CPC  COOPERATIVE PATENT CLASSIFICATION

D  TEXTILES; PAPER

TEXTILES OR FLEXIBLE MATERIALS NOT OTHERWISE PROVIDED FOR

D06  TREATMENT OF TEXTILES OR THE LIKE; LAUNDERING; FLEXIBLE MATERIALS NOT OTHERWISE PROVIDED FOR

D06P  DYEING OR PRINTING TEXTILES; DYEING LEATHER, FURS, OR SOLID MACROMOLECULAR SUBSTANCES IN ANY FORM (for mechanical matters D06B, D06C; surface treatment of fibres or filaments from glass, minerals or slags C03C 25/00)

WARNING
The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

- D06P 3/84 covered by D06P 3/82
- D06P 3/85 covered by D06P 3/82
- D06P 3/852 covered by D06P 3/82
- D06P 3/86 covered by D06P 3/82
- D06P 3/87 covered by D06P 3/82
- D06P 3/872 covered by D06P 3/82
- D06P 3/874 covered by D06P 3/82
- D06P 5/24 - D06P 5/28 covered by D06P 5/003 and s.gr.

1/00  General processes of dyeing or printing textiles, or general processes of dyeing leather, furs, or solid macromolecular substances in any form, classified according to the dyes, pigments, or auxiliary substances employed

1/0004  . . [General aspects of dyeing]
1/0008  . . [Dyeing processes in which the dye is not specific (waste liquors)]
1/0012  . . [Effecting dyeing to obtain luminescent or phosphorescent dyes]
1/0016  . . [Dye baths containing a dyeing agent in a special form such as for instance in melted or solid form, as a floating film or gel, spray or aerosol, or atomised dyes]
1/002  . . [Processing by repeated dyeing, e.g. in different baths]
1/0024  . [Dyeing and bleaching in one process]
1/0028  . [Dyeing with a coacervate system]
1/0032  . [Determining dye recipes and dyeing parameters; Colour matching or monitoring]
1/0036  . [Dyeing and sizing in one process]
1/004  . [Dyeing with phototropic dyes; Obtaining camouflage effects]
1/0044  . [Dyeing with a dye in volatilised form]
1/0048  . [Converting dyes in situ in a non-appropriate form by hydrolysis, saponification, reduction with splitting-off of a substituent]
1/0052  . [Dyeing with polymeric dyes]
1/0056  . [Dyeing with polymeric dyes involving building the polymeric dyes on the fibres (dyes per se C09B)]
1/006  . . [by using dyes with polymerisable groups, e.g. dye --CH=CH2]
1/0064  . . [by using reactive polyfunctional compounds, e.g. crosslinkers]
1/0068  . . [Non-heterocyclic compounds]

1/0072  . . . [Heterocyclic compounds]
1/0076  . . . [Dyeing with mineral dye]
1/008  . . . [Preparing dyes in situ (D06P 1/12, D06P 1/145 take precedence)]
2001/0084  . . . [Non-aqueous dyeing in an inorganic medium]
2001/0088  . . . [Aqueous dyeing characterised by a short bath ratio]
1/0092  . . . [Foam dyeing]
1/0096  . . . [Multicolour dyeing]
1/02  . . . using azo dyes (D06P 1/18, D06P 1/38, D06P 1/39, D06P 1/41 take precedence)
1/04  . . . not containing metal
1/06  . . . containing acid groups
1/08  . . . cationic azo dyes
1/10  . . . containing metal
1/12  . . . prepared in situ
1/122  . . . [the textile material containing one component]
1/125  . . . [one or both of the components having fibre-reactive groups]
1/127  . . . [using a stabilised diazo component, e.g. diazoamino, anti-diazotate or nitrosamine R-N=N-OK, diazosulfonate, hydrazinesulfonate, R-N=N-N-CN]
1/13  . . . using azomethine dyes
1/14  . . . using phthalocyanine dyes without vatting (D06P 1/38, D06P 1/40 take precedence)
1/145  . . . [using phthalocyanine dyes prepared in situ]
1/16  . . . using dispersed, e.g. acetate, dyestuffs
1/18  . . . Azo dyes
1/19  . . . Nitro dyes
1/20  . . . Anthraquinone dyes
1/22  . . . using vat dyestuffs (including indigo)
1/221  . . . [Reducing systems; Reducing catalysts]
1/22  . . . [Oxidising agents]
1/24  . . . [using vat dyes in unreduced pigment state]
1/25  . . . [using acid vat method]
1/27  . . . [Specific dyes not provided for in groups D06P 1/228 - D06P 1/28]
1/28  . . . [Indigo]
1/24  . . . Anthraquinone dyes [or anthracene nucleus containing vat dyes]
1/26  . . . Phthalocyanine dyes
1/28  . . . Esters of vat dyestuffs
1/30  . . . using sulfur dyes
1/35  . . . [SO₂,H-groups containing dyes]
1/32  . . . using oxidation dyes
1/34  . . . using natural dyestuffs
1/36  . . . using mordant dyes [; using metallisable dyes]
1/38  . . . using reactive dyes
1/382 . . . reactive group directly attached to heterocyclic group
1/384 . . . reactive group not directly attached to heterocyclic group
1/39  . . . using acid dyes
1/40  . . . using acid dyes without azo groups
1/41  . . . using basic dyes
1/42  . . . using basic dyes without azo groups
1/44  . . . using insoluble pigments or auxiliary substances, e.g. binders
1/445 . . . [Use of auxiliary substances before, during or after dyeing or printing]
1/46  . . . using compositions containing natural macromolecular substances or derivatives thereof
1/48  . . . Derivatives of carbohydrates
1/50  . . . Derivatives of cellulose
1/52  . . . using compositions containing synthetic macromolecular substances (D06P 1/60 takes precedence)
1/5207 . . . [Macromolecular compounds obtained by reactions involving only carbon-to-carbon unsaturated bonds]
1/5214 . . . [Polymers of unsaturated compounds containing no COOH groups or functional derivatives thereof]
1/5221 . . . [Polymers of unsaturated hydrocarbons, e.g. polystyrene polyalkylene]
1/5228 . . . [Polyalkenyl alcohols, e.g. PVA]
1/5235 . . . [Polyalkenyln halides, e.g. PVC]
1/5242 . . . [Polymers of unsaturated N-containing compounds]
1/525 . . . [Polymers of unsaturated carboxylic acids or functional derivatives thereof]
1/5257 . . . [Meth]acrylic acid
1/5264 . . . [Macromolecular compounds obtained otherwise than by reactions involving only unsaturated carbon-to-carbon bonds]
1/5271 . . . [Polysters; Polycarbonates; Alkyd resins]
1/5278 . . . [Polymides; Polyimides; Polylactames; Polyalkenylenimines]
1/5285 . . . [Polyurethanes; Polyurea; Polyguanamides]
1/5292 . . . [containing Si-atoms]
1/54  . . . Substances with reactive groups together with crosslinking agents
1/56  . . . Condensation products or precondensation products prepared with aldehydes
1/58  . . . . . . . together with other synthetic macromolecular substances
1/60  . . . . . . . using compositions containing polymeric substances
1/607 . . . . . . . Nitrogen-containing polyethers [or their quaternary derivatives]
1/6073 . . . . . . . [containing CON=, OCON=, SO₂N=, OSO₂N= groups]
1/6076 . . . . . . . [addition products of amines and alkylene oxides or oxiranes]
1/613 . . . . . . . Polyethers without nitrogen
1/6131 . . . . . . . [Addition products of hydroxyl groups-containing compounds with oxiranes]
1/6133 . . . . . . . [from araliphatic or aliphatic alcohols]
1/6135 . . . . . . . [from aromatic alcohols or from phenols, naphthols]
1/6136 . . . . . . . [Condensation products of esters, acids, oils, oxycacids with oxiranes]
1/6138 . . . . . . . [Polymerisation products of glycols, e.g. Carbowax, Pluronics]
1/62  . . . . . . . using compositions containing low-molecular-weight organic compounds with sulfate, sulfonate, {sulfenic or sulfinic} groups
1/621 . . . . . . . [Compounds without nitrogen]
1/622 . . . . . . . [Sulfonic acids or their salts]
1/623 . . . . . . . [Aromatic, araliphatic or cycloaliphatic]
1/625 . . . . . . . [Aromatic]
1/626 . . . . . . . [Sulfocarboxylic acids]
1/627 . . . . . . . [Sulfates]
1/628 . . . . . . . [Compounds containing nitrogen]
1/64  . . . . . . . using compositions containing low-molecular-weight organic compounds without sulfate or sulfonate groups
1/642 . . . . . . . Compounds containing nitrogen
1/6421 . . . . . . . [Compounds containing nitrile groups]
1/6422 . . . . . . . [Compounds containing nitro or nitroso groups]
1/6423 . . . . . . . [Compounds containing azide or oxime groups]
1/6424 . . . . . . . [Compounds containing isocyanate or isothiocyanate groups]
1/6425 . . . . . . . [Compounds containing hydrazine or azo groups]
1/6426 . . . . . . . [Heterocyclic compounds]
1/6427 . . . . . . . [Compounds containing sulfonamide groups]
1/6428 . . . . . . . [Compounds containing aminoxide groups]
1/6429 . . . . . . . [bound to a six-membered aromatic carbocyclic ring]
1/645 . . . . . . . Aliphatic, araliphatic or cycloaliphatic compounds containing amino groups
1/647 . . . . . . . Nitrogen-containing carboxylic acids or their salts
1/649  . . . . . . . Compounds containing carbonamide, thiocarbonamide or guanil groups
1/6491 . . . . . . . [(Thio)urea or (cyclic) derivatives]
1/6492 . . . . . . . [(Thio)urethanes; (Di)(thio)carbamic acid derivatives; Thiuramdisulfide]
1/6493 . . . . . . . [Carbodiimides (=N=C=N=)]
1/6494 . . . . . . . [Compounds containing a guanil group R-C=N=, e.g. (bi)guanadine, dicyandiamid amidines]
1/6495 . . . . . . . [Compounds containing carbonamide - RCON= (R=H or hydrocarbons)]
Organo-phosphorus compounds

Compounds containing ammonium groups

- (sulfocarboxylic acids D06P 1/626)

Nitrogen-free carboxylic acids or their salts

- { Salts or oxidising-compounds mixtures }
- containing silicon

Compounds containing phosphonium groups

- Compounds containing sulfone disulfide groups
- Compounds containing sulfide or thiol groups
- Compounds containing hydroxyl groups
- Compounds containing acid anhydride or ozonide groups
- Compounds containing acid hydride or acid halide groups

Hydrocarbons

- Compounds without nitrogen

- Hydantoine; Compounds containing RCONHSO₂

- Material containing basic nitrogen

- Containing quaternary ammonium groups

- Organo-phosphorus compounds

- Inorganic compounds

- (Kritchewski bases)

- Acids

- Complex acids, e.g. phosphomolybdic, phosphotungstic, molybdotungstic

- Salts or hydroxides (hydroxylamines (Kritchewski bases))

- (of elements different from the alkaline or alkaline-earth metals or with anions containing those elements (D06P 1/67383 takes precedence))

- (of alkaline or alkaline-earth metals with anions different from those provided for in D06P 1/67341)

- (Halides or oxyhalides)

- Phosphates or polyphosphates

- (with sulfur-containing anions (sulfates D06P 1/6735))

- containing silicon

- Salts or oxidising-compounds mixtures

Using dyes dissolved in inorganic solvents

Material containing basic nitrogen

- Dyeing characterised by a short bath ratio

- Foam dyeing (mechanical features D06B 19/0094)

Special processes of dyeing or printing textiles, or dyeing leather, furs, or solid macromolecular substances in any form, classified according to the material treated

- using acid dyes
- using basic dyes
- using vat or sulfur dyes
- using dispersed dyes
- using metallisable or mordant dyes
- using dispersed dyes
- using basic dyes
- using acid dyes
- using reactive dyes
- using acid dyes
- using basic dyes
- using vat or sulfur dyes
- using dispersed dyes
- using basic dyes
- using acid dyes
- using reactive dyes
- using acid dyes
- using oxidation dyes
- using reactive dyes
- Preparing azo dyes on the material
- Wool
- using vat or sulfur dyes
- using dispersed dyes
- using metallisable or mordant dyes
- using polymeric dyes
- preparing non-azo dyes on the material
- using acid dyes
- using oxidation dyes
- using reactive dyes
- Preparing azo dyes on the material
- using basic dyes
- using mordant dyes (using metallisable dyes)
- Preparing azo dyes on the fibre
Preparing azo dyes on the material

{ using dispersed dyestuffs }

{ using reactive dyes }

{ preparing non-azo dyes on the material }

{ using polymeric dyes }

{ using metallisable or mordant dyes }

{ using vat or sulfur dyes, indigo }

{ using basic dyes }

{ using acid dyes }

{ using reactive dyes }

{ preparing non-azo dyes on the material }

{ using polymeric dyes }

{ using metallisable or mordant dyes }

{ using vat or sulfur dyes }

{ using basic dyes }

{ using dispersed dyestuffs }

{ using reactive dyes }

{ preparing non-azo dyes on the material }

{ using polymeric dyes }

{ using metallisable or mordant dyes }

{ using vat or sulfur dyes }

{ using basic dyes }

{ using dispersed dyestuffs }

{ using reactive dyes }

{ preparing non-azo dyes on the material }

{ using polymeric dyes }

{ using metallisable or mordant dyes }

{ using vat or sulfur dyes }

{ using basic dyes }

{ using dispersed dyestuffs }

{ using reactive dyes }

{ preparing non-azo dyes on the material }

{ using polymeric p...
5/00 Other features in dyeing or printing textiles, or dyeing leather, furs, or solid macromolecular substances in any form

5/001 . [Special chemical aspects of printing textile materials]
5/002 . [Locally enhancing dye affinity of a textile material by chemical means]
5/003 . [Transfer printing]
5/004 . [using subliming dyes]
5/005 . [on resin-treated fibres]
5/006 . [using specified dyes]
5/007 . [using non-subliming dyes]
5/008 . [Migrating dyes]
5/009 . [Non-migrating dyes]
5/02 . After-treatment

NOTE
In groups D06P 5/04 - D06P 5/10 a compound is always classified in the last appropriate place.

5/04 . . with organic compounds
5/06 . . containing nitrogen
5/08 . . macromolecular
5/10 . . with compounds containing metal

5/12 . Reserving parts of the material before dyeing or printing (locally decreasing dye affinity by chemical means)
5/13 . Fugitive dyeing or stripping dyes
5/131 . . (with acids or bases)
5/132 . . (with oxidants)
5/134 . . (with reductants)
5/135 . . (with combined acids or bases + oxidants + reductants means)
5/137 . . (with other compounds)
5/138 . . (fugitive dyeing)
5/15 . Locally discharging the dyes
5/151 . . (with acids or bases)
5/153 . . (with oxidants)
5/155 . . (with reductants)
5/156 . . (with combined A+B+C means)
5/158 . . (with other compounds)
5/17 . Azo dyes
5/20 . Physical treatments affecting dyeing, e.g. ultrasonic or electric
5/2005 . . (Treatments with alpha, beta, gamma or other rays, e.g. stimulated rays)
5/2011 . . [Application of vibrations, pulses or waves for non-thermic purposes]
5/2016 . . [Application of electric energy]
5/2022 . . (Textile treatments at reduced pression, i.e. lower than 1 atm)
5/2027 . . (before dyeing)
5/2033 . . (during dyeing)
5/2038 . . (after dyeing)
5/2044 . . (Textile treatments at a pression higher than 1 atm)
5/205 . . (before dyeing)
5/2055 . . (during dyeing)
5/2061 . . (after dyeing)
5/2066 . . (Thermic treatments of textile materials)
5/2072 . . (before dyeing)
5/2077 . . (after dyeing)
5/2083 . . (heating with IR or microwaves)
5/2088 . . (by fluid-bed techniques)
5/2094 . . (by molten masses)
5/22 . Effecting variation of dye affinity on textile material by chemical means that react with the fibre ([documents concerning material modified in the mass by compounding with modifying agents affecting the dye affinity after spinning, are not classified here: see the relevant groups C08; D01F; D06P 3/00; grafting of monomers on textile materials C08F; D06M 11/00])
5/225 . . (Aminalization of cellulose: introducing aminogroups into cellulose)
5/30 . Ink jet printing

7/00 Dyeing or printing processes combined with mechanical treatment

7/005 . . (Dyeing combined with texturising or drawing treatments)