

## PHYSICS

## Note(s)

1. In this section, the following term is used with the meaning indicated:
  - "variable" (as a noun) means a feature or property (e.g., a dimension, a physical condition such as temperature, a quality such as density or colour) which, in respect of a particular entity (e.g., an object, a quantity of a substance, a beam of light) and at a particular instant, is capable of being measured; the variable may change, so that its numerical expression may assume different values at different times, in different conditions or in individual cases, but may be constant in respect of a particular entity in certain conditions or for practical purposes (e.g., the length of a bar may be regarded as constant for many purposes).
2. Attention is drawn to the definitions of terms or expressions used, appearing in the notes of several of the classes in this section, in particular those of "measuring" in class G01 and "control" and "regulation" in class G05.
3. Classification in this section may present more difficulty than in other sections, because the distinction between different fields of use rests to a considerable extent on differences in the intention of the user rather than on any constructional differences or differences in the manner of use, and because the subjects dealt with are often in effect systems or combinations, which have features or parts in common, rather than "things", which are readily distinguishable as a whole. For example, information (e.g., a set of figures) may be displayed for the purpose of education or advertising (G09), for enabling the result of a measurement to be known (G01), for signalling the information to a distant point or for giving information which has been signalled from a distant point (G08). The words used to describe the purpose depend on features that may be irrelevant to the form of the apparatus concerned, for example, such features as the desired effect on the person who sees the display, or whether the display is controlled from a remote point. Again, a device which responds to some change in a condition, e.g., in the pressure of a fluid, may be used, without modification of the device itself, to give information about the pressure (G01L) or about some other condition linked to the pressure (another subclass of class G01, e.g., G01K for temperature), to make a record of the pressure or of its occurrence (G07C), to give an alarm (G08B), or to control another apparatus (G05).

The classification scheme is intended to enable things of a similar nature (as indicated above) to be classified together. It is therefore particularly necessary for the real nature of any technical subject to be decided before it can be properly classified.

## G03

**PHOTOGRAPHY; CINEMATOGRAPHY; ANALOGOUS TECHNIQUES USING WAVES OTHER THAN OPTICAL WAVES; ELECTROGRAPHY; HOLOGRAPHY** (reproduction of pictures or patterns by scanning and converting into electrical signals H04N) [4]

## Note(s)

In this class, the following terms are used with the meaning indicated:

- "records" means photographs or any other kind of latent, directly-visible or permanent storage of pictorial information, which consist of an imagewise distribution of a quantity, e.g. an electric charge pattern, recorded on a carrier member;
- "optical" applies not only to visible light but also to ultra-violet or infra-red radiations. [4]

## G03C

**PHOTOSENSITIVE MATERIALS FOR PHOTOGRAPHIC PURPOSES** (for photomechanical purposes G03F); **PHOTOGRAPHIC PROCESSES, e.g. CINE, X-RAY, COLOUR, STEREO-PHOTOGRAPHIC PROCESSES; AUXILIARY PROCESSES IN PHOTOGRAPHY** (photographic processes characterised by the use or manipulation of apparatus classifiable *per se* in subclass G03B, see G03B; photomechanical production of textured or patterned surfaces G03F; electrography, electrophotography, magnetography G03G)

## Note(s)

In this subclass, the following expressions are used with the meanings indicated:

- "photosensitive compositions" covers photosensitive substances, e.g. silver halides, and, if applicable, binders or additives;
- "photosensitive materials" covers the photosensitive compositions, e.g. emulsions, the bases carrying them, and, if applicable, auxiliary layers. [5]

## G03C 1/00

**Photosensitive materials** (photosensitive materials for multicolour processes G03C 7/00; for diffusion transfer processes G03C 8/00; photosensitive glass C03C 4/04) [5]

## G03C 1/005

· Silver halide emulsions; Preparation thereof; Physical treatment thereof; Incorporation of additives therein (catalytic amounts of silver halide in dry silver systems G03C 1/498) [5]

## G03C 1/015

· · Apparatus or processes for the preparation of emulsions (coating, drying G03C 1/74) [5]

- G03C 1/025 .. Physical treatment of emulsions, e.g. by ultrasonics, refrigeration, pressure (coating, drying G03C 1/74) [5]
- G03C 1/035 .. characterised by the crystal form or composition, e.g. mixed grain [5]
- G03C 1/04 .. with macromolecular additives; with layer-forming substances [5]
- G03C 1/043 ... Polyalkylene oxides; Polyalkylene sulfides; Polyalkylene selenides; Polyalkylene tellurides [5]
- G03C 1/047 ... Proteins, e.g. gelatine derivatives; Hydrolysis or extraction products of proteins [5]
- G03C 1/053 ... Polymers obtained by reactions only involving carbon-to-carbon unsaturated bonds, e.g. vinyl polymers [5]
- G03C 1/06 .. with non-macromolecular additives (G03C 1/04 takes precedence) [5]
- G03C 1/07 ... Substances influencing grain growth during silver salt formation [5]
- G03C 1/08 ... Sensitivity-increasing substances [5]
- G03C 1/09 .... Noble metals or mercury; Salts or compounds thereof; Sulfur, selenium or tellurium, or compounds thereof, e.g. for chemical sensitising (G03C 1/34, G03C 1/35 take precedence) [5]
- G03C 1/10 .... Organic substances
- G03C 1/12 ..... Methine or polymethine dyes
- G03C 1/14 ..... with an odd number of CH groups
- G03C 1/16 ..... with one CH group
- G03C 1/18 ..... with three CH groups
- G03C 1/20 ..... with more than three CH groups
- G03C 1/22 ..... with an even number of CH groups
- G03C 1/24 ..... Styryl dyes
- G03C 1/26 ..... Polymethine chain forming part of a heterocyclic ring
- G03C 1/28 .... together with supersensitising substances
- G03C 1/29 ..... the supersensitising mixture being solely composed of dyes [5]
- G03C 1/295 ... Development accelerators [5]
- G03C 1/30 ... Hardeners
- G03C 1/31 ... Plasticisers [2]
- G03C 1/32 ... Matting agents
- G03C 1/33 ... Spot-preventing agents [2]
- G03C 1/34 ... Fog-inhibitors; Stabilisers; Agents inhibiting latent image regression [5]
- G03C 1/35 ... Antiplumming agents, i.e. antibronzing agents; Toners [5]
- G03C 1/36 ... Desensitisers (direct positive emulsions G03C 1/485) [5]
- G03C 1/37 ... Antiseptic agents [2]
- G03C 1/38 ... Dispersants; Agents facilitating spreading [5]
- G03C 1/40 ... Dyestuffs not covered by groups G03C 1/08-G03C 1/38 or G03C 1/42 [5]
- G03C 1/42 ... Developers or their precursors [5]
- G03C 1/43 ... Processing agents or their precursors, not covered by groups G03C 1/07-G03C 1/42 [5]
- G03C 1/46 .. having more than one photosensitive layer
- G03C 1/485 .. Direct positive emulsions [5]
- G03C 1/49 .. Print-out and photodevelopable emulsions [5]
- G03C 1/492 .. Photosoluble emulsions [5]
- G03C 1/494 .. Silver salt compositions other than silver halide emulsions; Photothermographic systems [5]
- G03C 1/496 .. Binder-free compositions, e.g. evaporated [5]
- G03C 1/498 .. Photothermographic systems, e.g. dry silver [5]
- G03C 1/50 .. Compositions containing noble metal salts other than silver salts, as photosensitive substances [5]
- G03C 1/52 .. Compositions containing diazo compounds as photosensitive substances (G03C 1/64 takes precedence) [5]
- G03C 1/54 .. Diazonium salts or diazo anhydrides
- G03C 1/56 .. Diazo sulfonates
- G03C 1/58 .. Coupling substances therefor [5]
- G03C 1/60 .. with macromolecular additives [5]
- G03C 1/61 .. with non-macromolecular additives [5]
- G03C 1/62 ... Metal compounds reducible to metal
- G03C 1/64 .. Compositions containing iron compounds as photosensitive substances [5]
- G03C 1/66 .. Compositions containing chromates as photosensitive substances [5]
- G03C 1/67 .. Compositions containing cobalt compounds as photosensitive substances [5]
- G03C 1/675 .. Compositions containing polyhalogenated compounds as photosensitive substances (for photopolymerisable or photocrosslinkable compositions G03F 7/028, G03F 7/038) [5]
- G03C 1/685 .. Compositions containing spiro-condensed pyran compounds or derivatives thereof, as photosensitive substances [5]
- G03C 1/695 .. Compositions containing azides as photosensitive substances (for photopolymerisable or photocrosslinkable compositions G03F 7/008) [5]
- .. Compositions containing chalcogenides, metals or alloys thereof, as photosensitive substances, e.g. photodope systems

G03C 1/705	(used as photoresists G03F 7/004) [5]
G03C 1/72	· Photosensitive compositions not covered by groups G03C 1/005-G03C 1/705 [5]
G03C 1/725	.. containing inorganic compounds [5]
G03C 1/73	.. containing organic compounds [5]
G03C 1/735	... Organo-metallic compounds [5]
G03C 1/74	· Applying photosensitive compositions to the base; Drying processes therefor (G03C 1/496 takes precedence) [5]
G03C 1/76	· Photosensitive materials characterised by the base or auxiliary layers [5]
G03C 1/765	.. characterised by the shape of the base, e.g. arrangement of perforations, jags [5]
G03C 1/77	.. the base being of metal [5]
G03C 1/775	.. the base being of paper [5]
G03C 1/785	... translucent [5]
G03C 1/79	... Macromolecular coatings or impregnations therefor, e.g. varnishes [5]
G03C 1/795	.. the base being formed of macromolecular substances (G03C 1/775 takes precedence) [5]
G03C 1/805	.. characterised by stripping layers or stripping means [5]
G03C 1/81	.. characterised by anti-coiling means [5]
G03C 1/815	.. characterised by means for filtering or absorbing ultraviolet light, e.g. optical bleaching agents (for photoprinting G03C 5/10; for intensifying X-ray images G03C 5/17) [5]
G03C 1/825	.. characterised by antireflecting means or visible-light filtering means, e.g. anti-halation [5]
G03C 1/83	... Organic dyestuffs therefor [5]
G03C 1/835	... Macromolecular substances therefor, e.g. mordants [5]
G03C 1/85	.. characterised by antistatic additives or coatings [5]
G03C 1/89	... Macromolecular substances therefor [5]
G03C 1/91	.. characterised by subbing layers or subbing means [5]
G03C 1/93	... Macromolecular substances therefor [5]
G03C 1/95	.. rendered opaque or writable, e.g. with inert particulate additives (G03C 1/775 takes precedence) [5]

**G03C 3/00** **Packages of films for inserting into cameras, e.g. roll-films, film-packs; Wrapping materials for light-sensitive plates, films, or papers, e.g. materials characterised by the use of special dyes, printing inks, adhesives** (wrapping materials in general B65D)

G03C 3/02	· Photographic roll-films with paper strips
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**G03C 5/00** **Photographic processes or agents therefor; Regeneration of such processing agents** (multicolour processes G03C 7/00; diffusion transfer processes G03C 8/00; stereo-photographic processes G03C 9/00; photomechanical processes G03F) [5]

G03C 5/02	· Sensitometric processes, e.g. determining sensitivity, colour sensitivity, gradation, graininess, density; Making sensitometric wedges
G03C 5/04	· Photo-taking processes
G03C 5/06	.. Travelling-mask processes
G03C 5/08	· Photoprinting (G03C 5/18 takes precedence); Processes or means for preventing photoprinting [5]
G03C 5/10	.. Reflex-printing; Photoprinting using fluorescent or phosphorescent means [5]
G03C 5/12	· Cinematographic processes of taking pictures or printing
G03C 5/14	.. combined with sound-recording (sound-recording in general G11B)
G03C 5/16	· X-ray, infra-red, or ultra-violet ray processes
G03C 5/17	.. using screens to intensify X-ray images (X-ray conversion screens G21K 4/00) [4]
G03C 5/18	· Diazo-type processes, e.g. thermal development, or agents therefor [5]
G03C 5/20	.. Reflex-printing
G03C 5/22	· Direct chromate processes, i.e. without preceding silver picture, or agents therefor [5]
G03C 5/26	· Processes using silver-salt-containing photosensitive materials or agents therefor (physical development G03C 5/58) [5]
G03C 5/28	.. Cinematographic-film processes [5]
G03C 5/29	.. Development processes or agents therefor (G03C 5/38, G03C 5/50 take precedence) [5]
G03C 5/30	... Developers
G03C 5/305	... Additives other than developers [5]
G03C 5/31	... Regeneration; Replenishers [5]
G03C 5/315	... Tanning development [5]
G03C 5/32	.. Latensification; Desensitising [5]
G03C 5/38	.. Fixing; Developing-fixing; Hardening-fixing (bleach-fixing G03C 5/44) [5]
G03C 5/39	... Stabilising, i.e. fixing without washing out [5]
G03C 5/395	.. Regeneration of photographic processing agents other than developers; Replenishers therefor [5]
G03C 5/40	.. Chemically transforming developed images (G03C 5/50 takes precedence) [5]
G03C 5/42	... Reducing; Intensifying [5]

G03C 5/44	... Bleaching; Bleach-fixing [5]
G03C 5/46	... Toning [5]
G03C 5/48	... Mordanting [5]
G03C 5/50	.. Reversal development; Contact processes (G03C 5/315, G03C 8/00 take precedence) [5]
G03C 5/56	· Processes using photosensitive compositions covered by groups G03C 1/64-G03C 1/72 or agents therefor (G03C 5/58 takes precedence) [5]
G03C 5/58	· Processes for obtaining metallic images by vapour deposition or physical development (images obtained by photomechanical means, e.g. by etching, G03F) [5]
G03C 5/60	· Processes for obtaining vesicular images [5]

<b>G03C 7/00</b>	<b>Multicolour photographic processes or agents therefor; Regeneration of such processing agents; Photosensitive materials for multicolour processes</b> (diffusion transfer processes G03C 8/00) [5]
G03C 7/02	· Direct bleach-out processes; Materials therefor; Preparing or processing such materials [5]
G03C 7/04	· Additive processes using colour screens; Materials therefor; Preparing or processing such materials [5]
G03C 7/06	.. Manufacture of colour screens
G03C 7/08	... from diversely-coloured grains irregularly distributed
G03C 7/10	... with regular areas of colour, e.g. bands, lines, dots
G03C 7/12	.... by photo-exposure
G03C 7/14	· Additive processes using lenticular screens; Materials therefor; Preparing or processing such materials [5]
G03C 7/18	· Processes for the correction of the colour image in subtractive colour photography (using coloured colour-couplers G03C 7/333) [5]
G03C 7/20	· Subtractive colour processes using differently sensitised films, each coated on its own base, e.g. bipacks, tripacks [5]
G03C 7/22	· Subtractive cinematographic processes; Materials therefor; Preparing or processing such materials [5]
G03C 7/24	.. combined with sound-recording (sound-recording in general G11B)
G03C 7/25	.. Dye-imbibition processes; Materials therefor; Preparing or processing such materials [5]
G03C 7/26	· Silver halide emulsions for subtractive colour processes (G03C 7/28-G03C 7/30 take precedence) [5]
G03C 7/28	· Silver dye bleach processes; Materials therefor; Preparing or processing such materials [5]
G03C 7/29	.. Azo dyes therefor [5]
G03C 7/30	· Colour processes using colour-coupling substances; Materials therefor; Preparing or processing such materials [5]
G03C 7/305	.. Substances liberating photographically active agents, e.g. development-inhibiting releasing couplers (G03C 7/388 takes precedence) [5]
G03C 7/32	.. Colour-coupling substances (G03C 7/305, G03C 7/388 take precedence) [5]
G03C 7/327	... Macromolecular coupling substances [5]
G03C 7/333	... Coloured coupling substances, e.g. for the correction of the coloured image [5]
G03C 7/34	... Couplers containing phenols (G03C 7/327, G03C 7/333 take precedence) [5]
G03C 7/36	... Couplers containing compounds with active methylene groups (G03C 7/327, G03C 7/333 take precedence) [5]
G03C 7/38	.... in rings [5]
G03C 7/384	..... in pyrazolone rings [5]
G03C 7/388	.. Processes for the incorporation in the emulsion of substances liberating photographically active agents or colour-coupling substances; Solvents therefor [5]
G03C 7/392	.. Additives (G03C 7/305, G03C 7/32 take precedence) [5]
G03C 7/396	... Macromolecular additives [5]
G03C 7/407	.. Development processes or agents therefor [5]
G03C 7/413	... Developers [5]
G03C 7/42	.. Bleach-fixing or agents therefor [5]
G03C 7/44	.. Regeneration; Replenishers (G03C 7/42 takes precedence) [5]
G03C 7/46	· Subtractive colour processes not covered by group G03C 7/26; Materials therefor; Preparing or processing such materials [5]

<b>G03C 8/00</b>	<b>Diffusion transfer processes or agents therefor; Photosensitive materials for such processes</b> [5]
G03C 8/02	· Photosensitive materials characterised by the image-forming section [5]
G03C 8/04	.. the substances transferred by diffusion consisting of inorganic compounds or of organo-metallic compounds derived from photosensitive noble metals [5]
G03C 8/06	... Silver salt diffusion transfer [5]
G03C 8/08	.. the substances transferred by diffusion consisting of organic compounds (G03C 8/04 takes precedence) [5]
G03C 8/10	... of dyes or their precursors [5]
G03C 8/12	.... characterised by the release mechanism [5]
G03C 8/14	..... Oxidation of the chromogenic substance [5]
G03C 8/16	..... initially diffusible in alkaline environment [5]
G03C 8/18	..... Dye developers [5]

G03C 8/20	. . . . . initially non-diffusible in alkaline environment [5]
G03C 8/22	. . . . . Reduction of the chromogenic substance [5]
G03C 8/24	. Photosensitive materials characterised by the image-receiving section [5]
G03C 8/26	. . Image-receiving layers (G03C 8/52 takes precedence) [5]
G03C 8/28	. . . containing development nuclei or compounds forming such nuclei [5]
G03C 8/30	. Additive processes using colour screens; Materials therefor; Preparing or processing such materials [5]
G03C 8/32	. Development processes or agents therefor (G03C 8/18 takes precedence) [5]
G03C 8/34	. . Containers for the agents (G03C 8/48, G03B 17/50 take precedence) [5]
G03C 8/36	. . Developers [5]
G03C 8/38	. . . containing viscosity increasing substances [5]
G03C 8/40	. . Development by heat [5]
G03C 8/42	. Structural details [5]
G03C 8/44	. . Integral units, i.e. the image-forming section not being separated from the image-receiving section [5]
G03C 8/46	. . . characterised by the trapping means or by gas releasing means [5]
G03C 8/48	. . . characterised by substances used for masking the image-forming section [5]
G03C 8/50	. . Peel-apart units, i.e. the image-forming section being separated from the image-receiving section [5]
G03C 8/52	. . Bases or auxiliary layers; Substances therefor [5]
G03C 8/54	. . . Timing layers [5]
G03C 8/56	. . . Mordant layers [5]

**G03C 9/00 Stereo-photographic or similar processes**

G03C 9/02	. Parallax-stereogram
G03C 9/04	. Vectographic-image
G03C 9/06	. Anaglyph
G03C 9/08	. producing three-dimensional images

**G03C 11/00 Auxiliary processes in photography (characterised by apparatus used G03D 15/00)**

G03C 11/02	. Marking or applying of text
G03C 11/04	. Retouching
G03C 11/06	. Smoothing; Renovating; Roughening; Matting; Cleaning; Lubricating; Flame retardant treatments [5]
G03C 11/08	. Varnishing, e.g. application of protective layers on finished photographic prints [5]
G03C 11/10	. . for protection from ultra-violet light
G03C 11/12	. Stripping or transferring intact photographic layers
G03C 11/14	. Pasting; Mounting
G03C 11/16	. Drying
G03C 11/18	. Colouring
G03C 11/20	. . with powdered or molten colours
G03C 11/22	. Preparing plates or films for the manufacture of photographic negatives by non-photographic processes
G03C 11/24	. Removing emulsion from waste photographic material; Recovery of photosensitive substances (electrolytic recovery of metals C25C 1/00) [5]