

# CPC COOPERATIVE PATENT CLASSIFICATION

## G PHYSICS (NOTES omitted)

### INSTRUMENTS

#### G03 PHOTOGRAPHY; CINEMATOGRAPHY; ELECTROGRAPHY; HOLOGRAPHY (reproduction of pictures or patterns by scanning and converting into electrical signals [H04N](#))

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

##### NOTES

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

##### WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

<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>5/026</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>5/005</b>	• {Materials for treating the recording members, e.g. for cleaning, reactivating, polishing}	<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>5/02</b>	• Charge-receiving layers ( <a href="#">G03G 5/153</a> takes precedence)	<b>5/04</b>	• • Photoconductive layers; Charge-generation layers or charge-transporting layers; Additives therefor; Binders therefor
<b>5/0202</b>	• • {Dielectric layers for electrography}	<b>5/043</b>	• • • Photoconductive layers characterised by having two or more layers or characterised by their composite structure
<b>5/0205</b>	• • • {Macromolecular components}	<b>5/0433</b>	• • • • {all layers being inorganic}
<b>5/0208</b>	• • • • {obtained by reactions only involving carbon-to-carbon unsaturated bonds}	<b>5/0436</b>	• • • • {combining organic and inorganic layers}
<b>5/0211</b>	• • • • {obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}	<b>5/047</b>	• • • • characterised by the charge-generation layers or charge transport layers {( <a href="#">G03G 5/0433</a> and <a href="#">G03G 5/0436</a> take precedence)}
<b>5/0214</b>	• • • {Organic non-macromolecular components}	<b>5/05</b>	• • • Organic bonding materials; Methods for coating a substrate with a photoconductive layer; Inert supplements for use in photoconductive layers
<b>5/0217</b>	• • • {Inorganic components}	<b>5/0503</b>	• • • • {Inert supplements}
<b>5/022</b>	• • Layers for surface-deformation imaging, e.g. frost imaging		
<b>5/024</b>	• • Photoelectret layers		

5/0507	. . . . .	{Inorganic compounds}
5/051	. . . . .	{Organic non-macromolecular compounds}
5/0514	. . . . .	{not comprising cyclic groups}
5/0517	. . . . .	{comprising one or more cyclic groups consisting of carbon-atoms only}
5/0521	. . . . .	{comprising one or more heterocyclic groups}
5/0525	. . . . .	{Coating methods}
5/0528	. . . . .	{Macromolecular bonding materials}
<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		
5/0532	. . . . .	{obtained by reactions only involving carbon-to-carbon unsaturated bonds}
5/0535	. . . . .	{Polyolefins; Polystyrenes; Waxes}
5/0539	. . . . .	{Halogenated polymers}
5/0542	. . . . .	{Polyvinylalcohol, polyallyl alcohol; Derivatives thereof, e.g. polyvinylesters, polyvinylethers, polyvinylamines}
5/0546	. . . . .	{Polymers comprising at least one carboxyl radical, e.g. polyacrylic acid, polycrotonic acid, polymaleic acid; Derivatives thereof, e.g. their esters, salts, anhydrides, nitriles, amides}
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}
<b>NOTE</b>		
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}	5/102	. .	{consisting of or comprising metals}
5/0681	. . . . .	{containing hetero rings in the part of the molecule between the azo-groups}	5/104	. .	{comprising inorganic material other than metals, e.g. salts, oxides, carbon}
5/0683	. . . . .	{containing polymethine or anthraquinone groups}	5/105	. .	{comprising electroconductive macromolecular compounds}
5/0685	. . . . .	{containing hetero rings in the part of the molecule between the azo-groups}	5/107	. . .	{the electroconductive macromolecular compounds being cationic}
5/0687	. . . . .	{Trisazo dyes}	5/108	. . .	{the electroconductive macromolecular compounds being anionic}
5/0688	. . . . .	{containing hetero rings}	5/12	. .	Recording members for multicolour processes
5/069	. . . . .	{containing polymethine or anthraquinone groups}	5/14	. .	Inert intermediate or cover layers for charge-receiving layers ( <a href="#">G03G 5/04</a> takes precedence)
5/0692	. . . . .	{containing hetero rings}	5/142	. .	{Inert intermediate layers}
5/0694	. . . . .	{containing more than three azo groups}	5/144	. . .	{comprising inorganic material}
5/0696	. . . . .	{Phthalocyanines}	5/147	. .	Cover layers
5/0698	. . . . .	{Compounds of unspecified structure characterised by a substituent only}	5/14704	. . .	{comprising inorganic material}
5/07	. . . . .	Polymeric photoconductive materials	5/14708	. . .	{comprising organic material}
5/071	. . . . .	{obtained by reactions only involving carbon-to-carbon unsaturated bonds ( <a href="#">G03G 5/078</a> takes precedence)}	5/14713	. . . . .	{Macromolecular material}
5/073	. . . . .	{comprising pending carbazol groups}	<b>NOTE</b>		
5/075	. . . . .	{obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds ( <a href="#">G03G 5/078</a> takes precedence)}	In groups <a href="#">G03G 5/14713</a> - <a href="#">G03G 5/14795</a> , in the absence of an indication to the contrary, a polymer is classified in the last appropriate place		
5/076	. . . . .	{having a photoconductive moiety in the polymer backbone}	5/14717	. . . . .	{obtained by reactions only involving carbon-to-carbon unsaturated bonds}
5/078	. . . . .	{comprising silicon atoms}	5/14721	. . . . .	{Polyolefins; Polystyrenes; Waxes}
5/08	. . .	characterised by the photoconductive material being inorganic	5/14726	. . . . .	{Halogenated polymers}
5/082	. . . . .	and not being incorporated in a bonding material, e.g. vacuum deposited	5/1473	. . . . .	{Polyvinylalcohol, polyallylalcohol; Derivatives thereof, e.g. polyvinylesters, polyvinylethers, polyvinylamines}
5/08207	. . . . .	{Selenium-based}	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}
5/08214	. . . . .	{Silicon-based}	5/14739	. . . . .	{Polymers containing hereto rings in the side chain}
5/08221	. . . . .	{comprising one or two silicon based layers}	5/14743	. . . . .	{Polymers derived from conjugated double bonds containing monomers, e.g. polybutadiene; Rubbers}
5/08228	. . . . .	{at least one with varying composition}	5/14747	. . . . .	{obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
5/08235	. . . . .	{comprising three or four silicon-based layers}	5/14752	. . . . .	{Polyesters}
5/08242	. . . . .	{at least one with varying composition}	5/14756	. . . . .	{Polycarbonates}
5/0825	. . . . .	{comprising five or six silicon-based layers}	5/1476	. . . . .	{Other polycondensates comprising oxygen atoms in the main chain; Phenol resins}
5/08257	. . . . .	{at least one with varying composition}	5/14765	. . . . .	{Polyamides; Polyimides}
5/08264	. . . . .	{comprising seven or more silicon-based layers}	5/14769	. . . . .	{Other polycondensates comprising nitrogen atoms with or without oxygen atoms in the main chain}
5/08271	. . . . .	{at least one with varying composition}	5/14773	. . . . .	{Polycondensates comprising silicon atoms in the main chain}
5/08278	. . . . .	{Depositing methods}	5/14778	. . . . .	{Polycondensates comprising sulfur atoms in the main chain}
5/08285	. . . . .	{Carbon-based ( <a href="#">in ad mixture with Si G03G 5/08214</a> )}	5/14782	. . . . .	{Cellulose and derivatives}
5/08292	. . . . .	{Germanium-based ( <a href="#">in ad mixture with Si G03G 5/08214</a> )}	5/14786	. . . . .	{Macromolecular compounds characterised by specific side-chain substituents or end groups}
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 ( <a href="#">G03G 5/12</a> takes precedence)			
5/10	. .	Bases for charge-receiving or other layers			
5/101	. .	{Paper bases ( <a href="#">G03G 5/102</a> , <a href="#">G03G 5/104</a> , <a href="#">G03G 5/105</a> take precedence)}			

- 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}
- 7/0073 . . {Organic components thereof}
- 7/008 . . . {being macromolecular}
- 7/0086 . {Back layers for image-receiving members; Strippable backsheets}
- 7/0093 . {Image-receiving members, based on materials other than paper or plastic sheets, e.g. textiles, metals}
- 8/00 Layers covering the final reproduction, e.g. for protecting, for writing thereon**
- 9/00 Developers**
- 9/06 . the developer being electrolytic
- 9/08 . with toner particles
- NOTE**
- In groups [G03G 9/0802](#) - [G03G 9/135](#), the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.
- 9/0802 . . {Preparation methods}
- 9/0804 . . . {whereby the components are brought together in a liquid dispersing medium}
- 9/0806 . . . . {whereby chemical synthesis of at least one of the toner components takes place}
- 9/0808 . . . {by dry mixing the toner components in solid or softened state}
- 9/081 . . . {by mixing the toner components in a liquefied state; melt kneading; reactive mixing}
- 9/0812 . . . {Pretreatment of components}
- 9/0815 . . . {Post-treatment}
- 9/0817 . . . {Separation; Classifying}
- 9/0819 . . {characterised by the dimensions of the particles}
- 9/0821 . . {characterised by physical parameters ([magnetic parameters \[G03G 9/083\]\(#\)](#))}
- 9/0823 . . . {Electric parameters}
- 9/0825 . . {characterised by their structure; characterised by non-homogeneous distribution of components ([microcapsular toners \[G03G 9/093\]\(#\)](#))}
- 9/0827 . . {characterised by their shape, e.g. degree of sphericity}
- 9/083 . . Magnetic toner particles
- 9/0831 . . . {Chemical composition of the magnetic components}
- 9/0832 . . . . {Metals}
- 9/0833 . . . . {Oxides}
- 9/0834 . . . . {Non-magnetic inorganic compounds chemically incorporated in magnetic components}
- 9/0835 . . . {Magnetic parameters of the magnetic components}
- 9/0836 . . . {Other physical parameters of the magnetic components}
- 9/0837 . . . {Structural characteristics of the magnetic components, e.g. shape, crystallographic structure}
- 9/0838 . . . {Size of magnetic components}
- 9/0839 . . . {Treatment of the magnetic components; Combination of the magnetic components with non-magnetic materials ([G03G 9/0834 takes precedence](#))}
- 9/087 . . Binders for toner particles
- 9/08702 . . . {comprising macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds}
- 9/08704 . . . . {Polyalkenes}
- 9/08706 . . . . {Polymers of alkenyl-aromatic compounds}
- 9/08708 . . . . . {Copolymers of styrene}
- 9/08711 . . . . . {with esters of acrylic or methacrylic acid}
- 9/08713 . . . . {Polyvinylhalogenides}
- 9/08715 . . . . . {containing chlorine, bromine or iodine}
- 9/08717 . . . . . {Polyvinylchloride}
- 9/0872 . . . . . {containing fluorine}
- 9/08722 . . . . {Polyvinylalcohols; Polyallylcohols; Polyvinylethers; Polyvinylaldehydes; Polyvinylketones; Polyvinylketals}
- 9/08724 . . . . {Polyvinylesters}
- 9/08726 . . . . {Polymers of unsaturated acids or derivatives thereof}
- 9/08728 . . . . . {Polymers of esters}
- 9/08731 . . . . . {Polymers of nitriles}
- 9/08733 . . . . . {Polymers of unsaturated polycarboxylic acids}
- 9/08735 . . . . {Polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a side-chain, e.g. coumarone-indene resins}
- 9/08737 . . . . {Polymers derived from conjugated dienes}
- 9/0874 . . . . {Polymers comprising hetero rings in the side chains}
- 9/08742 . . . {comprising macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
- 9/08744 . . . . {Polyacetals}



9/08746	. . . .	{Condensation polymers of aldehydes or ketones}	9/09314	. . . .	{Macromolecular compounds}
9/08748	. . . . .	{Phenoplasts}	9/09321	. . . . .	{obtained by reactions only involving carbon-to-carbon unsaturated bonds}
9/08751	. . . . .	{Aminoplasts}	9/09328	. . . . .	{obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
9/08753	. . . . .	{Epoxyresins}	9/09335	. . . . .	{Non-macromolecular organic compounds}
9/08755	. . . . .	{Polyesters}	9/09342	. . . . .	{Inorganic compounds}
9/08757	. . . . .	{Polycarbonates}	9/0935	. . . .	{specified by the core material}
9/08759	. . . . .	{Polyethers}	9/09357	. . . . .	{Macromolecular compounds}
9/08762	. . . . .	{Other polymers having oxygen as the only heteroatom in the main chain}	9/09364	. . . . .	{obtained by reactions only involving carbon-to-carbon unsaturated bonds}
9/08764	. . . . .	{Polyureas; Polyurethanes}	9/09371	. . . . .	{obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
9/08766	. . . . .	{Polyamides, e.g. polyesteramides}	9/09378	. . . . .	{Non-macromolecular organic compounds}
9/08768	. . . . .	{Other polymers having nitrogen in the main chain, with or without oxygen or carbon only}	9/09385	. . . . .	{Inorganic compounds}
9/08771	. . . . .	{Polymers having sulfur in the main chain, with or without oxygen, nitrogen or carbon only}	9/09392	. . . .	{Preparation thereof}
9/08773	. . . . .	{Polymers having silicon in the main chain, with or without sulfur, oxygen, nitrogen or carbon only}	9/097	. . .	Plasticisers; Charge controlling agents
9/08775	. . . .	{Natural macromolecular compounds or derivatives thereof}	9/09708	. . . .	{Inorganic compounds}
9/08777	. . . . .	{Cellulose or derivatives thereof}	9/09716	. . . . .	{treated with organic compounds}
9/08779	. . . . .	{Natural rubber}	9/09725	. . . . .	{Silicon-oxides; Silicates}
9/08782	. . . . .	{Waxes}	9/09733	. . . .	{Organic compounds ( <a href="#">G03G 9/08782</a> takes precedence)}
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> }	9/09741	. . . . .	{cationic}
9/08786	. . . . .	{Graft polymers}	9/0975	. . . . .	{anionic}
9/08788	. . . . .	{Block polymers}	9/09758	. . . . .	{comprising a heterocyclic ring}
9/08791	. . . . .	{characterised by the presence of specified groups or side chains}	9/09766	. . . . .	{comprising fluorine}
9/08793	. . . . .	{Crosslinked polymers}	9/09775	. . . . .	{containing atoms other than carbon, hydrogen or oxygen ( <a href="#">G03G 9/09741</a> - <a href="#">G03G 9/09766</a> take precedence)}
9/08795	. . . . .	{characterised by their chemical properties, e.g. acidity, molecular weight, sensitivity to reactants}	9/09783	. . . .	{Organo-metallic compounds}
9/08797	. . . . .	{characterised by their physical properties, e.g. viscosity, solubility, melting temperature, softening temperature, glass transition temperature}	9/09791	. . . . .	{Metallic soaps of higher carboxylic acids}
9/09	. . .	Colouring agents for toner particles	9/10	. . .	characterised by carrier particles
9/0902	. . . .	{Inorganic compounds}	9/107	. . . .	having magnetic components
9/0904	. . . . .	{Carbon black}	9/1075	. . . . .	{Carrier particles having a multi-layered structure; Carrier particles comprising a core}
9/0906	. . . .	{Organic dyes}	9/113	. . . .	having coatings applied thereto
9/0908	. . . . .	{Anthracene dyes}	9/1131	. . . . .	{Coating methods; Structure of coatings}
9/091	. . . . .	{Azo dyes}	9/1132	. . . . .	{Macromolecular components of coatings}
9/0912	. . . . .	{Indigoid; Diaryl and Triaryl methane; Oxyketone dyes}	9/1133	. . . . .	{obtained by reactions only involving carbon-to-carbon unsaturated bonds}
9/0914	. . . . .	{Acridine; Azine; Oxazine; Thiazine; (Xanthene-) dyes}	9/1134	. . . . .	{containing fluorine atoms}
9/0916	. . . . .	{Quinoline; Polymethine dyes}	9/1135	. . . . .	{obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}
9/0918	. . . . .	{Phthalocyanine dyes}	9/1136	. . . . .	{containing silicon atoms}
9/092	. . . . .	{Quinacridones}	9/1137	. . . . .	{being crosslinked}
9/0922	. . . . .	{Formazane dyes; Nitro and Nitroso dyes; Quinone imides; Azomethine dyes}	9/1138	. . . . .	{Non-macromolecular organic components of coatings}
9/0924	. . . . .	{Dyes characterised by specific substituents}	9/1139	. . . . .	{Inorganic components of coatings}
9/0926	. . . .	{characterised by physical or chemical properties}	9/12	. . .	in liquid developer mixtures
9/0928	. . . .	{Compounds capable to generate colouring agents by chemical reaction}	9/122	. . . .	{characterised by the colouring agents}
9/093	. . .	Encapsulated toner particles	9/125	. . . .	characterised by the liquid
9/09307	. . . .	{specified by the shell material}	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 microgap}
- 15/0258 . . {provided with means for the maintenance of the charging apparatus, e.g. cleaning devices, ozone removing devices [G03G 15/0225](#), [G03G 15/0291](#) takes precedence}
- 15/0266 . . {Arrangements for controlling the amount of charge}
- 15/0275 . . {Arrangements for controlling the area of the photoconductor to be charged}
- 15/0283 . . {Arrangements for supplying power to the sensitising device}
- 15/0291 . . {corona discharge devices, e.g. wires, pointed electrodes, means for cleaning the corona discharge device}
- 15/04 . . for exposing, i.e. imagewise exposure by optically projecting the original image on a photoconductive recording material
- NOTE**
- The original image is obtained by direct optical projection or received from other sources, e.g. by computer modified or generated image data, by scanning, e.g. digital copiers
- 15/04009 . . {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}
- 15/0844 . . . . {Arrangements for purging used developer from the developing unit}
- 15/0848 . . . . {Arrangements for testing or measuring developer properties or quality, e.g. charge, size, flowability}
- 15/0849 . . . . . {Detection or control means for the developer concentration}
- 15/0851 . . . . . {the concentration being measured by electrical means}
- 15/0853 . . . . . {the concentration being measured by magnetic means}
- 15/0855 . . . . . {the concentration being measured by optical means}

- 15/0856 . . . . . {Detection or control means for the developer level}
- 15/0858 . . . . . {the level being measured by mechanical means}
- 15/086 . . . . . {the level being measured by electro-magnetic means}
- 15/0862 . . . . . {the level being measured by optical means}
- 15/0863 . . . . . {provided with identifying means or means for storing process- or use parameters, e.g. an electronic memory}
- 15/0865 . . . . . {Arrangements for supplying new developer}
- 15/0867 . . . . . {cylindrical developer cartridges, e.g. toner bottles for the developer replenishing opening}
- 15/0868 . . . . . {Toner cartridges fulfilling a continuous function within the electrographic apparatus during the use of the supplied developer material, e.g. toner discharge on demand, storing residual toner, acting as an active closure for the developer replenishing opening}
- 15/087 . . . . . {Developer cartridges having a longitudinal rotational axis, around which at least one part is rotated when mounting or using the cartridge}
- 15/0872 . . . . . {the developer cartridges being generally horizontally mounted parallel to its longitudinal rotational axis}
- 15/0874 . . . . . {non-rigid containers, e.g. foldable cartridges, bags}
- 15/0875 . . . . . {cartridges having a box like shape}
- 15/0877 . . . . . {Arrangements for metering and dispensing developer from a developer cartridge into the development unit}
- 15/0879 . . . . . {for dispensing developer from a developer cartridge not directly attached to the development unit}
- 15/0881 . . . . . {Sealing of developer cartridges}
- 15/0882 . . . . . {by a peelable sealing film ([resealing used developer units before refilling: G03G 15/0894](#))}
- 15/0884 . . . . . {by a sealing film to be ruptured or cut}
- 15/0886 . . . . . {by mechanical means, e.g. shutter, plug}
- 15/0887 . . . . . {Arrangements for conveying and conditioning developer in the developing unit, e.g. agitating, removing impurities or humidity}
- 15/0889 . . . . . {for agitation or stirring}
- 15/0891 . . . . . {for conveying or circulating developer, e.g. augers}
- 15/0893 . . . . . {in a closed loop within the sump of the developing device}
- 15/0894 . . . . . {Reconditioning of the developer unit, i.e. reusing or recycling parts of the unit, e.g. resealing of the unit before refilling with toner}
- 15/0896 . . . . . {Arrangements or disposition of the complete developer unit or parts thereof not provided for by groups [G03G 15/08](#) - [G03G 15/0894](#)}
- 15/0898 . . . . . {for preventing toner scattering during operation, e.g. seals ([sealing the donor member G03G 15/0817](#); [sealing the magnetic brush G03G 15/0942](#))}
- 15/09 . . . . . using magnetic brush
- 15/0907 . . . . . {with bias voltage ([G03G 15/065 takes precedence](#))}
- 15/0914 . . . . . {with a one-component toner}
- 15/0921 . . . . . {Details concerning the magnetic brush roller structure, e.g. magnet configuration}
- 15/0928 . . . . . {relating to the shell, e.g. structure, composition}
- 15/0935 . . . . . {relating to bearings or driving mechanism}
- 15/0942 . . . . . {with means for preventing toner scattering from the magnetic brush, e.g. magnetic seals}
- 15/095 . . . . . Removing excess solid developer {, e.g. fog preventing}
- 15/10 . . . . . using a liquid developer
- 15/101 . . . . . {for wetting the recording material}
- 15/102 . . . . . {for differentially wetting the recording material ([developers for differentially wetting G03G 9/18](#))}
- 15/104 . . . . . {Preparing, mixing, transporting or dispensing developer}
- 15/105 . . . . . {Detection or control means for the toner concentration}
- 15/107 . . . . . {Condensing developer fumes ([G03G 15/11 takes precedence](#))}
- 15/108 . . . . . {with which the recording material is brought in contact, e.g. immersion or surface immersion development}
- 15/11 . . . . . Removing excess liquid developer, e.g. by heat
- 15/14 . . . . . for transferring a pattern to a second base
- 15/16 . . . . . of a toner pattern, e.g. a powder pattern {, e.g. magnetic transfer}
- 15/1605 . . . . . {using at least one intermediate support ([G03G 15/1625 takes precedence](#))}
- 15/161 . . . . . {with means for handling the intermediate support, e.g. heating, cleaning, coating with a transfer agent}
- 15/1615 . . . . . {relating to the driving mechanism for the intermediate support, e.g. gears, couplings, belt tensioning}
- 15/162 . . . . . {details of the 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}
- 15/165 . . . . . {Arrangements for supporting or transporting the second base in the transfer area, e.g. guides}



- 15/1655 . . . . . {comprising a rotatable holding member to which the second base is attached or attracted, e.g. screen transfer holding drum}
- 15/166 . . . . . {with means for conditioning the holding member, e.g. cleaning}
- 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}
- 15/167 . . . . {at least one of the recording member or the transfer member being rotatable during the transfer}
- 15/1675 . . . . {with means for controlling the bias applied in the transfer nip}
- 15/168 . . . . {with means for conditioning the transfer element, e.g. cleaning}
- 15/1685 . . . . {Structure, details of the transfer member, e.g. chemical composition}
- 15/169 . . . {with means for preconditioning the toner image before the transfer ([G03G 15/095](#) and [G03G 15/11](#) take precedence)}
- 15/1695 . . . {with means for preconditioning the paper base before the transfer}
- 15/18 . . of a charge pattern
- 15/20 . for fixing, e.g. by using heat
- 15/2003 . . {using heat}
- 15/2007 . . . {using radiant heat, e.g. infra-red lamps, microwave heaters}
- 15/201 . . . . {of high intensity and short duration, i.e. flash fusing}
- 15/2014 . . . {using contact heat}
- 15/2017 . . . . {Structural details of the fixing unit in general, e.g. cooling means, heat shielding means ([G03G 15/2053](#) takes precedence)}
- 15/2021 . . . . . {Plurality of separate fixing and/or cooling areas or units, two step fixing}
- 15/2025 . . . . . {with special means for lubricating and/or cleaning the fixing unit, e.g. applying offset preventing fluid}
- 15/2028 . . . . . {with means for handling the copy material in the fixing nip, e.g. introduction guides, stripping means}
- 15/2032 . . . . . {Retractable heating or pressure unit}
- 15/2035 . . . . . {for maintenance purposes, e.g. for removing a jammed sheet}
- 15/2039 . . . . {with means for controlling the fixing temperature}
- 15/2042 . . . . . {specially for the axial heat partition}
- 15/2046 . . . . . {specially for the influence of heat loss, e.g. due to the contact with the copy material or other roller}
- 15/205 . . . . . {specially for the mode of operation, e.g. standby, warming-up, error ([G03G 15/2046](#) takes precedence)}
- 15/2053 . . . . {Structural details of heat elements, e.g. structure of roller or belt, eddy current, induction heating}
- 15/2057 . . . . . {relating to the chemical composition of the heat element and layers thereof}
- 15/206 . . . . {Structural details or chemical composition of the pressure elements and layers thereof}
- 15/2064 . . . . {combined with pressure}
- 15/2092 . . {using pressure only}
- 15/2096 . . {using a solvent}
- 15/22 . . involving the combination of more than one step according to groups [G03G 13/02](#) - [G03G 13/20](#) ([G03G 15/01](#) takes precedence)
- 15/221 . . {Machines other than electrographic copiers, e.g. electrophotographic cameras, electrostatic typewriters}
- 15/222 . . . {Machines for handling xeroradiographic images, e.g. xeroradiographic processors}
- 15/223 . . . {Machines for handling microimages, e.g. microfilm copiers}
- 15/224 . . . {Machines for forming tactile or three dimensional images by electrographic means, e.g. braille, 3d printing}
- 15/225 . . {using contact-printing}
- 15/226 . . {where the image is formed on a dielectric layer covering the photoconductive layer}
- 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}
- 15/228 . . {the process involving the formation of a master, e.g. photocopy-printer machines}
- 15/23 . . specially adapted for copying both sides of an original or for copying on both sides of a recording or image-receiving material
- 15/231 . . . {Arrangements for copying on both sides of a recording or image-receiving material}
- 15/232 . . . . {using a single reusable electrographic recording member}
- 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}
- 15/235 . . . . . {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}
- 15/237 . . . . . {the image receiving member being in form of a continuous web ([G03G 15/235](#) takes precedence)}
- 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 or toner density measurement}
- 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, photoelectrosolography; Processes involving a selective transfer, e.g. electrophoto-adhesive processes; Apparatus essentially involving a single such process**
- 17/005 . . {Radiation field photography, e.g. Kirlian photography, colour-discharge photography (recording electrical waveforms in general [G01R 13/04](#), e.g. [G01R 13/12](#) - [G01R 13/14](#))}
- 17/02 . . with electrolytic development
- 17/04 . . using photoelectrophoresis
- 17/06 . . . Apparatus therefor
- 17/08 . . using an electrophoto-adhesive process, e.g. manifold imaging
- 17/10 . . using migration imaging, e.g. photoelectrosolography ([G03G 17/04](#) takes precedence)
- 19/00 Processes using magnetic patterns; Apparatus therefor {, i.e. magnetography}**
- NOTE**  
This group comprises also processes and apparatus wherein magnetography and electrography are combined; magnetographic printing apparatus for data processing machines [G06K 15/14](#); recording members therefor [G03G 5/00](#); 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}
- 21/00 Arrangements not provided for by groups [G03G 13/00](#) - [G03G 19/00](#), e.g. cleaning, elimination of residual charge**
- 21/0005 . . {for removing solid developer or debris from the electrographic recording medium}
- 21/0011 . . {using a blade; Details of cleaning blades, e.g. blade shape, layer forming}
- 21/0017 . . . {Details relating to the internal structure or chemical composition of the blades}
- 21/0023 . . . {with electric bias}
- 21/0029 . . . {Details relating to the blade support}
- 21/0035 . . {using a brush; Details of cleaning brushes, e.g. fibre density ([G03G 21/0064](#) takes precedence; magnetic brushes [G03G 21/0047](#))}
- 21/0041 . . {using a band; Details of cleaning bands, e.g. band winding}

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



21/1896	. . . . {mechanical or optical identification means, e.g. protrusions, bar codes}	2215/00194	. . . . original either moving or at rest
21/20	. Humidity or temperature control {also ozone evacuation; Internal apparatus environment control}	2215/00198	. . . . . where one single scanning surface is used
21/203	. . {Humidity}	2215/00202	. . . . . where separate scanning surfaces are used
21/206	. . {Conducting air through the machine, e.g. for cooling, filtering, removing gases like ozone}	2215/00206	. . Original medium
<b>2215/00</b>	<b>Apparatus for electrophotographic processes</b>	2215/0021	. . . Plural types handled
2215/00004	. Handling of entire apparatus	2215/00215	. . . . Mixed types handled
2215/00008	. . Upright positioning for maintenance or storage	2215/00219	. . . Paper
2215/00012	. . Upright positioning as well as horizontal positioning for image forming	2215/00223	. . . . Continuous web, i.e. roll
2215/00016	. Special arrangement of entire apparatus	2215/00227	. . . . . Fan fold, e.g. CFF, normally perforated
2215/00021	. . Plural substantially independent image forming units in cooperation, e.g. for duplex, colour or high-speed simplex	2215/00232	. . . . Non-standard format
2215/00025	. Machine control, e.g. regulating different parts of the machine	2215/00236	. . . . . Large sized, e.g. technical plans
2215/00029	. . Image density detection	2215/0024	. . . . . Small sized, e.g. postcards
2215/00033	. . . on recording member	2215/00244	. . . . Non-standard property
2215/00037	. . . . Toner image detection	2215/00248	. . . . . Thick
2215/00042	. . . . . Optical detection	2215/00253	. . . . . Thin
2215/00046	. . . . . Magnetical detection	2215/00257	. . . . . coloured
2215/0005	. . . . . without production of a specific test patch	2215/00261	. . . Plastic
2215/00054	. . . . . Electrostatic image detection	2215/00265	. . . . Overhead Transparency, i.e. OHP
2215/00059	. . . on intermediate image carrying member, e.g. transfer belt	2215/0027	. . . . Transparent film roll
2215/00063	. . . Colour	2215/00274	. . . . Slide
2215/00067	. . . on recording medium	2215/00278	. . . . Microfiche
2215/00071	. . by measuring the photoconductor or its environmental characteristics	2215/00282	. . . Book
2215/00075	. . . the characteristic being its speed	2215/00286	. . . With punch holes or other non-image related artifacts, e.g. staples
2215/0008	. . . . for continuous control of recording starting time	2215/00291	. . . Fragile, e.g. old documents
2215/00084	. . . the characteristic being the temperature	2215/00295	. . . Valuable, e.g. cheques, passport
2215/00088	. . by using information from an external support	2215/00299	. . . Confidential, e.g. secret documents
2215/00092	. . . the support being an IC card	2215/00303	. . . Control sheet
2215/00097	. . . the support being a counter	2215/00308	. . . Object for which a graphic image is not of interest, e.g. medical sample
2215/00101	. . . the support being a magnetic card	2215/00312	. . . Other special types
2215/00105	. . . the support being a payment means, e.g. a coin	2215/00316	. . . Electronic image supplied to the apparatus
2215/00109	. . Remote control of apparatus, e.g. by a host	2215/0032	. . Original binding
2215/00113	. . . Plurality of apparatus configured in groups each with its own host	2215/00324	. . Document property detectors
2215/00118	. . using fuzzy logic	2215/00329	. . . Document size detectors
2215/00122	. . using speech synthesis or voice recognition	2215/00333	. . . . detecting feeding of documents
2215/00126	. . Multi-job machines	2215/00337	. . Document set detector
2215/0013	. . for producing copies with MICR	2215/00341	. . Jam handling in document feeder
2215/00135	. Handling of parts of the apparatus	2215/00345	. . . Copying machine problems
2215/00139	. . Belt	2215/0035	. . . Document related problems, e.g. double-fed sheets
2215/00143	. . . Meandering prevention	2215/00354	. . Specific document handling machines
2215/00147	. . . . using tractor sprocket holes	2215/00358	. . . Plural feed trays for document sets, e.g. multi-job
2215/00151	. . . . using edge limitations	2215/00362	. relating to the copy medium handling
2215/00156	. . . . by controlling drive mechanism	2215/00367	. . The feeding path segment where particular handling of the copy medium occurs, segments being adjacent and non-overlapping. Each segment is identified by the most downstream point in the segment, so that for instance the segment labelled "Fixing device" is referring to the path between the "Transfer device" and the "Fixing device"
2215/0016	. . . . by mark detection, e.g. optical	2215/00371	. . . General use over the entire feeding path
2215/00164	. . . . by electronic scan control	2215/00375	. . . Package, e.g. a ream
2215/00168	. . . . by friction	2215/00379	. . . Copy medium holder
2215/00172	. relative to the original handling	2215/00383	. . . . Cassette
2215/00177	. . for scanning	2215/00388	. . . . . rotatable
2215/00181	. . . concerning the original's state of motion	2215/00392	. . . . Manual input tray
2215/00185	. . . . original at rest	2215/00396	. . . Pick-up device
2215/00189	. . . . original moving	2215/004	. . . Separation device
		2215/00405	. . . Registration device

2215/00409	. . .	Transfer device	2215/00628	. . . .	Mechanical detector or switch
2215/00413	. . .	Fixing device	2215/00632	. . . .	Electric detector, e.g. of voltage or current
2215/00417	. . .	Post-fixing device	2215/00637	. . . .	Acoustic detector
2215/00421	. . . .	Discharging tray, e.g. devices stabilising the quality of the copy medium, postfixing-treatment, inverting, sorting	2215/00641	. . . .	Pneumatic detector
2215/00426	. . . .	Post-treatment device adding qualities to the copy medium product ( <a href="#">G03G 2215/00421 takes precedence</a> )	2215/00645	. . . .	Speedometer
2215/0043	. . . .	Refeeding path ( <a href="#">G03G 2215/00421 takes precedence</a> )	2215/00649	. . .	Electrodes close to the copy feeding path
2215/00434	. . . . .	Refeeding tray or cassette	2215/00654	. . .	Charging device
2215/00438	. . . . .	Inverter of refeding path	2215/00658	. . .	Brush ( <a href="#">G03G 2215/00654 takes precedence</a> )
2215/00443	. .	Copy medium	2215/00662	. . .	Decurling device
2215/00447	. . .	Plural types handled	2215/00666	. . .	Heating or drying device
2215/00451	. . .	Paper	2215/0067	. . .	Damping device
2215/00455	. . . .	Continuous web, i.e. roll	2215/00675	. . .	Mechanical copy medium guiding means, e.g. mechanical switch
2215/00459	. . . . .	Fan fold, e.g. CFF, normally perforated	2215/00679	. . .	Conveying means details, e.g. roller
2215/00464	. . . .	Non-standard format	2215/00683	. . . .	Chemical properties
2215/00468	. . . . .	Large sized, e.g. technical plans	2215/00687	. . .	Handling details
2215/00472	. . . . .	Small sized, e.g. postcards	2215/00691	. . . .	Shredder
2215/00476	. . . .	Non-standard property	2215/00696	. . . .	Turner acting in plane of recording medium, e.g. A4 to A4R change
2215/00481	. . . . .	Thick	2215/007	. . . .	Inverter not for refeding purposes
2215/00485	. . . . .	Thin	2215/00704	. . . .	Curl adding, bending
2215/00489	. . . . .	coloured	2215/00708	. . . .	Cleaning of sheet or feeding structures
2215/00493	. . .	Plastic	2215/00713	. . . .	Lock related to feeding device
2215/00497	. . . .	Overhead Transparency, i.e. OHP	2215/00717	. . .	Detection of physical properties
2215/00502	. . . .	Transparent film	2215/00721	. . . .	of sheet position
2215/00506	. . . .	Slide	2215/00725	. . . .	of sheet presence in input tray
2215/0051	. . . .	Microfiche	2215/00729	. . . .	of sheet amount in input tray
2215/00514	. . .	Envelopes	2215/00734	. . . .	of sheet size
2215/00518	. . .	Recording medium, e.g. photosensitive	2215/00738	. . . .	of sheet thickness or rigidity
2215/00523	. . .	Other special types, e.g. tabbed	2215/00742	. . . .	of sheet weight
2215/00527	. . . .	Fabrics, e.g. textiles	2215/00746	. . . .	of sheet velocity
2215/00531	. . .	transported through the apparatus for non-imaging purposes, e.g. cleaning	2215/00751	. . . .	of sheet type, e.g. OHP
2215/00535	. .	Stable handling of copy medium	2215/00755	. . . .	of sheet toner density
2215/0054	. . .	Detachable element of feed path	2215/00759	. . . .	of sheet image, e.g. presence, type
2215/00544	. . .	Openable part of feed path	2215/00763	. . . .	of sheet resistivity
2215/00548	. . .	Jam, error detection, e.g. double feeding	2215/00767	. . . .	of sheet potential
2215/00552	. . . .	Purge of recording medium at jam	2215/00772	. . . .	of temperature influencing copy sheet handling
2215/00556	. . .	Control of copy medium feeding	2215/00776	. . . .	of humidity or moisture influencing copy sheet handling
2215/00561	. . . .	Aligning or deskewing	2215/0078	. . . .	of opening of structural part
2215/00565	. . . . .	Mechanical details	2215/00784	. . . .	of connection or pressing of structural part
2215/00569	. . . .	Calibration, test runs, test prints	2215/00789	. .	Adding properties or qualities to the copy medium
2215/00573	. . . .	Recording medium stripping from image forming member	2215/00793	. . .	Stamping device
2215/00578	. . . .	Composite print mode	2215/00797	. . .	Printing device, i.e. annotation
2215/00582	. . . . .	Plural adjacent images on one side	2215/00801	. . .	Coating device
2215/00586	. . . .	duplex mode	2215/00805	. . .	Gloss adding or lowering device
2215/0059	. . . .	Effect of changed recording medium size, e.g. originating from heating	2215/0081	. . . .	Gloss level being selectable
2215/00594	. . . .	Varying registration in order to produce special effect, e.g. binding margin	2215/00814	. . .	Cutter
2215/00599	. . . .	Timing, synchronisation	2215/00818	. . .	Punch device
2215/00603	. . .	Control of other part of the apparatus according to the state of copy medium feeding	2215/00822	. . .	Binder, e.g. glueing device
2215/00607	. . .	Debris handling means	2215/00827	. . . .	Stapler
2215/00611	. . .	Detector details, e.g. optical detector	2215/00831	. . . .	Stitcher
2215/00616	. . . .	Optical detector	2215/00835	. . . .	Toner binding
2215/0062	. . . . .	infra-red	2215/00839	. . . .	Binding tape
2215/00624	. . . .	Magnetic detector or switch, e.g. reed switch	2215/00843	. . . .	Clip
			2215/00848	. . . .	Details of binding device
			2215/00852	. . . .	Temporary binding
			2215/00856	. . . .	External binding device
			2215/0086	. . . .	Manual activation of binding
			2215/00864	. . . .	Plural selectable binding modes

- 2215/00869 . . . Cover sheet adding means
- 2215/00873 . . . Tape adding means
- 2215/00877 . . . Folding device
- 2215/00881 . . . Magnetic information
- 2215/00886 . . . Sorting or discharging
- 2215/0089 . . . Shifting jobs
- 2215/00894 . . . Placing job divider sheet
- 2215/00898 . . . Mechanical separator between jobs
- 2215/00902 . . . Sorting marks of jobs, e.g. on the sheet edges
- 2215/00907 . . . Electronically addressable mailing bins
- 2215/00911 . . . Detection of copy amount or presence in discharge tray
- 2215/00915 . . . . Detection of weight of copies
- 2215/00919 . . . Special copy medium handling apparatus
- 2215/00924 . . . . two or more parallel feed paths
- 2215/00928 . . . . Copies and originals use a common part of the copy medium handling apparatus
- 2215/00932 . . . Security copies
- 2215/00936 . . . Bookbinding
- 2215/0094 . . . Copy produced and used as original
- 2215/00945 . . . Copy material feeding speed varied over the feed path
- 2215/00949 . . . Copy material feeding speed switched according to current mode of the apparatus, e.g. colour mode
- 2215/00953 . . . Electrographic recording members
- 2215/00957 . . . Compositions
- 2215/00962 . . . Electrographic apparatus defined by the electrographic recording member
- 2215/00966 . . . . Sheet type electrographic recording members from which a toner or charge image is transferred
- 2215/0097 . . . . . Sheet cartridge or tray
- 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
- 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
- 2215/01 . . . for producing multicoloured copies
- 2215/0103 . . . Plural electrographic recording members
- 2215/0106 . . . . At least one recording member having plural associated developing units
- 2215/0109 . . . . Single transfer point used by plural recording members
- 2215/0112 . . . . . Linearly moving set of recording members
- 2215/0116 . . . . . Rotating set of recording members
- 2215/0119 . . . . Linear arrangement adjacent plural transfer points
- 2215/0122 . . . . . primary transfer to an intermediate transfer belt
- 2215/0125 . . . . . . the linear arrangement being horizontal or slanted
- 2215/0129 . . . . . . horizontal medium transport path at the secondary transfer
- 2215/0132 . . . . . . vertical medium transport path at the secondary transfer
- 2215/0135 . . . . . the linear arrangement being vertical
- 2215/0138 . . . . . primary transfer to a recording medium carried by a transport belt
- 2215/0141 . . . . . the linear arrangement being horizontal
- 2215/0145 . . . . . the linear arrangement being vertical
- 2215/0148 . . . . . the linear arrangement being slanted
- 2215/0151 . . . characterised by the technical problem
- 2215/0154 . . . Vibrations and positional disturbances when one member abuts or contacts another member
- 2215/0158 . . . Colour registration
- 2215/0161 . . . . Generation of registration marks
- 2215/0164 . . . Uniformity control of the toner density at separate colour transfers
- 2215/0167 . . . single electrographic recording member
- 2215/017 . . . single rotation of recording member to produce multicoloured copy
- 2215/0174 . . . plural rotations of recording member to produce multicoloured copy
- 2215/0177 . . . . Rotating set of developing units
- 2215/018 . . . . Linearly moving set of developing units, one at a time adjacent the recording member
- 2215/0183 . . . . Reciprocal movement of transfer member across transfer point
- 2215/0187 . . . Multicoloured toner image formed on the recording member
- 2215/019 . . . Structural features of the multicolour image forming apparatus
- 2215/0193 . . . transfer member separable from recording member
- 2215/0196 . . . Recording medium carrying member with speed switching
- 2215/02 . . . Arrangements for laying down a uniform charge
- 2215/021 . . . by contact, friction or induction
- 2215/022 . . . . using a magnetic brush
- 2215/023 . . . . using a laterally vibrating brush
- 2215/025 . . . . using contact charging means having lateral dimensions related to other apparatus means, e.g. photodrum, developing roller
- 2215/026 . . . by coronas
- 2215/027 . . . . using wires
- 2215/028 . . . . using pointed electrodes
- 2215/04 . . . Arrangements for exposing and producing an image
- 2215/0402 . . . Exposure devices
- 2215/0404 . . . . Laser
- 2215/0407 . . . . Light-emitting array or panel
- 2215/0409 . . . . . Light-emitting diodes, i.e. LED-array
- 2215/0412 . . . . . Electroluminescent elements, i.e. EL-array
- 2215/0414 . . . . . Liquid-crystal display elements, i.e. LCD-shutter array
- 2215/0417 . . . Standard lamp used to produce a reflection or transmission image of an original
- 2215/0419 . . . Device not using light, e.g. ion-writer
- 2215/0421 . . . Plurality of devices for producing the image (excluding dedicated erasing means)
- 2215/0424 . . . Using contents of CCD array to produce the image
- 2215/0426 . . . Editing of the image, e.g. adding or deleting ([correction, i.e. changing or enhancing the image G03G 2215/0429](#))
- 2215/0429 . . . Changing or enhancing the image
- 2215/0431 . . . Producing a clean non-image area, i.e. avoiding show-around effects
- 2215/0434 . . . . Parameters defining the non-image area to be cleaned

2215/0436	. . . . .	Document properties at the scanning position, e.g. position and density
2215/0439	. . . . .	Automatic detection of properties
2215/0441	. . . . .	Manual input of properties
2215/0443	. . . . .	Copy medium outline relative to the charge image
2215/0446	. . . . .	Magnification degree
2215/0448	. . . . .	Charge-erasing means for the non-image area
2215/0451	. . . . .	Light-emitting array or panel
2215/0453	. . . . .	Light-emitting diodes, i.e. LED-array
2215/0456	. . . . .	Electroluminescent elements, i.e. EL-array
2215/0458	. . . . .	Liquid-crystal display elements, i.e. LCD-shutter array
2215/046	. . . . .	Charger
2215/0463	. . . . .	Exposure lamp used for scanning
2215/0465	. . . . .	Developing conditions changed to produce a clean non-image area
2215/0468	. . . . .	Image area information changed (default is the charge image)
2215/047	. . . . .	Image corrections
2215/0473	. . . . .	due to document imperfections, e.g. punchholes, books
2215/0475	. . . . .	due to cover imperfection, i.e. show-through problem
2215/0478	. . . . .	due to image carrier variations, e.g. ageing
2215/048	. . . . .	Technical-purpose-oriented image area changes
2215/0482	. . . . .	Toner-free areas produced
2215/0485	. . . . .	Avoiding problems in standard processing steps, such as transfer and fixing
2215/0487	. . . . .	Adapted to post-processing step, e.g. binding
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
2215/0602	. . . . .	Developer

**NOTE**

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

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

2215/0631	. . . . .	melted, or otherwise made liquid
2215/0634	. . . . .	Developing device

**NOTE**

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

2215/0636	. . . . .	Specific type of dry developer device
2215/0639	. . . . .	Without donor member (i.e. developing housing slides on latent image-carrying member)
2215/0641	. . . . .	Without separate supplying member (i.e. with developing housing sliding on donor member)
2215/0643	. . . . .	Electrodes in developing area, e.g. wires, not belonging to the main donor part
2215/0646	. . . . .	Electrodes only acting from one side of the developing area, e.g. plate electrode
2215/0648	. . . . .	Two or more donor members
2215/0651	. . . . .	Electrodes in donor member surface
2215/0653	. . . . .	Microelectrodes in donor member surface, e.g. floating
2215/0656	. . . . .	Fixed electrodes behind moving donor member surface
2215/0658	. . . . .	Liquid developer devices
2215/066	. . . . .	Toner cartridge or other attachable and detachable container for supplying developer material to replace the used material
2215/0663	. . . . .	having a longitudinal rotational axis, around which at least one part is rotated when mounting or using the cartridge
2215/0665	. . . . .	Generally horizontally mounting of said toner cartridge parallel to its longitudinal rotational axis
2215/0668	. . . . .	Toner discharging opening at one axial end
2215/067	. . . . .	Toner discharging opening covered by arcuate shutter
2215/0673	. . . . .	Generally vertically mounting of said toner cartridge parallel to its longitudinal rotational axis
2215/0675	. . . . .	Generally cylindrical container shape having two ends
2215/0678	. . . . .	Bottle shaped container having a bottle neck for toner discharge
2215/068	. . . . .	having a box like shape
2215/0682	. . . . .	Bag-type non-rigid container
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
2215/0687	. . . . .	using a peelable sealing film
2215/069	. . . . .	using a sealing member to be ruptured or cut
2215/0692	. . . . .	using a slidable sealing member, e.g. shutter
2215/0695	. . . . .	using identification means or means for storing process or use parameters
2215/0697	. . . . .	being an electronically readable memory
2215/08	. . . . .	Details of powder developing device not concerning the development directly
2215/0802	. . . . .	Arrangements for agitating or circulating developer material



2215/0805	. . .	Cleaning blade adjacent to the donor member	2215/1671	. . .	Preheating the copy medium before the transfer point
2215/0808	. . .	Donor member rotation direction	2215/1676	. .	Simultaneous toner image transfer and fixing
2215/0811	. . . .	Upper part of donor member transports used developer back to the sump	2215/168	. . .	at the first transfer point
2215/0813	. . . .	Lower part of donor member transports used developer back to the sump	2215/1685	. . . .	using heat
2215/0816	. . .	Agitator type	2215/169	. . . .	without heat
2215/0819	. . . .	two or more agitators	2215/1695	. . .	at the second or higher order transfer point
2215/0822	. . . . .	with wall or blade between agitators	2215/20	.	Details of the fixing device or process
2215/0825	. . . .	belt	<b>NOTE</b>		
2215/0827	. . . .	Augers	Indexing codes of group <a href="#">G03G 2215/20</a> can be followed by additional symbols preceded by a "+" sign and relating to additional characteristics. The indexing codes have the meaning as indicated below.		
2215/083	. . . . .	with two opposed pitches on one shaft	<b>+H</b> Using heat to fix		
2215/0833	. . . . .	with varying pitch on one shaft	<b>+P</b> Using pressure to fix		
2215/0836	. . .	Way of functioning of agitator means	<b>+P1</b> where the pressure is changed		
2215/0838	. . . .	Circulation of developer in a closed loop within the sump of the developing device	<b>+P1A</b> being adapted to the current toner-carrying medium treated (e.g. duplex copy, colour copy, OHP sheet, envelope)		
2215/0841	. . . .	Presentation of developer to donor member	<b>+P1B</b> compensating for temperature or other technical condition variations (e.g. sheet skewing) occurring		
2215/0844	. . . . .	by upward movement of agitator member	<b>+P1C</b> when being in a non-fixing or waiting mode		
2215/0847	. . . . .	by downward movement of agitator member	<b>+P1M</b> for maintenance purpose or abnormal situations (e.g. power cut-off)		
2215/085	. . .	Stirring member in developer container	2215/2003	. .	Structural features of the fixing device
2215/0852	. . . .	reciprocating	2215/2006	. . .	Plurality of separate fixing areas
2215/0855	. .	Materials and manufacturing of the developing device	2215/2009	. . .	Pressure belt
2215/0858	. . .	Donor member	2215/2012	. . . .	having an end
2215/0861	. . . .	Particular composition or materials	2215/2016	. . .	Heating belt
2215/0863	. . . .	Manufacturing	2215/2019	. . . .	the belt not heating the toner or medium directly, e.g. heating a heating roller
2215/0866	. . .	Metering member	2215/2022	. . . .	the fixing nip having both a stationary and a rotating belt support member opposing a pressure member
2215/0869	. . .	Supplying member	2215/2025	. . . .	the fixing nip having a rotating belt support member opposing a pressure member
2215/0872	. . .	Housing of developing device	2215/2029	. . . . .	the belt further entrained around one or more stationary belt support members, the latter not being a cooling device
2215/0875	. .	Arrangements for shipping or transporting of the developing device to or from the user	2215/2032	. . . . .	the belt further entrained around additional rotating belt support members
2215/0877	. . .	Sealing of the developing device opening, facing the image-carrying member	2215/2035	. . . .	the fixing nip having a stationary belt support member opposing a pressure member
2215/088	. . . .	Peelable sealing film	2215/2038	. . . . .	the belt further entrained around one or more rotating belt support members
2215/0883	. . . .	Rupturable sealing film, e.g. tearable film	2215/2041	. . . .	the fixing nip being formed by tensioning the belt over a surface portion of a pressure member
2215/0886	. . .	Container for holding the whole developing device when outside the machine, e.g. box, sack	2215/2045	. . .	Variable fixing speed
2215/0888	. .	Arrangements for detecting toner level or concentration in the developing device	2215/2048	. . .	Surface layer material
2215/0891	. . .	Optical detection	2215/2051	. . . .	Silicone rubber
2215/0894	. . . .	through a light transmissive window in the developer container wall	2215/2054	. . . .	Inorganic filler, e.g. silica powder
2215/0897	. . . . .	Cleaning of the light transmissive window	2215/2058	. . .	Shape of roller along rotational axis
2215/16	.	Transferring device, details			
2215/1604	. .	Main transfer electrode			
2215/1609	. . .	Corotron			
2215/1614	. . .	Transfer roll			
2215/1619	. . .	Transfer drum			
2215/1623	. . .	Transfer belt			
2215/1628	. . .	Blade			
2215/1633	. . .	Plate			
2215/1638	. . .	Wires			
2215/1642	. . .	Brush			
2215/1647	. .	Cleaning of transfer member			
2215/1652	. . .	of transfer roll			
2215/1657	. . .	of transfer drum			
2215/1661	. . .	of transfer belt			
2215/1666	. .	Preconditioning of copy medium before the transfer point			

2215/2061	. . . . concave	2221/0073	. . . Electrostatic
2215/2064	. . . . convex	2221/0078	. . . Magnetic
2215/2067	. . . . Shape of roller core	2221/0084	. . . Liquid
2215/207	. . Type of toner image to be fixed	2221/0089	. . . Mechanical
2215/2074	. . . colour	2221/0094	. . . Suction
2215/2077	. . . . Fixing between separate colour toner transfers	2221/16	. Mechanical means for facilitating the maintenance of the apparatus, e.g. modular arrangements and complete machine concepts
2215/208	. . . black and white	2221/1603	. . for multicoloured copies
2215/2083	. . . duplex	2221/1606	. . for the photosensitive element
2215/2087	. . . simplex	2221/1609	. . . protective arrangements for preventing damage
2215/209	. . . plural types of toner image handled by the fixing device	2221/1612	. . . . plural shutters for openings of process cartridge
2215/2093	. . Release agent handling devices	2221/1615	. . . being a belt
2215/2096	. . . using porous fluoropolymers for wicking the release agent	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
2217/0091	. Process comprising image exposure at the developing area	2221/1654	. . . Locks and means for positioning or alignment
<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>	2221/1657	. . . transmitting mechanical drive power
2221/0005	. Cleaning of residual toner	2221/166	. . . Electrical connectors
2221/001	. . Plural sequential cleaning devices	2221/1663	. . having lifetime indicators
2221/0015	. . Width of cleaning device related to other parts of the apparatus, e.g. transfer belt width	2221/1666	. . . integer lifetimes of each other
2221/0021	. . applying vibrations to the electrographic recording medium for assisting the cleaning, e.g. ultrasonic vibration	2221/1669	. . Details about used materials
2221/0026	. Cleaning of foreign matter, e.g. paper powder, from imaging member	2221/1672	. . Paper handling
2221/0031	. . Type of foreign matter	2221/1675	. . . jam treatment
2221/0036	. . . Oil and other liquid matter	2221/1678	. . Frame structures
2221/0042	. . . Paper powder and other dry foreign matter	2221/1681	. . . Portable machines
2221/0047	. . Type of cleaning device	2221/1684	. . . using extractable subframes, e.g. on rails or hinges
2221/0052	. . . Common container for holding cleaned foreign matter and residual toner	2221/1687	. . . using opening shell type machines, e.g. pivoting assemblies
2221/0057	. . . . Separate cleaning members for foreign matter and residual toner	2221/169	. . . Structural door designs
2221/0063	. . . Cleaning device for foreign matter separate from residual toner cleaning device	2221/1693	. . for charging
2221/0068	. . Cleaning mechanism	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

## G03G

- 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