D06P

DYEING OR PRINTING TEXTILES; DYEING LEATHER, FURS, OR SOLID MACROMOLECULAR SUBSTANCES IN ANY FORM (for mechanical matters, see B41F, D06B, D06C; printing on surfaces of materials other than textiles B41M; surface treatment of fibres or filaments from glass, mineral, or slags C03C25/00; mordanting D06M; dyeing paper D21H)

Definition statement

This subclass/group covers:

- Dyeing and printing in general of organic macromolecular substances in any form, like fibres, leather, furs and feathers.
- Dyeing compositions for textiles as well as dyeing inks for textiles.
- The dyeing of optical lenses.
- The bleaching of dyed materials when bleaching means complete or partial removal of dyes or decolourization.
- The treatment of textile materials to improve their dyeability.

Relationship between large subject matter areas

- The mechanical aspects and apparatuses for the dyeing of textiles are covered by D06B-D06C.
- The mechanical aspects of printing are covered by B41F.
- The dyeing of optical lenses is also covered by G02C 7/021.
- The dyeing of human hair is covered by A61K.
- The dyeing of macromolecular products in other form than a textile, e.g. films, shaped or moulded macromolecular substances is also covered by C08J 7/00.
- The finishing of textile materials is covered byD06M.
- An overlapping might occur with D06Q dealing with textile decoration.
- An overlapping might occur with C03C 25/102 dealing with the colouring of glass fibres or C03C 25/104, C03C 25/106 or C03C 25/1065 dealing with the coating of optical fibres or C03C 25/1095 dealing with the chemical treatment of glass fabrics.

References relevant to classification in this subclass

This subclass/group does not cover:

Dyeing of human hair	A61K
Chemical treatment or coating of shaped articles made of macromolecular substances	C08J 7/00
The synthesis of organic dyes or organic pigments	C09B
Inorganic pigments	C09C
Ink compositions	C09D 11/00
Pigment pastes	C09D 17/00
The chemical treatment of leather	C14C
Industrial bleaching of textile materials	D06L
Optical bleaching	D06L 3/12
Finishing of textile materials	D06M
Chemical aspects of textile decoration	D06Q

Special rules of classification within this subclass

In case of a composition comprising several compounds, a class is allocated for each compound.

Mirrored Indexing Codes are used for classifying informative aspects or complementary aspects of the invention, e.g. when the invention is focused on a reactive dye, then a group corresponding to reactive dye is allocated: D06P 1/38. In case there are examples concerning the dyeing of wool or cotton with this dye and the process is very well-known, then Indexing Codes are allocated: D06P 3/148 and D06P 3/66.

Indexing Codes are also used when the information disclosed is not very clear or when the information is close to the subject matter of the group, but not exactly the same.

When mechanical and chemical aspects are mentioned, then it should be classified in all subclasses, i.e. a group is allocated in D06P and D06B and/or D06C.

When dyeing and finishing processes are combined, it is recommended to also classify the finishing aspect in the corresponding D06M groups.

Generally, documents disclosing the dyeing of natural polyamide fibres or keratin fibres like wool or hair should be classified in both D06P and A61K only in case there are examples for both textile fibres and hair. When the given examples are only disclosing the dyeing of hair, then it is recommended that the document should only be classified in A61K. Would the classifier consider the process or the dye used very special or of great interest for the field, then he/she may always allocate a group in D06P.

D06P 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

Definition statement

This subclass/group covers:

General processes for dyeing, compositions for dyeing or printing classified according to the chemical structure of the dyes or the compounds used.

Special processes for dyeing, e.g. dyeing with dyes in special form, specific dyeing recipes, specific dyes used like phosphorescent dyes, obtaining special effects like multicolour dyed textile materials, e.g. different colours on the same thread.

All the compounds which might be used in dye baths or printing pastes or inks, i.e. dyes, mineral, organic or macromolecular compounds.

References relevant to classification in this group

This subclass/group does not cover:

Dyeing of glass fibres	C03C
Dyeing of paper	D21H

Special rules of classification within this group

It is recommended to allocate a class for each compound present in the dye bath.

When a compound is bearing several functional groups, then it is recommended to allocate a class for each special functional group.

In case of copolymers it is recommended to allocate a class for each monomer or each part of the copolymer.

The same rule applies to dye, e.g. when the document discloses a process for dyeing with a reactive disperse dye, then a class for the disperse dye should be allocated - D06P 1/16- as well as a class for the reactive dye D06P 1/38.

D06P 1/0004

[N: General aspects of dyeing]

Definition statement

This subclass/group covers:

The general aspects of dyeing which are not well specified or broadly defined or dyeing processes which cannot be covered by any other subgroups.

Dyeing processes using enzymes in the dye bath.

D06P 1/0008

[N: Dyeing in which the dye is not specific (waste liquors)]

Definition statement

This subclass/group covers:

The dyeing of textile where the dye is not specific, or dyeing with waste liquors, i.e. dyeing with dye baths which have already been used, dyeing by immersing the textile several times in the same bath.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Treatment of waste liquors	C02F

Special rules of classification within this group

When a textile material is dyed with a waste liquor comprising a specific dye, it is recommended to also classify in the group corresponding to the dye used.

D06P 1/0032

[N: Determining dye recipes and parameters; Colour matching or monitoring]

Definition statement

This subclass/group covers:

Specific processes for dyeing when specific details are provided on the process, e.g. it is disclosed when a specific compound is added to the dye bath, when temperature raises are occurring, when dyeing times are particular, important or well described.

Special rules of classification within this group

A document disclosing that at instant T, compound A is added to dye bath and then the temperature is raised until boiling point in X minutes and further maintained for Y hours... should be classified in that group.

It is recommended that in addition to this class to also allocate classes corresponding to the different compounds used during the dyeing process.

D06P 1/0036

[N: Dyeing and sizing in one process]

Definition statement

This subclass/group covers:

The dyeing and sizing in one process but also the dyeing and finishing in one process, i.e. when the finishing agent is applied simultaneously with the dye, e.g. dyeing combined with a softening treatment.

Relationship between large subject matter areas

The dyeing or printing with pigments combined with optical bleaching in the same bath is covered by D06L 3/12.

Special rules of classification within this group

It is recommended to allocate a class for each compound used in the dye bath in D06P but also in D06M.

D06P 1/004

[N: Dyeing with phototropic dyes; obtaining camouflage effects]

Definition statement

This subclass/group covers:

The dyeing with dyes changing of colours according to the circumstances, e.g. color indicators or thermochromic dyes.

Dyed textile materials changing colours according to light orientation.

Textile materials printed with certain patterns to obtain camouflage fabrics, or dyed with specific dyes; e.g. which are reflecting or absorbing infrareds. These textile materials are generally used for military purposes.

Relationship between large subject matter areas

An overlapping might occur with D06Q.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Wearing apparels	A41
Armours, protective apparels, camouflage in general	F41H

D06P 1/0076

[N: Dyeing with mineral dye]

Definition statement

This subclass/group covers:

The dyeing of textile materials with mineral dyes like carbon black or ferrous oxides.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Inorganic pigments	C09C

D06P 1/0096

[N: Multicolour dyeing]

Definition statement

This subclass/group covers:

Dyeing processes to obtain multicoloured textiles, i.e. different colours on the same piece, space dyeing, dyeing mixtures of fibres having different dye affinities with dyes of different classes.

Special rules of classification within this group

In case of dyeing of mixture of fibres, it is recommended to also classify in D06P 3/82 and its subgroups as well as to allocate the Indexing Code corresponding to the nature of the fibre dyed by a specific class of dye, e.g. when a textile material comprising polyester and cotton fibres is dyed with a blue disperse dye and a red reactive dye, then a multicolour effect will be obtained.

D06P 3/8252 should be allocated but also D06P 3/66 as well as D06P 3/54 in addition to D06P 1/0096.

D06P 1/34

using natural dyestuffs

Definition statement

This subclass/group covers:

The dyeing with natural dyestuffs, of plant or animal origins.

References relevant to classification in this group

This subclass/group does not cover:

Dyeing with mineral dyes	D06P 1/0076

Special rules of classification within this group

In case the natural dye is indigo, D06P 1/228 and its subgroups takes precedence.

D06P 1/39

using acid dyes

Definition statement

This subclass/group covers:

The dyeing of textile materials with acid dyes, which can also be called anionic dyes as well as the dyeing of textile materials with direct dyes as they are also generally bearing some anionic solubilising groups.

Synonyms and Keywords

In patent documents the following expressions/words "anionic dye" and "acid

dye" are often used as synonyms.

D06P 1/44

using insoluble pigments or auxiliary substances, e.g. binders

Definition statement

This subclass/group covers:

- The pigments used in printing pastes or dye baths.
- All the auxiliary substances used in dye baths or printing pastes.
- Proteins used during dyeing processes.

Special rules of classification within this group

Mixtures of compound are classified according to each different compound.

D06P 1/48

Derivatives of carbohydrates

Definition statement

This subclass/group covers:

The carbohydrates used as auxiliary agent in dye baths or textile inks as well as binders in printing pastes.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Polysaccharides	C08B

D06P 1/5207

Macromolecular compounds obtained by reactions involving only carbon-to-carbon unsaturated bonds

Definition statement

This subclass/group covers:

The dyeing or printing of textile materials using polyaddition polymers.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Macromolecular compounds obtained only by reactions involving unsaturated carbon-to-carbon bonds	C08F

Special rules of classification within this group

Copolymers are classified according to each monomer.

When possible, it is recommended to classify as much as possible in subgroups.

D06P 1/5242

[N: Polymers of unsaturated N-containing compounds]

Definition statement

This subclass/group covers:

Polymers of unsaturated N-containing compounds like vinyl amines or polyacrylamides or polyallylamines.

Special rules of classification within this group

It is also recommended to classify polyacrylamides or copolymers of acrylamide in D06P 1/5257 as derivatives of unsaturated carboxylic acids.

D06P 1/525

[N: Polymers of unsaturated carboxylic acids or functional derivatives thereof]

Definition statement

This subclass/group covers:

Polymers of unsaturated carboxylic acids or functional derivatives thereof like esters, salts or amides of unsaturated carboxylic acids.

Polyacrylates, polyacrylamides, polymethylmethacrylates etc... are covered by this group.

D06P 1/5264

[N: Macromolecular compounds obtained otherwise than by reactions involving only unsaturated carbon-to-carbon bonds]

Definition statement

This subclass/group covers:

The dyeing or printing textile materials using polycondensation polymers as auxiliary agents.

Informative references

Attention is drawn to the following places, which may be of interest for search:

Macromolecular compounds obtained otherwise than by reactions only involving unsaturated carbon-to-carbon bonds	C08G

Special rules of classification within this group

D06P 1/5271 to D06P 1/5292 are taking precedence on this group.

In case of many possibilities disclosed, unclear polymers or multifunctional polymers it is recommended to also classify in this group in addition to groups D06P 1/5271 - D06P 1/5292.

D06P 1/54

Substances with reactive groups together with crosslinking agents

Definition statement

This subclass/group covers:

The dyeing or printing of textile materials with macromolecular substances combined with a crosslinking agent in the same dye bath.

Special rules of classification within this group

In addition to this class, it is recommended to also allocate a class corresponding to the polymer used.

D06P 1/81

using dyes dissolved in inorganic solvents

Definition statement

This subclass/group covers:

The dyeing of textile materials dyed with inorganic solvents like liquid carbon dioxide.

Special rules of classification within this group

When the solvent is in a supercritical state, then D06P 1/94 takes precedence. In case the state of the solvent is not clearly defined or disclosed or different states are mentioned, then it is recommended to both classify in D06P 1/81 and D06P 1/94.

D06P 1/90

using dyes dissolved in organic solvents or aqueous emulsions thereof [N: (D06P1/94 takes precedence)]

Definition statement

This subclass/group covers:

The dyeing of textile materials using organic solvents.

Special rules of classification within this group

When the solvent is in a supercritical state, then D06P 1/94 takes precedence. In case the state of the solvent is not clearly defined or disclosed or different states are mentioned, then it is recommended to both classify in D06P 1/90 and D06P 1/94.

D06P 1/94

using dyes dissolved in solvents which are in the supercritical state

Definition statement

This subclass/group covers:

The dyeing of textile materials with dye which are dissolved in a solvent which is in a supercritical state, e.g. supercritical CO2 or carbon dioxide.

Special rules of classification within this group

In case the solvent may be in different state or it is not very clear that the solvent is in a supercritical state, then it is recommended to also classify in D06P 1/81 and D06P 1/90 or its subgroups, according to the chemical nature of the solvent.

D06P 3/00

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

Definition statement

This subclass/group covers:

The dyeing or printing according to the material treated as well as the chemical nature of the dyes used.

Special rules of classification within this group

In this main group, it might be useful to classify using the corresponding Indexing Code instead of the EC class as a complement of information.

For example, when the invention is focussed on auxiliary agents, it is recommended to classify the auxiliary agent with EC classes and give the Indexing Code for the type of fibre dyed.

Synonyms and Keywords

In patent documents the following expressions/words "basic dyes" and "cationic dyes" are often used as synonyms.

In patent documents the following expressions/words "acid dyes" and "anionic dyes" are often used as synonyms.

D06P 3/04

containing amide groups

Definition statement

This subclass/group covers:

The dyeing of textile materials comprising amide groups and which are not covered by any other subgroups (D06P 3/24, D06P 3/30, D06P 3/32) like silk.

D06P 3/70

material containing nitrile groups

Definition statement

This subclass/group covers:

The dyeing of fibrous materials containing nitrile groups, like acrylic fibres.

D06P 3/80

inorganic fibres (surface treatment of fibres or filaments from glass, minerals or slags C03C25/00)

Definition statement

This subclass/group covers:

The dyeing or printing of inorganic fibres, like glass.

Relationship between large subject matter areas

An overlapping might occur with C03C 25/102, dealing with the colouring of glass fibres or C03C 25/104, C03C 25/106 or C03C 25/1065, dealing with the coating of optical fibres.

The chemical treatment of glass fabrics is classified in C03C 25/1095.

Special rules of classification within this group

With regard to glass fibres or glass fabrics, it is recommended to also classify the document in C03C 25/00.

D06P 3/82

textiles which contain different kinds of fibres

Definition statement

This subclass/group covers:

The dyeing of textile materials made of blends of fibres, like blends of polyester and cotton fibres, wool and polyamide etc...with one dye or with mixtures of dyes.

This group and subgroups are not aligned on the IPC.

Relationship between large subject matter areas

Multicoulour dyeing; i.e. when different colours are visible on the textile is also classified in D06P 1/0096.

Special rules of classification within this group

In this subgroup, it is recommended to allocate the most appropriate class but also to allocate the Indexing Code corresponding to the material used: e.g. a mixture of polyester / cotton dyed with a dye bath comprising a mixture of disperse and reactive dye should be classify in D06P 3/8252. In addition, the following Indexing Codes should also be allocated: D06P 3/54 and D06P

.

Classes corresponding to the additives present in the dye-bath should also be allocated.

It is recommended to also classify in D06P 1/0096 when a multicolour effect is obtained.

D06P 5/00

Other features in dyeing or printing textiles, or dyeing leather, furs, or solid macromolecular substances in any form

Definition statement

This subclass/group covers:

All the dyeing or printing aspects which are not covered by the previous groups, e.g. after-treatments of dyed materials, special aspects or processes for printing, physical treatments affecting dyeing, treatments modifying dye affinity.

Special rules of classification within this group

In this subgroup, it is recommended to additionally classify the chemical aspect or the material used either with EC symbols D06P 1/00-D06P 3/00 or to allocate the corresponding Indexing Codes D06P 1/00-D06P 3/00.

D06P 5/001

[N: Special chemical aspects of printing textile materials]

Definition statement

This subclass/group covers:

Only the special chemical aspects of printing of textile materials which are not covered by any other groups, e.g. printing pastes.

References relevant to classification in this group

This subclass/group does not cover:

Special chemical aspects of ink-jet printing	D06P 5/30
Special chemical aspects of transfer printing	D06P 5/003-D06P 5/009

Special rules of classification within this group

In addition to this group, it is always recommended to add a class to according to the individual chemical compounds used in D06P 1/00 and its subgroups.

D06P 5/002

[N: Locally enhancing dye affinity of a textile material by chemical means]

Definition statement

This subclass/group covers:

All the chemical treatments, locally or on the whole surface to enhance the dye affinity of the textile material.

Relationship between large subject matter areas

An overlapping might occur with D06P 5/22 and D06P 5/225 dealing with treatment affecting dye affinity.

References relevant to classification in this group

This subclass/group does not cover:

Physical treatments to enhance dye affinity	D06P 5/20

Special rules of classification within this group

In this group, an overlapping might occur with D06P 5/22 and D06P 5/225. When it is not clear that the chemical treatment reacts with the fibre or in case of doubt, it is recommended to classify at both places, i.e. D06P 5/22 and D06P 5/002.

Synonyms and Keywords

In patent documents the expression "dye uptake" is often used instead of "dye affinity" which is used in the classification scheme of this group.

D06P 5/003

[N:Transfer printing]

Definition statement

This subclass/group covers:

Textile materials dyed by transfer printing, the pre-treatment of textile materials to make them suitable for transfer printing, materials used for transfer printing of textiles like transfer sheets and processes for the transfer printing of textile materials.

This group is not completely aligned with IPC.

Relationship between large subject matter areas

An overlapping might occur with transfer printing in general which is covered by B41M as well as decalcomanias which are covered by B44C.

An overlapping might also occur with D06Q when other materials than dyes are transferred onto textile surfaces for decorative purposes, D06Q.

Special rules of classification within this group

Papers for transfer printing of textile materials should also be classified in B41M.

Papers for transfer printing of textile materials are also classified in D06P 5/30.

Chemical compounds used for transfer printing processes are also classified according to their chemical nature in D06P 1/00 and subgroups.

Post-treatments of transfer printed textiles are also classified in D06P 5/02-D06P 5/08.

D06P 5/02

Ater-treatment

Definition statement

This subclass/group covers:

All the after-treatments of dyed or printed textile materials to modify their properties, e.g. to soften them, to enhance their fastness to wash, light, sweat, etc...or to remove unfixed dyes.

Special rules of classification within this group

In addition to this group, it is recommended to also allocate an Indexing Code according to the nature of the chemical compounds used.

D06P 5/12

Reserving parts of the material before dyeing or printing [N: Locally decreasing dye affinity by chemical means]

Definition statement

This subclass/group covers:

The partial treatment with chemical compounds of textile materials to locally decrease their dye affinity, the application of printing pastes to prevent dyes from accessing the fibre. The physical hindrance for dyes to access the fibres like making knots on fabrics.

These treatments are carried out before dyeing to produce completely white or lighter areas on the dyed textile materials.

Synonyms and Keywords

In patent documents the expression "dye uptake" is often used instead of "dye affinity" which is used in the classification scheme of this group.

D06P 5/13

Fugitive dyeing or stripping dyes

Definition statement

This subclass/group covers:

The bleaching / decolouration or removal of dyes of dyed/printed textile materials.

The fugitive dyeing of textile materials, i.e. temporary dyeing of textile materials with dyes which are not fast or are unstable in normal conditions.

Relationship between large subject matter areas

An overlapping might occur with D06P 1/004, dyeing with phototropic dyes, colour indicators.

An overlapping might occur with D06P 5/15, locally discharging the dyes.

Special rules of classification within this group

In case of doubt or overlapping with D06P 5/15, it is recommended to classify in both groups.

D06P 5/15

Locally discharging the dyes

Definition statement

This subclass/group covers:

The discharge printing of textile materials, partial discolouration, the uncomplete removal of dye from dyed or printed textile materials, the producing of stone washed effects or the ageing of dyed textile materials.

Relationship between large subject matter areas

An overlapping might occur with D06P 5/13, fugitive dyeing or stripping dyes.

With regard to stone washing or ageing of textile materials, an overlapping might occur with D06P 5/20 and D06P 7/00.

Special rules of classification within this group

In case of doubt or overlapping with D06P 5/13, it is recommended to classify in both groups, i.e. D06P 5/13 and D06P 5/15.

With regard to stone washing or ageing of textile materials, it is recommended to additionally classify in D06P 5/20, when partial discolouration is obtained by laser treatment for example or in D06P 7/00 when partial discolouration is obtained by abrasion with pumice for example.

D06P 5/20

Physical treatments affecting dyeing, e.g. ultrasonic, electric

Definition statement

This subclass/group covers:

All the physical treatments affecting dyeing which are carried out before, during of after dyeing to modify dyeing affinity, to fix the dyes, to remove the dye or to help in the dyeing process.

Relationship between large subject matter areas

An overlapping might exist with D06M 10/00-D06M 10/10, physical treatment of fibres combined or not with a chemical treatment.

Special rules of classification within this group

In this subgroup, when chemical compounds are used in combination with the physical treatment, is recommended to also allocate an Indexing Code corresponding to the chemical compound.

D06P 5/2005

[N: Treatments with alpha, beta, gamma or other rays, e.g. stimulated rays]

Definition statement

This subclass/group covers:

The treatment of textile materials with e.g. ionizing radiations, gamma rays, ultra-violet, laser, infrared, etc...at any stage of the dyeing process.

Relationship between large subject matter areas

There might be an overlapping with D06P 5/2083, heating with infrareds.

Special rules of classification within this group

In case of treatment with infrared, it is also recommended to classify in D06P 5/2083.

Synonyms and Keywords

In patent documents the following abbreviations are often used:

IR	Infrared

D06P 5/2011

[N: Application of vibrations, pulses or waves for non thermic purposes]

Definition statement

This subclass/group covers:

The treatment with waves, e.g. microwaves for non thermic purposes or application of ultrasonic radiations.

Relationship between large subject matter areas

There might be an overlapping with D06P 5/2083.

Special rules of classification within this group

In case of micro-waves, it is recommended to also classify in D06P 5/2083 as microwaves always generate a temperature elevation.

D06P 5/2016

[N: Application of electric energy]

Definition statement

This subclass/group covers:

The application of electric energy to the textile material istelf, like a plasma treatment of the textile material or application of electric energy to the dye bath, like electrolysis of some components of the dye bath.

Special rules of classification within this group

In the case of electrolysis of some components of the dye bath, it is recommended to allocate a class corresponding to the component itself, before and/or after electrolysis as well as a class corresponding to the dyeing process.

D06P 5/22

Effecting variation of dye affinity on textile material by chemical means that react with the fibre [N: (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, D06P3/00; Grafting of monomers on textile materials C08F, D06M11/00)]

Definition statement

This subclass/group covers:

The treatment of textile materials with chemical compounds that react with the fibre, i.e. which are forming a chemical bonding with the fibre, to increase or improve the dye affinity of the textile material.

Relationship between large subject matter areas

An overlapping might occur with D06P 5/002.

References relevant to classification in this group

This subclass/group does not cover:

The treatment of textile materials to locally or completely decrease their dye affinity	D06P 5/12
Physical treatment to increase dye	D06P 5/20

affinity or dye uptake	
Treatment to improve hydrophilic properties	D06M

Special rules of classification within this group

In case of overlapping with D06P 5/002, it is recommended to classify in both groups.

When it is mentioned that the treatment also increases hydrophilic properties of the textile treated, then a class in D06M should also be allocated as well as the relevant N06M Indexing Code.

Synonyms and Keywords

In patent documents the expression "dye uptake" is often used instead of "dye affinity" which is used in the classification scheme of this group.

D06P 5/30

Ink jet printing (ink jet printing apparatus B41J2/00)

Definition statement

This subclass/group covers:

- The dyeing of textile materials by the ink-jet printing method.
- Ink compositions for ink-jet printing of textile materials.
- The pre-treatments of textile materials to make them suitable for subsequent ink-jet printing.
- Papers suitable for transfer printing of textile materials but printed by ink-jet method.

Relationship between large subject matter areas

An overlap might occur with C09D 11/00, ink compositions in general, when the use of the ink is not limited to textile ink-jet printing.

References relevant to classification in this group

This subclass/group does not cover:

Ink-jet printing of any other surface than textile surfaces	B41M

Ink-jet printers	B41J 2/00
Ink compositions in general	C09D 11/00

Special rules of classification within this group

Next to this subgroup, it is recommended to also classify a document dealing with ink-jet printing in the groups corresponding to the different components used in the ink or in the pre-treatment composition. In that case, it is recommended to use Indexing Codes for complementary informations.

For example, document EP-A-1835060 discloses the pre-treatment of a textile material made of polyamide with hydroxyethyl cellulose and an ammonium salt and urea. It is suitable for ink-jet printing employing an acid dye.

This document is classified in D06P 1/66 for the ammonium salt, D06P 1/50 for the hydroxyethyl cellulose, D06P 1/6491 for the urea, D06P 5/30 for the ink-jet printing aspect. As it is a polyamide material dyed with acid dye, the Indexing Code corresponding to dyeing of polyamide with acid dye, D06P 3/241 is also allocated.

D06P 7/00

Dyeing or printing processes combined with mechanical treatment

Definition statement

This subclass/group covers:

The dyeing of textile materials combined with mechanical treatment like stretching, drawing, twisting, pressing, calendering, embossing etc.

The stone-washing of dyed textile materials when it is carried out in presence of pumice stones or any other abrading material.

Relationship between large subject matter areas

An overlapping might occur with D06Q 1/08, dealing with the decoration of textiles by fixation of mechanical effects, e.g. calendering, embossing or Chintz effects using chemical means.

With regard to the stone washing of textile materials, when mechanical abrasion is combined with a bleaching agent or any other chemical, then it is recommended to also classify the chemical agent in D06P 5/15 as well as allocating the relevant Indexing Code for the chemical agent.