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 <u>D06L</u> - <u>D06Q</u>.

References

Limiting references

This place does not cover:

Mechanical treatment of natural fibrous or filamentary material to obtain	<u>D01B</u>
fibres or filaments	

Informative references

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

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

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	<u>D06B 7/00</u>
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	<u>D06M 23/00</u>

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
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Informative references

Spraying in general	<u>B05</u>

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	<u>D01D 10/06</u> .
process before the filaments have been collected	

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

Yarns or threads with coloured effects, i.e. by differential dyeing process, D02G 3/346.
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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	D06B 5/16.
(e.g. treating in containers under pressure)	

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	D06B 13/00.
high frequency vibration, e.g. ultrasound	

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:

(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:

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:

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:

•	(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
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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	B01D 53/00
from gases etc	

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:

	D06B 1/00, D06B 3/00, D06B 5/00
Printing on textile	B41J 3/4078
Ink-jet dyeing or printing processes for textile	<u>D06P 5/30</u>

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
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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	<u>B65C</u>

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	<u>D06M 10/005</u> .
made of such materials	

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	D06B 3/205.
are enhanced by low frequency vibrations, e.g. mechanical vibration	

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 of supports for textile materials to be treated D06b 23/04	Carriers or supports for textile materials to be treated	D06B 23/04
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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 $\frac{\text{D06B 1/00}}{\text{D06B 1/00}}$.

D06B 21/00

Successive treatments of textile materials by liquids, gases or vapours

Definition statement

This place covers:

Two or more treatments in succession of textile materials by liquids, gases or vapours. Successive treatments involve two or more treatments in a series or sequence.

Relationships with other classification places

When the treatments are combined or successive such that the features of a single treatment only are of interest, or when all combined or successive treatments are covered by a single main group of this subclass, then classification should be directed to the relevant main groups of $\frac{D06B\ 1/00}{D06B\ 1/00}$ - $\frac{D06B\ 19/00}{D06B\ 1/00}$ are relevant, then they should be co-classified with group $\frac{D06B\ 21/00}{D06B\ 21/00}$ as well.

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 <u>D06B 1/00</u> - <u>D06B 21/00</u>

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	B65H 23/00
or plastic webs)	

D06B 23/02

Rollers

References

Informative references

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
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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

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

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

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