt over a surface portion of a pressure member	2221/0036	. . . Oil and other liquid matter
2215/2045	. . . Variable fixing speed	2221/0042	. . . Paper powder and other dry foreign matter
2215/2048	. . . Surface layer material	2221/0047	. . Type of cleaning device
2215/2051	. . . . Silicone rubber	2221/0052	. . . Common container for holding cleaned foreign matter and residual toner
2215/2054	. . . . Inorganic filler, e.g. silica powder	2221/0057	. . . . Separate cleaning members for foreign matter and residual toner
2215/2058	. . . Shape of roller along rotational axis	2221/0063	. . . Cleaning device for foreign matter separate from residual toner cleaning device
2215/2061	. . . . concave	2221/0068	. . Cleaning mechanism
2215/2064	. . . . convex	2221/0073	. . . Electrostatic
2215/2067	. . . . Shape of roller core	2221/0078	. . . Magnetic
2215/207	. . Type of toner image to be fixed ( <b>not used</b> )	2221/0084	. . . Liquid
2215/2074	. . . colour	2221/0089	. . . Mechanical
2215/2077	. . . . Fixing between separate colour toner transfers	2221/0094	. . . Suction
2215/208	. . . black and white	2221/16	. Mechanical means for facilitating the maintenance of the apparatus, e.g. modular arrangements and complete machine concepts
2215/2083	. . . duplex	2221/1603	. . for multicoloured copies
2215/2087	. . . simplex	2221/1606	. . for the photosensitive element
2215/209	. . . plural types of toner image handled by the fixing device	2221/1609	. . . protective arrangements for preventing damage
2215/2093	. . Release agent handling devices	2221/1612	. . . . plural shutters for openings of process cartridge
2215/2096	. . . using porous fluoropolymers for wicking the release agent	2221/1615	. . . being a belt
		2221/1618	. . for the cleaning unit
<b>2217/00</b>	<b>Details of electrographic processes using patterns other than charge patterns</b>	2221/1621	. . . re-use of cleaned toner
2217/0008	. Process where toner image is produced by controlling which part of the toner should move to the image- carrying member	2221/1624	. . . transporting cleaned toner into separate vessels, e.g. photoreceptors, external containers
2217/0016	. . where the toner is conveyed over the electrode array to get a charging and then being moved	2221/1627	. . . Details concerning the cleaning process
2217/0025	. . where the toner starts moving from behind the electrode array, e.g. a mask of holes	2221/163	. . for the developer unit
2217/0033	. . where the toner is held behind a gate electrode array until being released	2221/1633	. . . Details concerning the developing process
2217/0041	. Process where the image-carrying member is always completely covered by a toner layer	2221/1636	. . for the exposure unit
2217/005	. . where the toner is charged before producing the toner layer on the image-carrying member	2221/1639	. . for the fixing unit
2217/0058	. . where the toner layer is being charged	2221/1642	. . for the transfer unit
2217/0066	. . where no specific pick-up of toner occurs before transfer of the toner image	2221/1645	. . for conducting air through the machine, e.g. cooling
2217/0075	. Process using an image-carrying member having an electrode array on its surface	2221/1648	. . using seals, e.g. to prevent scattering of toner ( <a href="#">light shields for the photoreceptor G03G 2221/1609</a> )
2217/0083	. Process using a fixed electrode array behind a moving recording medium	2221/1651	. . for connecting the different parts
		2221/1654	. . . Locks and means for positioning or alignment
		2221/1657	. . . transmitting mechanical drive power
		2221/166	. . . Electrical connectors
		2221/1663	. . having lifetime indicators
		2221/1666	. . . integer lifetimes of each other
		2221/1669	. . Details about used materials
		2221/1672	. . Paper handling

- 2221/1675 . . . jam treatment
- 2221/1678 . . Frame structures
- 2221/1681 . . . Portable machines
- 2221/1684 . . . using extractable subframes, e.g. on rails or hinges
- 2221/1687 . . . using opening shell type machines, e.g. pivoting assemblies
- 2221/169 . . . Structural door designs
- 2221/1693 . . for charging
- 2221/1696 . . for auxiliary devices, e.g. add-on modules
- 2221/18 . . Cartridge systems
- 2221/1807 . . . Transport of supply parts, e.g. process cartridges
- 2221/1815 . . . for cleaning or developing but not being a process cartridge
- 2221/1823 . . . Cartridges having electronically readable memory
- 2221/183 . . . Process cartridge
- 2221/1838 . . . . Autosetting of process parameters
- 2221/1846 . . . . using a handle for carrying or pulling out of the main machine
- 2221/1853 . . . . having a submodular arrangement
- 2221/1861 . . . . . Rotational subunit connection
- 2221/1869 . . . . . Cartridge holders, e.g. intermediate frames for placing cartridge parts therein
- 2221/1876 . . . . . for production purposes, e.g. manufacture or mass production
- 2221/1884 . . . . Projections on process cartridge for guiding mounting thereof in main machine
- 2221/1892 . . . . Presence detection