

D21B

FIBROUS RAW MATERIALS OR THEIR MECHANICAL TREATMENT

Definition statement

This place covers:

Preparation of fibrous raw materials (like wood, rags, waste paper, pulp bales) and their mechanical treatment to obtain mechanical pulp, particular for papermaking purposes and production of fibre board, cutting raw materials into small particles, pretreatment of raw materials before pulp preparation, pulp preparation by mechanical defibration (for example by grinding), pulpers and mixers for pulps, de-inking devices.

Relationships with other classification places

Even if the focus is clearly on the mechanical side of pulp preparation, also processes including chemical aspects are classified herein, as long as the nature of the process is to be considered as mainly mechanical. Otherwise, [D21C](#) is the appropriate subclass.

References

Limiting references

This place does not cover:

Removal of bark	B27L
Obtaining fibres from plant material (mechanical separation)	D01B 1/00
Hackling or heckling machines	D01B 5/00
Pretreatment of the finely-divided materials before digesting	D21C 1/00
Methods of beating or refining pulp	D21D 1/00
Purification of the pulp suspension by mechanical means	D21D 5/00

Informative references

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

Disintegration in mills; Milling devices in general	B02C
Flotation in general	B03D
Dry sorting of waste	B07B
Disposal of solid waste	B09B
Manufacture of articles made from particles or fibres consisting of wood or like organic material by dry processes	B27N
Obtaining silk fibres or filaments	D01B 7/00
Working-up waste paper (chemical part)	D21C 5/02
Flotation of white water, recovering fibres from suspensions	D21F 1/70

Special rules of classification

Subgroups and main group

If a document concerns embodiments which are covered by several subgroups dependent on a higher hierarchy group, the following rules apply:

- the specific technical information relevant for some of the subgroups is classified in all said subgroups;
- if relevant, the structural association (e.g. the combination) of the elements covered by the subgroups is classified in the head group;
- analogously, if generic technical information common to all of the subgroups is disclosed and only schematic embodiments of the specific subgroup embodiments are represented, the documents is classified in the head group only.

D21B 1/02

Pretreatment of the raw materials by chemical or physical means (removal of bark [B27L](#))

Definition statement

This place covers:

Pretreatment of the raw materials by chemical or physical means, for example steaming or heating of wood chips.

D21B 1/021

{by chemical means}

Definition statement

This place covers:

Impregnation of wood chips with chemical or biological (enzymatic) substances.

References

Informative references

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

Chemical aspects of pulp preparation	D21C
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D21B 1/30

Defibrating by other means

Definition statement

This place covers:

Defibrating by means not explicitly defined before, for example between cooperating rotating screw members in drums.

D21B 1/306

{using microwaves}

Definition statement

This place covers:

Defibrating by the use of microwaves, for example by ultrasound treatments.