

D06B

TREATING TEXTILE MATERIALS USING LIQUIDS, GASES OR VAPOURS (mechanical treatment of natural fibrous or filamentary material to obtain fibres or filaments [D01B](#))

Definition statement

This place covers:

Apparatuses and methods for treating textile materials by liquids, gases or vapours.

Relationships with other classification places

Treatment of textiles by purely chemical means is covered by subclasses [D06L](#) - [D06Q](#).

References

Limiting references

This place does not cover:

Mechanical treatment of natural fibrous or filamentary material to obtain fibres or filaments	D01B
---	----------------------

Informative references

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

Applying liquids to surfaces in general	B05
Applying liquids or other fluent materials to surfaces in general conveying in general	B65G
Handling webs or filaments in general	B65H 16/00 - B65H 27/00 , B65H 49/00 , B65H 79/00
Treating leather	C14C
Laundering	D06F
Treatment, not provided for elsewhere in class D06 , of fibres, threads, yarns, fabrics, feathers or fibrous goods made from such materials	D06M

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Fabric	yarns in warp or sheet form
Textile material	fabrics, yarns, nonwoven or other fibrous materials
Indefinite length	an extent of material having the characteristics that the longitudinal dimension is effectively infinite in so far as the procedure for advancing or moving the material is concerned
Cheeses, cones or cakes	yarn packages formed by yarn wound on cores

D06B 1/00

Applying liquids, gases or vapours onto textile materials to effect treatment, e.g. washing, dyeing, bleaching, sizing or impregnating (mercerising [D06B 7/00](#); solvent-treatment [D06B 9/00](#); treatment of selected parts of textile materials [D06B 11/00](#); with aid of vibration [D06B 13/00](#))

Definition statement

This place covers:

Apparatuses and methods for applying liquids, gases or vapours on to textile materials by spraying, pouring or contact with a material carrying member to effect treatment, e.g. washing, dyeing, bleaching, sizing or impregnating.

References

Limiting references

This place does not cover:

Mercerising	D06B 7/00
Solvent-treatment	D06B 9/00
Treatment of selected parts of textile materials	D06B 11/00
With aid of vibration	D06B 13/00

Informative references

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

Transfer application of finishing agents	D06M 23/00
--	----------------------------

D06B 1/02

by spraying or projecting ([D06B 1/08](#) takes precedence)

Definition statement

This place covers:

Spraying or projecting on all surfaces of the textile material.

References

Limiting references

This place does not cover:

From outlets being in, or almost in, contact with the textile material	D06B 1/08
--	---------------------------

Informative references

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

Spraying in general	B05
---------------------	---------------------

D06B 3/00

Passing of textile materials through liquids, gases or vapours to effect treatment, e.g. washing, dyeing, bleaching, sizing, impregnating (mercerising [D06B 7/00](#); solvent-treatment [D06B 9/00](#); treatment of selected parts of textile materials [D06B 11/00](#); with aid of vibration [D06B 13/00](#))

Definition statement

This place covers:

Apparatuses and methods for passing textile materials through liquids, gases or vapours to effect treatment, e.g. washing, dyeing, bleaching, sizing or impregnating.

D06B 3/02

of fibres, slivers or rovings

References**Informative references**

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

Washing or drying artificial filaments i.e. during a continuous production process before the filaments have been collected	D01D 10/06 .
---	------------------------------

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Sliver	a continuous strand of loosely assembled fibres without twist
Roving	a condensed sliver in an intermediate state in the yarn production between sliver and yarn that has been drafted, twisted, doubled and redoubled. The production of the first roving operation is sometimes called slubbing.

D06B 3/04

of yarns, threads or filaments

References**Informative references**

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

Yarns or threads with coloured effects, i.e. by differential dyeing process,	D02G 3/346 .
--	------------------------------

D06B 3/09**as packages, e.g. cheeses****Definition statement***This place covers:*

Dyeing, bleaching, washing etc. of cheeses for example by dipping in a treatment bath (i.e. not pressurized).

References**Limiting references***This place does not cover:*

Forcing liquids, gases or vapours through yarns, threads or filaments (e.g. treating in containers under pressure)	D06B 5/16.
--	----------------------------

Glossary of terms*In this place, the following terms or expressions are used with the meaning indicated:*

Cheeses or cones	yarn packages formed by yarn wound on cores.
------------------	--

D06B 3/20**with means to improve the circulation of the treating material on the surface of the fabric****Definition statement***This place covers:*

All means to enhance the fabric treatment, e.g. the use of steam or water jets during a washing or scouring treatment of a moving web transported in a vat or a tank.

D06B 3/205**{by vibrating}****Definition statement***This place covers:*

Treatment of fabrics passing through liquids, i.e. during washing, which are enhanced by LOW frequency vibrations, e.g. by vibrations induced on the fabric by mechanical devices acting directly on the fabric or by hydraulic waves.

References**Limiting references***This place does not cover:*

Treatment of textile materials with liquids, gases or vapours with aid of high frequency vibration, e.g. ultrasound	D06B 13/00.
---	-----------------------------

D06B 5/00

Forcing liquids, gases or vapours through textile materials to effect treatment, e.g. washing, dyeing, bleaching, sizing impregnating (mercerising [D06B 7/00](#); solvent-treatment [D06B 9/00](#); treatment of selected parts of textile materials [D06B 11/00](#); with aid of vibration [D06B 13/00](#))

Definition statement

This place covers:

Apparatuses and methods for forcing liquids, gases or vapours through textile materials to effect treatment, e.g. washing, dyeing, bleaching, sizing or impregnating.

D06B 5/02

through moving materials of indefinite length

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Materials of indefinite length	(e.g. continuous webs or continuous yarns) are materials having the characteristics that the longitudinal dimension is effectively infinite in so far as the procedure for advancing or moving the material is concerned.
--------------------------------	---

D06B 5/12

through materials of definite length

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Materials of definite length	have to be understood as textile articles, i.e. garments, webs or yarns, with a definite length which can be subjected to treatment in a "batch" process. For example, yarns wound on cheeses or fabric web wrapped around a drum are considered as materials of definite length.
------------------------------	---

D06B 5/16

through yarns, threads or filaments

Definition statement

This place covers:

Apparatuses and methods for forcing liquids, gases or vapours through textile materials to effect treatment, e.g. packages of yarns stacked on rods located in containers and treated under pressure, e.g. autoclave.

Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

- "cheese", "cakes", "cones" and "packages"

D06B 7/00 **Mercerising, e.g. lustring by mercerising****Definition statement**

This place covers:

Apparatuses and methods for mercerising textile materials.

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Mergerisation	is a chemical treatment for cellulosic textile materials which gives the materials a lustrous appearance and improves the strength and affinity for dyes. The treatment involves immersion under tension in a caustic soda solution, which is later neutralised in acid. The treatment produces a permanent swelling of the fibre.
---------------	--

D06B 7/08**of fabrics of indefinite length****Glossary of terms**

In this place, the following terms or expressions are used with the meaning indicated:

Fabrics of indefinite length	(e.g. continuous webs) are materials having the characteristics that the longitudinal dimension is effectively infinite in so far as the procedure for advancing or moving the material is concerned (to distinguish from a "batch" treatment).
------------------------------	---

D06B 9/00**Solvent-treatment of textile materials****Definition statement**

This place covers:

Apparatuses and methods for solvent (e.g. ammonia) treatment of textile materials.

References**Application-oriented references**

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Dry-cleaning apparatus and methods for fabrics using volatile solvents	D06F 43/00
--	----------------------------

D06B 9/06**with recovery of the solvent****References****Informative references**

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

Separation of gases or vapours, recovering vapours of volatile solvents from gases etc	B01D 53/00
--	----------------------------

D06B 11/00**Treatment of selected parts of textile materials, e.g. partial dyeing****Definition statement**

This place covers:

Treatments on selected parts of textile materials, e.g. dyeing patterns on yarns or fabrics.

References**Limiting references**

This place does not cover:

The entire treatment of the surface or the material	D06B 1/00 , D06B 3/00 , D06B 5/00
Printing on textile	B41J 3/4078
Ink-jet dyeing or printing processes for textile	D06P 5/30

Informative references

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

Conversion of colour picture signals for textile printing	H04N 1/54
---	---------------------------

D06B 11/0076**{Transfer-treating}****Definition statement**

This place covers:

Treatment by transfer, e.g. transferring dye from a dyed paper onto a textile material or transferring an adhesive pattern from a tape onto a textile material.

References**Limiting references**

This place does not cover:

Transfer printing apparatus for textile	B41F 16/02
Apparatus for applying decalcomanias	B65C

D06B 11/0096**{to get a faded look}****Definition statement***This place covers:*

Apparatuses and methods to obtain dyed textile materials with a faded look, e.g. through sandblasting, laser carving, abrading, washing with pumice or stones in order to obtain a worn-out look on jeans etc.

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

Laser beam treatment of fibres, threads, yarns, fabrics, or fibrous goods made of such materials	D06M 10/005 .
--	-------------------------------

Synonyms and Keywords*In patent documents, the following words/expressions are often used as synonyms:*

- "jeans" and "denim"
- "pumice" and "stone"

D06B 13/00**Treatment of textile materials with liquids, gases or vapours with aid of vibration****Definition statement***This place covers:*

Treatment of textile materials by liquids, gases or vapours which are enhanced by high frequency vibrations, e.g. ultrasound devices in direct contact with the textile material or not in contact with the textile material.

References**Limiting references***This place does not cover:*

Treatments of fabrics passing through liquids, i.e. during washing, which are enhanced by low frequency vibrations, e.g. mechanical vibration	D06B 3/205 .
---	------------------------------

D06B 15/00**Removing liquids, gases or vapours from textile materials in association with treatment of the materials by liquids, gases or vapours****Definition statement***This place covers:*

Apparatuses and methods for removing liquids, gases or vapours from textile materials in association with treatment of the materials by liquids, gases or vapours.

References

Informative references

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

Drying	F26B
--------	----------------------

D06B 17/00

Storing of textile materials in association with the treatment of the materials by liquids, gases or vapours (carriers or supports specially adapted therefor [D06B 23/04](#))

Definition statement

This place covers:

Apparatuses and methods for storing the textile materials in association with the treatment of the materials by liquids, gases or vapours, e.g. heat-setting of yarns or fabrics in a steam chamber (steamer).

References

Informative references

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

Carriers or supports for textile materials to be treated	D06B 23/04
--	----------------------------

D06B 17/005

{in helical form}

Definition statement

This place covers:

The storing of textile materials in helical form, e.g. heat setting treatments of yarns which lay in helical form on a conveyor passing through a heated tunnel.

D06B 19/00

Treatment of textile materials by liquids, gases or vapours, not provided for in groups [D06B 1/00](#) - [D06B 17/00](#)

Definition statement

This place covers:

Apparatuses and methods for the treatment of textile materials by liquids, gases or vapours not provided for in groups [D06B 1/00](#) - [D06B 17/00](#).

D06B 21/00

Successive treatments of textile materials by liquids, gases or vapours (successive treatments in which the characteristics of a single treatment are of interest only, or in which all treatments have characteristics provided for in a single main group, see the relevant groups for the single treatment)

Definition statement

This place covers:

Successive treatments, i.e. involving two or more treatments in succession, of textile materials by liquids, gases or vapours.

Special rules of classification

The group covers successive treatments with detailed or non-detailed single treatments. Details of single treatments are additionally classified in the relevant groups.

D06B 23/00

Component parts, details, or accessories of apparatus or machines, specially adapted for the treating of textile materials, not restricted to a particular kind of apparatus, provided for in groups [D06B 1/00](#) - [D06B 21/00](#)

Definition statement

This place covers:

Components parts, details or accessories of apparatus for treatment of textile materials.

References

Informative references

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

Registering, tensioning, smoothing or guiding webs in general (e.g. paper or plastic webs)	B65H 23/00
--	----------------------------

D06B 23/02

Rollers

References

Informative references

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

Rollers for calendering, pressing, ironing, glossing or glazing textile fabrics	D06C 15/08
Calenders for paper	D21G 1/00
Rolls in paper calenders	D21G 1/02
Rollers in general	F16C 13/00

D06B 23/021**{Compressive rollers}****Definition statement**

This place covers:

Compression rollers or calenders, e.g. for compressing the textile material or for squeezing out liquid from the textile material.

D06B 23/025**{Perforated rollers}****Definition statement**

This place covers:

e.g. perforated drums for dyeing, washing treatment or imparting a water jet treatment to a fabric.

D06B 23/04**Carriers or supports for textile materials to be treated****References****Informative references**

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

Cores, formers, supports or holders for coiled, wound or folded material, e.g. reels, spindles, bobbins, cop tubes, cans	B65H 75/02
Supporting artificial filaments during physical treatment	D01D 10/04

D06B 23/042**{Perforated supports}****Definition statement**

This place covers:

e.g. perforated tubes for dyeing yarn packages.

References**Informative references**

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

Forcing liquids, gases or vapours through yarns, threads or filaments of definite lengths, i.e. packages	D06B 5/16
--	---------------------------

Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

- "cheeses", "cakes", "cones" and "packages"
- "bobbins", "dyeing tubes" and "cores"

D06B 23/10

Devices for dyeing samples ([D06B 23/12](#) takes precedence)

Definition statement

This place covers:

Devices for dyeing samples, e.g. small laboratory devices for testing fabric samples.

References

Informative references

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

Investigating or analysing fabric or woven textiles	G01N 33/367 .
---	-------------------------------