B42C

BOOKBINDING (cutting or perforating machines, devices or tools <u>B26</u>; folding sheets or webs <u>B31F</u>; ornamenting books <u>B44</u>)

Definition statement

This place covers:

Particular operations and machines peculiar to bookbinding for obtaining books as final products:

- providing or preparing book blocks and bookbinding cases as input material for bookbinding
- · applying glue or adhesive
- casing-in, .i.e. applying covers to fillings
- · jacketing books
- · rebinding books
- · multi-step processes for making books
- residual operations for bookbinding not provided for in other places

Some operations and machines similar to bookbinding operations for obtaining related final products:

- · making booklets, pads or form sets from multiple webs
- manufacturing covers of filing appliances, e.g. of loose-leaf binders or suspended filing appliances

Relationships with other classification places

Binding and bookbinding

Subclass <u>B42B</u> covers binding, especially stitching, processes for permanently attaching together sheets, quires or signatures by which book blocks can be obtained.

References

Informative references

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

Cutting or perforating operations, machines or devices	B26D, B26F
Folding sheets or webs	B31F 1/00, B65H 45/00
Apparatus for artistic work	<u>B44B</u>
Processes for decorating in general	B44C, B44D 5/00

B42C 1/00

Collating or gathering sheets combined with processes for permanently attaching together sheets or signatures or for interposing inserts (collating or gathering sheets or signatures without permanently attaching them together B65H 39/00)

Definition statement

This place covers:

Gathering and collating are typical for bookbinding in order to arrange the printed pages in a predetermined sequence to obtain the book block.

Gathering sheets means associating and registering folded printed sheets in the correct sequence to obtain a folded quire as a section of a book, collating means associating and registering sections, e.g. folded signatures or folded quires, in the proper sequence for the book block.

Gathering covers as well associating and registering flat or folded sheets to a single copy of a publication, e.g. for subsequent stapling.

Collating covers as well examining the associated section or set of sections, after gathering but before attaching, for proper sequence, e.g. by examining step marks on the back of the folded sheets.

Interposing inserts means inserting separately printed flat or folded sheets, e.g. of different paper or print quality for advertisement, into the gathered or collated main publication for becoming a permanent part of the final product.

References

Informative references

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

Permanently attaching together sheets, quires, or signatures	B42B
Supports or magazines for piles from which sheets are to be separated; Separating sheets from piles; Feeding sheets separated from piles; Feeding sheets to machines	B65H 1/00 - B65H 5/00
Delivering or advancing sheets from machines; Advancing sheets to or into piles; Pile receivers; Forming counted batches in delivery pile or stream of sheets	B65H 29/00 - B65H 33/00
Article or web delivery apparatus incorporating devices for securing together articles or webs, e.g. by adhesive, stitching or stapling	B65H 37/04
Associating, collating, or gathering sheets, quires or signatures without permanently attaching them together, e.g. from single or several sources, like piles or delivery streams	B65H 39/00
Devices for collating and binding sets of sheets, e.g. by stapling, gluing, in electrographic, e.g. xerographic, printing machines	G03G 15/00

B42C 3/00

Making booklets, pads, or form sets from multiple webs

Definition statement

This place covers:

Involves associating, registering and cutting one or more webs in multiple layers, usually printed, to obtain sets of flat or folded sheets in a correct predetermined sequence as a single copy of the final product, e.g. of a booklet, for simultaneous or subsequent binding.

References

Informative references

Printing apparatus for printing books, manifolding sets or calendars	B41F 17/02, B41F 17/04
Manifolding pads or books	B41L 1/24
Sheets united without binding to form pads or blocks, e.g. form sets or calendar blocks	B42D 5/00
Associating sheets from a single source, e.g. to form a writing pad	B65H 39/10
Associating two or more webs	B65H 39/16

B42C 5/00

Preparing the edges or backs of leaves or signatures for binding

Definition statement

This place covers:

Preparing the edges or backs of a set of flat or folded sheets or signatures, usually a book block or fillings, prior to associating it with a case or cover.

References

Informative references

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

Cutting of the book block	B26D
Decoration of the edges of book block, e.g. by colouring or gold foil	B42D 7/00
Loose leaves modified for binding	B42D 13/00

B42C 7/00

Manufacturing bookbinding cases or covers of {books or} loose-leaf binders (book covers <u>B42D 3/00</u>)

Definition statement

This place covers:

Bookbinding cases are usually manufactured as a separate unit to be associated with the fillings of a book.

Cases for hard cover books, or covers for loose-leave binders, are typically produced by printing a rectangular sheet of paper, cloth or leather, known as the cover material, and subsequently gluing the cover material to a pair of rigid panels and a spine.

Soft covers, e.g. for books, folders (<u>B42F 7/00</u> etc.) or suspension files (<u>B42F 15/00</u>), are made from foldable sheet material, e.g. as unitary cover from a single printed blank of cover material.

References

Informative references

Joint-creasing equipment for bookbinding	B42C 13/00
Book covers	B42D 3/00
Covers of loose-leaf binders	B42F 13/00
Covers of suspended files	B42F 15/04

B42C 9/00

Applying glue or adhesive peculiar to bookbinding

Definition statement

This place covers:

Methods and devices for applying adhesive, e.g. glue or paste,

- to obtain adhesively bound stacks of sheets or book blocks, e.g. by applying adhesive to the back of a stack of sheets or subsequently to individual sheets prior or during stacking,
- to join tape or covers by adhesive to a stack of sheets or a book block, e.g. by applying adhesive to the tape or cover, or by activating adhesive pre-coated on a tape or cover,
- to bond sheets together or a cover with a stack of sheets, e.g. by fusing plastic sheet or cover material or by fusing a binding material, e.g. a pre-applied binding agent or a material added to fill cavities in the sheets.
- for securing strips, ribbons or end papers to book blocks, e.g. back linings, bookmarkers, headbands or guards,
- for otherwise applying adhesive peculiar to bookbinding.

References

Informative references

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

Machines or equipment for attaching end papers to book blocks and casing-in	B42C 11/04
Machines or equipment for casing-in by welding plastic materials	B42C 11/06
Permanently attaching together sheets, quires, or signatures by adhesive or welding	B42B 5/00
Devices for pasting common to machines for permanently attaching together sheets, quires, or signatures, or for permanently attaching objects thereto	B42B 9/06

B42C 9/0006

{by applying adhesive to a stack of sheets}

Definition statement

This place covers:

Methods and devices to apply adhesive to a collated or gathered stack of sheets for attaching them together, for uniting it with a cover, or both. Usually, the adhesive is applied by a roller, whereby the roller is moved along a stack in a rest position or the stacks are continuously moved along a stationary applicator, as in industrial perfect binders.

References

Informative references

Binding sets of sheets, e.g. by gluing, applied in electro-photographic	G03G 15/6541
printers	

B42C 9/0093

{by fusing, welding sheets together}

References

Informative references

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

Joining, e.g. welding, plastic sheets by heating, with or without pressure	B29C 65/02
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B42C 9/02

for securing back linings, strips, ribbons or headbands

References

Informative references

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

Machines or equipment for attaching end papers to book blocks and	B42C 11/045
casing-in	

B42C 11/00

Casing-in

Definition statement

This place covers:

Associating a book block or other fillings with a bookbinding case or cover.

References

Informative references

Applying glue or adhesive peculiar to bookbinding	B42C 9/00
Devices for pasting common to machines for permanently attaching together sheets, quires, or signatures, or for permanently attaching objects thereto	B42B 9/06
Books or other bound products in which the fillings and covers are connected by end papers, secured integrally or united by other means	B42D 1/02 - B42D 1/06
Covers or strips provided with adhesive for binding	B42D 3/00

B42C 13/00

Bookbinding presses (general features of presses <u>B30B</u>); Joint-creasing equipment for bookbinding; Drying or setting devices for books

Definition statement

This place covers:

The machines, devices or equipment covered by this group is particularly used for treating, e.g. shaping, the book obtained from casing-in operations.

References

Informative references

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

Creasing the back of covers during the manufacture thereof	B42C 7/00
General features of presses	<u>B30B</u>

B42C 15/00

Jacketing books

Definition statement

This place covers:

Applying a protective book jacket to a bound book, typically an attractive detachable paper cover.

Covers as well applying protective adhesive or heat sealable foils and inserting books into protective cases.

References

Informative references

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

Joining sheets or webs to each other or to substantially flat surfaces	B29C 65/00
Protective jackets for books	B42D 3/04
Protective cases for books	B42D 3/18
Packaging articles in general	<u>B65B</u>
Packaging elements or packages in general	<u>B65D</u>

B42C 17/00

Rebinding books

Definition statement

This place covers:

Replacement of book covers or fillings of bound books.

Reuse of book covers or fillings for bookbinding.

References

Informative references

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

Files with adhesive strips for mounting papers	B42D 1/10
Loose book covers	B42D 3/04

B42C 19/00

Multi-step processes for making books

Definition statement

This place covers:

Bookbinding processes comprising a plurality of operations which are not fully covered by a single other group of this subclass and machines performing such sequences of operations. The format of the starting printing substrate (single sheets, signatures, webs) determines the steps required to obtain a book block, especially the type of collating operation.

The multi-step processes comprise operations covered by other places of subclass <u>B42C</u> as a process step and may include as well bookbinding steps not covered by this subclass, such as folding (<u>B65H 45/00</u>, <u>B31F 1/00</u>), collating (<u>B65H 39/00</u>), stitching with thread (<u>B42B</u>), cutting (<u>B26D</u>) or decorating (<u>B44</u>), as well as particular handling and conveying steps therefor (<u>B65H</u>, <u>B65G</u>).

They may further comprise printing steps adapted for obtaining books, for forme printing (<u>B41F 17/02</u>), for electrographic printing (<u>G03G</u>) or selective printing (<u>B41J</u>), including the forme preparation (<u>B41C</u>) or the preprocessing of the content (<u>G06K 15/00</u>, <u>G06F 3/12</u>, <u>H04N 1/00</u>).

References

Informative references

Collating or gathering sheets combined with processes permanently attaching together sheets or signatures or for interposing inserts	B42C 1/00
Making booklets, pads, or form sets from multiple webs	B42C 3/00
Manufacturing bookbinding cases	B42C 7/00
Applying glue or adhesive for bookbinding and subsequently applying a cover	B42C 9/00
Conveying in general	<u>B65G</u>