

D01B

MECHANICAL TREATMENT OF NATURAL FIBROUS OR FILAMENTARY MATERIAL TO OBTAIN FIBRES OF FILAMENTS, e.g. FOR SPINNING (crude extraction of asbestos fibres from ores B03B; apparatus for retting D01C)

Definition statement

This subclass/group covers:

The extraction of staple fibres, i.e. fibres of limited length, from natural materials like the seeds, leaves or stalks of plants or from silk.

Informative references

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

The extraction of mineral fibres like from ores, e.g. asbestos	B03B
Chemical treatment of natural filamentary or fibrous material to obtain filaments or fibres for spinning (e.g. chemical retting)	D01C

Glossary of terms

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

Fibre	a relatively-short, elongated member of natural or artificial material
Filament	an endless or quasi-endless, elongated member of natural (e.g. silk) or artificial material
Yarn	a unitary assembly of fibres, usually produced by spinning
Thread	an assembly of yarns or filaments, usually produced by twisting

D01B 1/00

Mechanical separation of fibres from plant material, e.g. seeds, leaves, stalks

Definition statement

This subclass/group covers:

The process steps used in separating fibres from the seeds (mainly cotton) and stalks or leaves (mainly flax or hemp) of plant material.

Glossary of terms

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

Stalk	the main stem of a herbaceous plant.
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D01B 1/04

Ginning

Definition statement

This subclass/group covers:

The initial separation of harvested fibres and seeds in so called ginning machines.

Glossary of terms

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

Ginning	the process of separating cotton fibres from their seeds and other agricultural waste
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D01B 1/12

Rippling

Definition statement

This subclass/group covers:

An early stage process of pulling the dry flax plants through coarse combs for removing the seeds from the stalks.

Glossary of terms

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

Rippling	the process of removing the seeds from the flax stalks
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D01B 1/14

Breaking or scutching, e.g. of flax; Decorticating

Definition statement

This subclass/group covers:

The mechanical separation of fibres from the wood of the stalks.

Glossary of terms

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

Scutching	the process whereby the woody portion of the stalks is removed by crushing them between two metal rolls
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D01B 1/48

Drying retted fibres

Definition statement

This subclass/group covers:

Only the drying methods and apparatuses of fibres obtained from retting.

Glossary of terms

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

Retting	a process employing the action of bacteria and moisture on stalks (e.g. flax stalks) to dissolve or rot away much of the cellular tissues and
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	gummy substances (i.e. pectin) surrounding bast-fibre bundles (i.e. fibre loosening). Basic methods include natural retting (i.e. dew retting or water retting) or chemical retting.
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D01B 3/00

Mechanical removal of impurities from animal fibres (carbonising rags to recover animal fibres D01C5/00)

Definition statement

This subclass/group covers:

The mechanical cleaning of wools (e.g. scouring and cleaning stages to remove organic, vegetal and mineral matters).

D01B 5/00

Hackling or heckling machines (hand heckling tools D01G33/00)

Definition statement

This subclass/group covers:

The combing out of flax or hemp fibres by hackling devices, that perform a discontinuous linear combing movement (i.e. by combs that get finer and finer) to separate stalk remains from the fibres.

D01B 7/00

Obtaining silk fibres or filaments

Definition statement

This subclass/group covers:

The extraction of silk filaments from silkworm cocoons, and their conversion into staple fibres.

Special rules of classification within this group

Silk being commonly classified as a "natural fibre" is actually a continuous filament.

D01B 7/04

Reeling silk

Definition statement

This subclass/group covers:

The unwinding of silk cocoons to gain the silk filament.

D01B 9/00

Other mechanical treatment of natural fibrous or filamentary material to obtain fibres or filaments

Definition statement

This subclass/group covers:

Other mechanical treatment of natural fibrous or filamentary material to obtain fibres or filaments (e.g. fibre content determination, colour alteration at fibre processing level).