CPC  COOPERATIVE PATENT CLASSIFICATION

B  PERFORMING OPERATIONS; TRANSPORTING
(NOTES omitted)

SHAPING

B31  MAKING ARTICLES OF PAPER, CARDBOARD OR MATERIAL WORKED IN A MANNER ANALOGOUS TO PAPER; WORKING PAPER, CARDBOARD OR MATERIAL WORKED IN A MANNER ANALOGOUS TO PAPER
(NOTES omitted)

B31B  MAKING CONTAINERS OF PAPER, CARDBOARD OR MATERIAL WORKED IN A MANNER ANALOGOUS TO PAPER (making wound articles, e.g. wound tubes, B31C; combined making and filling B65B)

NOTE
In this subclass, the following terms or expressions are used with the meaning indicated:
• "rigid or semi-rigid containers" includes:
  • containers not deformed by, or not taking-up the shape of, their contents;
  • containers adapted to be temporarily deformed to expel their contents;
  • pallets;
  • trays;
• "flexible containers" includes:
  • containers deformed by, or taking-up the shape of, their contents;
  • containers adapted to be permanently deformed to expel their contents.

50/00  Making rigid or semi-rigid containers, e.g. boxes or cartons

NOTE
In this group, it is desirable to add the indexing codes of groups B31B 2100/00 – B31B 2120/00.

WARNING
Group B31B 50/00 is incomplete pending reclassification of documents from groups B31D 1/00, B31D 3/00, B31D 5/00, B31D 5/02, B31D 5/04, and B31D 99/00.

All groups listed in this warning should be considered in order to perform a complete search.

50/002  .  .  Feeding or positioning sheets, blanks or webs

WARNING
Group B31B 50/002 is impacted by reclassification into groups B31B 50/022 - B31B 50/12.

All groups listed in this warning should be considered in order to perform a complete search.

50/003  .  .  { Prebreaking }
50/004  .  .  { Straightening the side walls of boxes; Squaring collapsed folded box blanks; Deforming boxes }
50/0042 .  .  { Closing boxes }
50/0044 .  .  { the boxes having their opening facing in horizontal direction }
50/0045 .  .  { the boxes having their opening facing upwardly }
50/005  .  .  { involving a particular layout of the machinery or relative arrangement of its subunits }
50/006  .  { Controlling; Regulating; Measuring; Improving safety }

50/0022  .  .  { Holders for feeding or positioning blanks or webs }

WARNING
Groups B31B 50/022 - B31B 50/12 are incomplete pending reclassification of documents from group B31B 50/02.

All groups listed in this warning should be considered in order to perform a complete search.

50/0024  .  .  { Rotating holders, e.g. star wheels, drums }
50/004  .  .  { Feeding sheets or blanks }
50/0042 .  .  { using rolls, belts or chains }
50/0044 .  .  { involving aligning }
50/0046 .  .  { involving changing orientation or changing direction of transport }
B31B

50/06 . . . from stacks

**WARNING**
Group B31B 50/06 is incomplete pending reclassification of documents from group B31B 50/02.
All groups listed in this warning should be considered in order to perform a complete search.

50/062 . . . . [from the underside of a magazine]
50/064 . . . . [by being moved in the plane they are lying in]
50/066 . . . . [from above a magazine]
50/07 . . . by air pressure or suction

**WARNING**
Group B31B 50/07 is incomplete pending reclassification of documents from group B31B 50/02.
Groups B31B 50/02 and B31B 50/07 should be considered in order to perform a complete search.

50/10 . . Feeding or positioning webs
50/102 . . [using rolls, belts or chains]
50/104 . . [involving aligning]
50/106 . . [involving changing orientation or changing direction of transport]
50/12 . . by air pressure or suction

**WARNING**
Group B31B 50/12 is incomplete pending reclassification of documents from group B31B 50/02.
Groups B31B 50/02 and B31B 50/12 should be considered in order to perform a complete search.

50/14 . . Cutting, e.g. perforating, punching, slitting or trimming (cutting window openings B31B 50/83)

**WARNING**
Group B31B 50/14 is impacted by reclassification into groups B31B 50/142 - B31B 50/22 and B31B 50/83.
All groups listed in this warning should be considered in order to perform a complete search.

50/142 . . [using presses or dies]

**WARNING**
Groups B31B 50/142 - B31B 50/22 are incomplete pending reclassification of documents from group B31B 50/14.
All groups listed in this warning should be considered in order to perform a complete search.

50/144 . . [using tools mounted on belts or chains]
50/146 . . [using tools mounted on a drum]

50/16 . . Cutting webs

**WARNING**
Group B31B 50/16 is incomplete pending reclassification of documents from group B31B 50/14. Group B31B 50/16 is also impacted by reclassification into group B31B 50/18.
Groups B31B 50/14, B31B 50/16 and B31B 50/18 should be considered in order to perform a complete search.

50/18 . . . longitudinally

**WARNING**
Group B31B 50/18 is incomplete pending reclassification of documents from groups B31B 50/14 and B31B 50/16.
All groups listed in this warning should be considered in order to perform a complete search.

50/20 . . Cutting sheets or blanks

**WARNING**
Groups B31B 50/20 and B31B 50/22 are incomplete pending reclassification of documents from group B31B 50/14.
Groups B31B 50/14, B31B 50/20 and B31B 50/22 should be considered in order to perform a complete search.

50/22 . . . Notching; Trimming edges of flaps
50/25 . . Surface scoring
50/252 . . . [using presses or dies]
50/254 . . . [using tools mounted on belts or chains]
50/256 . . . [using tools mounted on a drum]
50/26 . . Folding sheets, blanks or webs

**WARNING**
Group B31B 50/26 is impacted by reclassification into groups B31B 50/262 - B31B 50/585.
All groups listed in this warning should be considered in order to perform a complete search.

50/262 . . . [involving folding, leading, or trailing flaps of blanks]

**WARNING**
Group B31B 50/262 is incomplete pending reclassification of documents from group B31B 50/26.
Groups B31B 50/26 and B31B 50/262 should be considered in order to perform a complete search.
around mandrels, e.g. for forming bottoms

**WARNING**

Groups B31B 50/28 - B31B 50/34 are incomplete pending reclassification of documents from group B31B 50/26.

All groups listed in this Warning should be considered in order to perform a complete search.

50/282 . . . {involving stripping-off formed boxes from mandrels}
50/28 . . . the mandrels moving
50/32 . . . in circular paths
50/322 . . . . {the mandrels extending radially from the periphery of a drum}
50/324 . . . . . {the mandrels being parallel to the axis of a drum}
50/326 . . . . . {the mandrels extending tangentially to the periphery of a drum}
50/34 . . . about their own axes
50/36 . . . by continuously feeding the sheets, blanks or webs to stationary members, e.g. plates, ploughs or cores

**WARNING**

Group B31B 50/36 is incomplete pending reclassification of documents from group B31B 50/26.

Group B31B 50/36 is also impacted by reclassification into groups B31B 50/38, B31B 50/40 and B31B 50/42.

All groups listed in this warning should be considered in order to perform a complete search.

50/38 . . . the members being forming-tubes

**WARNING**

Groups B31B 50/38, B31B 50/40 and B31B 50/42 are incomplete pending reclassification of documents from groups B31B 50/26 and B31B 50/36.

All groups listed in this warning should be considered in order to perform a complete search.

50/40 . . . . acting internally
50/42 . . . . acting externally
50/44 . . . by plungers moving through folding dies

**WARNING**

Group B31B 50/44 is incomplete pending reclassification of documents from groups B31B 50/26, B31B 50/52 and B31B 50/54.

Group B31B 50/44 is also impacted by reclassification into groups B31B 50/442 and B31B 50/444.

All groups listed in this warning should be considered in order to perform a complete search.

50/442 . . . . {having several cooperating plungers and dies fitted on a rotating table or on moving chains}

**WARNING**

Groups B31B 50/442 and B31B 50/444 are incomplete pending reclassification of documents from groups B31B 50/26, B31B 50/44, B31B 50/52 and B31B 50/54.

All groups listed in this warning should be considered in order to perform a complete search.

50/444 . . . . {having several plungers moving in a closed path and cooperating with stationary folding dies}
50/46 . . . . and interconnecting side walls

**WARNING**

Group B31B 50/46 is incomplete pending reclassification of documents from groups B31B 50/26, B31B 50/52 and B31B 50/54.

Group B31B 50/46 is also impacted by reclassification into groups B31B 50/48 and B31B 50/50.

All groups listed in this warning should be considered in order to perform a complete search.

50/48 . . . . by folding or tucking in locking flaps

**WARNING**

Groups B31B 50/48 and B31B 50/50 are incomplete pending reclassification of documents from groups B31B 50/26, B31B 50/46, B31B 50/52 and B31B 50/54.

All groups listed in this warning should be considered in order to perform a complete search.

50/50 . . . . . by interengaging tongues and slots
50/52 . . . . by reciprocating or oscillating members, e.g. fingers (by plungers moving through folding dies B31B 50/44)

**WARNING**

Group B31B 50/52 is incomplete pending reclassification of documents from group B31B 50/26.

Group B31B 50/52 is also impacted by reclassification into groups B31B 50/54 and B31B 50/44-B31B 50/50.

All groups listed in this warning should be considered in order to perform a complete search.
Group B31B 50/54 is incomplete pending reclassification of documents from groups B31B 50/26 and B31B 50/52.

Group B31B 50/54 is also impacted by reclassification into groups B31B 50/44-B31B 50/50.

All groups listed in this warning should be considered in order to perform a complete search.

Group B31B 50/56, B31B 50/58, and B31B 50/585 are incomplete pending reclassification of documents from groups B31B 50/26.

All groups listed in this warning should be considered in order to perform a complete search.

Group B31B 50/59 is incomplete pending reclassification of documents from group B31B 50/00.

Groups B31B 50/00 and B31B 50/59 should be considered in order to perform a complete search.

Group B31B 50/61 is incomplete pending reclassification of documents from group B31B 50/60.

Groups B31B 50/60 and B31B 50/61 should be considered in order to perform a complete search.

Group B31B 50/64 is incomplete pending reclassification of documents from group B31B 50/60.

Group B31B 50/64 is also impacted by reclassification into groups B31B 50/62, B31B 50/622, B31B 50/624, B31B 50/626, and B31B 50/66.

All groups listed in this warning should be considered in order to perform a complete search.

Group B31B 50/68 is incomplete pending reclassification of documents from groups B31B 50/60 and B31B 50/64.

Groups B31B 50/60, B31B 50/64, and B31B 50/68 should be considered in order to perform a complete search.

Group B31B 50/70 are incomplete pending reclassification of documents from groups B31B 50/60.

All groups listed in this warning should be considered in order to perform a complete search.
WARNING

Groups B31B 50/72 - B31B 50/726 are incomplete pending reclassification of documents from groups B31B 50/60. All groups listed in this Warning should be considered in order to perform a complete search.

50/722 . . . [on already formed boxes]
50/724 . . . . [Applying tapes on the corners of set-up boxes, e.g. involving setting-up]
50/726 . . . [for uniting meeting edges of collapsed boxes]
50/73 . . . by mechanically interlocking integral parts, e.g. by tongues and slots (interengaging side walls during folding by plungers moving through folding dies B31B 50/46)
50/732 . . . [by folding or tucking-in locking flaps]
50/734 . . . . [interengaging tongues and slots]

WARNING

Groups B31B 50/73 - B31B 50/734 are incomplete pending reclassification of documents from groups B31B 50/60. All groups listed in this Warning should be considered in order to perform a complete search.

50/74 . . . Auxiliary operations

WARNING

Group B31B 50/74 is impacted by reclassification into groups B31B 50/741 - B31B 50/98. All groups listed in this warning should be considered in order to perform a complete search.

50/741 . . . [Moistening; Drying; Cooling; Heating; Sterilizing]

WARNING

Group B31B 50/741 is incomplete pending reclassification of documents from group B31B 50/74. Groups B31B 50/741 and B31B 50/74 should be considered in order to perform a complete search.

50/742 . . . [Coating; Impregnating; Waterproofing; Decoating]

WARNING

Groups B31B 50/742 - B31B 50/756 are incomplete pending reclassification of documents from group B31B 50/74. All groups listed in this Warning should be considered in order to perform a complete search.

50/743 . . . [Coating or impregnating edges or corners]
50/745 . . . [Coating or impregnating formed boxes]
50/747 . . . [Coating or impregnating blanks or webs]
50/75 . . . [by immersing in a bath]
50/753 . . . [by spraying]
50/756 . . . . [only the interior of the boxes]
50/76 . . . Opening and distending flattened articles

WARNING

Group B31B 50/76 is incomplete pending reclassification of documents from group B31B 50/74. Groups B31B 50/76 and B31B 50/74 should be considered in order to perform a complete search.

50/78 . . . Mechanically
50/782 . . . . [by pushing the opposite ends of collapsed blanks towards each other]
50/784 . . . . [for setting up boxes having their opening facing upwardly]
50/786 . . . . [by introducing opening fingers in the collapsed blanks]
50/787 . . . . . [Rotating fingers; Two or more fingers moving relatively to each other]
50/788 . . . . . [by introducing the blanks into undeformable holders, e.g. on a drum or on chains]
50/80 . . . Pneumatically
50/802 . . . . [for setting-up boxes having their opening facing upwardly]
50/804 . . . . [using two or more suction devices on a rotating element]
50/81 . . . Forming or attaching accessories, e.g. opening devices, closures or tear strings

WARNING

Group B31B 50/81 is incomplete pending reclassification of documents from B31B 50/74. Group B31B 50/81 is also impacted by reclassification into groups B31B 50/84 and B31B 50/85. All groups listed in this Warning should be considered in order to perform a complete search.

50/811 . . . . [Applying strips, strings, laces or ornamental edgings to formed boxes]

WARNING

Groups B31B 50/811-B31B 50/8144 are incomplete pending reclassification of documents from group B31B 50/74. All groups listed in this Warning should be considered in order to perform a complete search.

50/812 . . . . [Applying tabs, patches, strips or strings on blanks or webs]
50/8121 . . . . [Applying tabs on corners of box blanks]
50/8122 . . . . [Applying patches]
50/8123 . . . . . [the blanks remaining stationary during application of the patches]
50/8124 . . . . {the patches being taken out of a magazine}
50/8125 . . . . {Applying strips or strings, e.g. tear strips or strings}
50/8126 . . . . {parallel to the direction of movement of the webs or the blanks}
50/8127 . . . . {perpendicular to the direction of movement of the webs or the blanks}
50/8128 . . . . {the webs or blanks remaining stationary during application of the strips or strings}
50/8129 . . . . {the webs or blanks moving during application of the strips or strings}
50/813 . . . . {obliquely to the direction of movement of the webs or blanks or in an irregular path}
50/814 . . . . {Applying closure elements to blanks, webs or boxes}
50/8142 . . . . {Applying button-and-string or washer like closure elements}
50/8144 . . . . {Applying hook-and-loop-type fasteners}
50/82 . . . . Forming or attaching windows

**WARNING**

Group B31B 50/82 is incomplete pending reclassification of documents from B31B 50/74.

Group B31B 50/82 is also impacted by reclassification into group B31B 50/83.

All groups listed in this Warning should be considered in order to perform a complete search.

50/83 . . . . Cutting window openings

**WARNING**

Group B31B 50/83 is incomplete pending reclassification of documents from groups B31B 50/74 and B31B 50/82.

All groups listed in this Warning should be considered in order to perform a complete search.

50/84 . . . . Forming or attaching means for filling or dispensing contents, e.g. valves or spouts

**WARNING**

Group B31B 50/84 is incomplete pending reclassification of documents from groups B31B 50/74 and B31B 50/81.

Group B31B 50/84 is also impacted by reclassification into groups B31B 50/85.

All groups listed in this Warning should be considered in order to perform a complete search.

50/85 . . . . Applying patches or flexible valve inserts, e.g. applying film-like valves

**WARNING**

Group B31B 50/85 is incomplete pending reclassification of documents from groups B31B 50/74, B31B 50/81 and B31B 50/84.

All groups listed in this Warning should be considered in order to perform a complete search.

50/86 . . . . Forming integral handles; Attaching separate handles

**WARNING**

Groups B31B 50/86 - B31B 50/98 are incomplete pending reclassification of documents from group B31B 50/74.

All groups listed in this Warning should be considered in order to perform a complete search.

50/87 . . . . {Fitting separate handles on boxes, e.g. on drinking cups}
50/88 . . Printing; Embossing
50/92 . . Delivering
50/94 . . . singly or in succession
50/96 . . . in an overlapping arrangement
50/98 . . . in stacks or bundles
50/99 . . using hand tools

**WARNING**

Group B31B 50/99 is incomplete pending reclassification of documents from group B31B 2247/00.

Group B31B 50/99 is also impacted by reclassification into group B31B 70/99.

All groups listed in this warning should be considered in order to perform a complete search.

70/00 Making flexible containers, e.g. envelopes or bags

**NOTES**

1. Processes or apparatus for making both flexible containers and rigid or semi-rigid containers are classified in group B31B 50/00.
2. In this group, it is desirable to add the indexing codes of groups B31B 2150/00 - B31B 2170/00.

70/001 . . {Shaping, other than by folding, sheet material under pressure}
70/002 . . {using punches or dies}
70/003 . . {Opening or distending bags}
70/004 . . {Closing bags}
70/005 . . {involving a particular layout of the machinery or relative arrangement of its subunits}
70/006 . . {Controlling; Regulating; Measuring; Safety measures}
70/008 . . {Stiffening or reinforcing (B31B 70/876 takes precedence)}

**WARNING**

Group B31B 70/008 is impacted by reclassification into group B31B 70/876.

Groups B31B 70/008 and B31B 70/876 should be considered in order to perform a complete search.

70/02 . . Feeding or positioning sheets, blanks or webs
70/022 . . {Holders for feeding or positioning sheets or webs}
70/024 . . {Rotating holders, e.g. star wheels, drums}
70/04 . . Feeding sheets or blanks
70/10 . . Feeding or positioning webs
70/14 . . . Cutting, e.g. perforating, punching, slitting or trimming (cutting window openings B31B 70/83)

**WARNING**

Group B31B 70/14 is impacted by reclassification into group B31B 70/83.

Groups B31B 70/14 and B31B 70/83 should be considered in order to perform a complete search.

70/142 . . . [using presses or dies]
70/144 . . . [using tools mounted on belts or chains]
70/146 . . . [using tools mounted on a drum]
70/148 . . . [Cutting-out portions from the sides of webs or sheets]
70/16 . . . Cutting webs
70/18 . . . longitudinally
70/20 . . . Cutting sheets or blanks
70/25 . . . [Surface scoring]
70/252 . . . [using presses or dies]
70/254 . . . [using tools mounted on belts or chains]
70/256 . . . [using tools mounted on a drum]
70/26 . . . Folding sheets, blanks or webs
70/261 . . . [involving transversely folding, i.e. along a line perpendicular to the direction of movement]
70/262 . . . [involving longitudinally folding, i.e. along a line parallel to the direction of movement]
70/266 . . . [involving gusset-forming]
70/28 . . . [around mandrels]
70/30 . . . [Moving mandrels]
70/36 . . . by continuously feeding them to stationary members, e.g. plates, ploughs or cores
70/44 . . . [by plungers moving through folding dies]
70/52 . . . by reciprocating or oscillating members other than plungers and dies, e.g. by fingers
70/56 . . . [by rotary members co-operating with blades]
70/58 . . . [by moving belts or chains]
70/60 . . . Uniting opposed surfaces or edges; Taping

**WARNING**

Group B31B 70/60 is impacted by reclassification into groups B31B 70/61 - B31B 70/68.

All groups listed in this warning should be considered in order to perform a complete search.

70/61 . . . [by applying or securing strips or tape]

**WARNING**

Groups B31B 70/61- B31B 70/68 are incomplete pending reclassification of documents from group B31B 70/60.

All groups listed in this warning should be considered in order to perform a complete search.

70/62 . . . by adhesives
70/626 . . . [Arrangements for permitting the glue to set]
70/628 . . . [Applying glue on moving webs to form tubular webs]
70/64 . . . by applying heat or pressure (to unite areas where adhesives are applied B31B 70/62)
70/642 . . . [using sealing jaws or sealing dies]
70/643 . . . . . . . . . . [on piled sheets, e.g. sealing bags arranged in a pile]
70/644 . . . . . . . . . . [Making seals parallel to the direction of movement, i.e. longitudinal sealing]
70/645 . . . . . . . . . . [Making seals transversally to the direction of movement]
70/648 . . . . . . . . . . [using tools mounted on belts or chains]
70/649 . . . . . . . . . . [using tools mounted on a drum]
70/66 . . . . . . . . . . by high-frequency electric heating
70/68 . . . . . . . . . . by stitching, stapling or riveting
70/74 . . . . . . . . . . Auxiliary operations

**WARNING**

Group B31B 70/74 is impacted by reclassification into groups B31B 70/76 - B31B 70/988.

All groups listed in this warning should be considered in order to perform a complete search.

70/76 . . . . . . . . . . [Moistening; Drying; Cooling; Heating]

**WARNING**

Group B31B 70/76 is incomplete pending reclassification of documents from group B31B 70/74.

Groups B31B 70/74 and B31B 70/76 should be considered in order to perform a complete search.

70/79 . . . . . . . . . . [Coating; Impregnating; Waterproofing; Decoating]

**WARNING**

Group B31B 70/79 is incomplete pending reclassification of documents from group B31B 70/74.

Groups B31B 70/74 and B31B 70/79 should be considered in order to perform a complete search.

70/81 . . . . . . . . . . Forming or attaching accessories, e.g. opening devices, closures or tear strings

**WARNING**

Groups B31B 70/81, B31B 70/8137 are incomplete pending reclassification of documents from group B31B 70/74.

All groups listed in this warning should be considered in order to perform a complete search.

70/812 . . . . . . . . . . [Applying patches, strips or strings on sheets or webs]
70/8122 . . . . . . . . . . [Applying patches]
70/8123 . . . . . . . . . . [Applying strips]
70/813 . . . . . . . . . . [Applying closures]
70/8131 . . . . . . . . . . [Making bags having interengaging closure elements]
70/8132 . . . . . . . . . . [Applying the closure elements in the machine direction]
70/8133 . . . . . . . . . . [Applying the closure elements in the cross direction]
70/8134 . . . . . . . . . . [Applying strings; Making string-closed bags]

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70/8135 . . . . (the strings being applied in the machine direction)
70/8136 . . . . (the strings being applied in the cross direction)
70/8137 . . . . . (the ends of the strings being attached to the side edges of the bags)
70/82 . . . Forming or attaching windows

**WARNING**

Group B31B 70/82 is incomplete pending reclassification of documents from group B31B 70/74.
Group B31B 70/82 is also impacted by reclassification into groups B31B 70/822, B31B 70/826, and B31B 70/83.
All groups listed in this warning should be considered in order to perform a complete search.

70/822 . . . . {by making paper transparent or translucent; by applying transparent melt}

**WARNING**

Groups B31B 70/822, B31B 70/826 are incomplete pending reclassification of documents from group B31B 70/74 and B31B 70/82.
All groups listed in this warning should be considered in order to perform a complete search.

70/826 . . . . [involving applying window patches]
70/83 . . . . . Cutting window openings

**WARNING**

Group B31B 70/83 is incomplete pending reclassification of documents from groups B31B 70/14, B31B 70/74 and B31B 70/82.
All groups listed in this warning should be considered in order to perform a complete search.

70/84 . . . . . Forming or attaching means for filling or dispensing contents, e.g. valves or spouts

**WARNING**

Group B31B 70/84 is incomplete pending reclassification of documents from group B31B 70/74.
Group B31B 70/84 is also impacted by reclassification into groups B31B 70/844, B31B 70/859.
All groups listed in this warning should be considered in order to perform a complete search.

70/844 . . . . {Applying rigid valves, spouts, or filling tubes}

**WARNING**

Groups B31B 70/844 - B31B 70/859 are incomplete pending reclassification of documents from groups B31B 70/74 and B31B 70/84.
All groups listed in this warning should be considered in order to perform a complete search.

70/85 . . . . Applying patches or flexible valve inserts, e.g. applying film-like valves
70/853 . . . . . {Applying valve inserts on tubular webs, e.g. from the inside}
70/855 . . . . . Forming valves integral with the containers
70/857 . . . . . {by deforming the bag, e.g. stretching}
70/859 . . . . . {involving turning the bags inside out}
70/86 . . . . . Forming integral handles or mounting separate handles

**WARNING**

Groups B31B 70/86 - B31B 70/859 are incomplete pending reclassification of documents from group B31B 70/74.
All groups listed in this warning should be considered in order to perform a complete search.

70/864 . . . . {Mounting separate handles on bags, sheets or webs}
70/866 . . . . . {Applying handles on a moving web followed by longitudinal folding}
70/868 . . . . . {Applying handles on a moving web followed by transverse folding}
70/87 . . . . . {Applying handles on one side of a moving longitudinally folded web, e.g. after cutting a tubular web longitudinally: Applying handles on both sides of a moving web and folding this web longitudinally afterwards}
70/872 . . . . . {Forming integral handles on bags}
70/874 . . . . . {involving punching or cutting}
70/876 . . . . . {involving application of reinforcement strips or patches; involving reinforcements obtained by folding}

**WARNING**

Group B31B 70/876 is incomplete pending reclassification of documents from groups B31B 70/008 and B31B 70/74.
All groups listed in this warning should be considered in order to perform a complete search.

70/88 . . Printing; Embossing

**WARNING**

Groups B31B 70/88 - B31B 70/988 are incomplete pending reclassification of documents from group B31B 70/74.
All groups listed in this warning should be considered in order to perform a complete search.

70/92 . . Delivering
singly or in succession

[involving folding of the bags]

[Stacking bags on wicket pins]

[Stacking bags by means of a rotary stacking drum]

(Assembling or block-forming of bags; Loading bags on a mandrel)

Group B31B 70/99 is incomplete pending reclassification of documents from groups B31B 50/99 and B31B 2247/00.

Groups B31B 50/99, B31B 2247/00 and B31B 70/99 should be considered in order to perform a complete search.

2100/00 Rigid or semi-rigid containers made by folding single-piece sheets, blanks or webs

2105/00 Rigid or semi-rigid containers made by assembling separate sheets, blanks or webs

Group B31B 70/99 is incomplete pending reclassification of documents from groups B31B 50/99 and B31B 2247/00.

Groups B31B 50/99, B31B 2247/00 and B31B 70/99 should be considered in order to perform a complete search.

2105/001 [made from laminated webs, e.g. including laminating the webs]

2105/002 [Making boxes characterised by the shape of the blanks from which they are formed]

2105/0022 [Making boxes from tubular webs or blanks, e.g. with separate bottoms, including tube or bottom forming operations]

2105/0024 [Making boxes having all side walls attached to the bottom]

2105/0025 [Making boxes by uniting two U-shaped blanks]

2105/0027 [Making boxes from blanks consisting of side wall panels integral with a bottom panel and additional side wall panels]

2110/00 Shape of rigid or semi-rigid containers

Group B31B 2110/00 is impacted by reclassification into groups B31B 2110/10 - B31B 2110/40.

All groups mentioned should be considered in order to perform a complete search.

2110/10 having a cross section of varying size or shape, e.g. conical or pyramidal

2110/20 having a curved cross section, e.g. circular

2110/30 having a polygonal cross section

2110/35 rectangular, e.g. square

2110/40 without sidewalls

2120/00 Construction of rigid or semi-rigid containers

Group B31B 2120/00 is impacted by reclassification into groups B31B 2120/04 - B31B 2120/70.

All groups mentioned should be considered in order to perform a complete search.

2120/002 [having contracted or rolled necks, having shoulders]

2120/004 [the bottom of which includes a rim projecting at the edges]
## Indexing scheme associated with group B31B 70/00, relating to making of flexible containers

### Flexible containers made from sheets or blanks, e.g. from flattened tubes

<table>
<thead>
<tr>
<th>Indexing scheme</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2150/00</td>
<td>Flexible containers made from sheets or blanks, e.g. from flattened tubes</td>
</tr>
</tbody>
</table>

#### WARNING

- Group B31B 2150/00 is impacted by reclassification into groups B31B 2150/001 – B31B 2150/003, B31B 2170/00 and B31B 2170/30. All groups mentioned should be considered in order to perform a complete search.

- Group B31B 2155/00 is impacted by reclassification into groups B31B 2155/001 – B31B 2155/003, B31B 2170/00 and B31B 2170/30. All groups mentioned should be considered in order to perform a complete search.

- Group B31B 2160/00 is incomplete pending reclassification of documents from group B31B 2241/008. Group B31B 2160/00 is also impacted by reclassification into groups B31B 2160/10 – B31B 2160/30. All groups mentioned should be considered in order to perform a complete search.

- Group B31B 2170/30 is also impacted by reclassification into groups B31B 2170/00 and B31B 2170/30. All groups mentioned should be considered in order to perform a complete search.

### Flexible containers made from webs

<table>
<thead>
<tr>
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<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2155/00</td>
<td>Flexible containers made from webs</td>
</tr>
</tbody>
</table>

#### WARNING

- Group B31B 2155/00 is impacted by reclassification into groups B31B 2155/001 – B31B 2155/003, B31B 2170/00 and B31B 2170/30. All groups mentioned should be considered in order to perform a complete search.

- Group B31B 2160/00 is incomplete pending reclassification of documents from group B31B 2241/008. Group B31B 2160/00 is also impacted by reclassification into groups B31B 2160/10 – B31B 2160/30. All groups mentioned should be considered in order to perform a complete search.

### Shape of flexible containers

<table>
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<tr>
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<tbody>
<tr>
<td>2160/00</td>
<td>Shape of flexible containers</td>
</tr>
</tbody>
</table>

#### WARNING

- Group B31B 2160/00 is incomplete pending reclassification of documents from groups B31B 2241/00 – B31B 2241/008. Group B31B 2160/00 is also impacted by reclassification into groups B31B 2160/10 – B31B 2160/30. All groups mentioned should be considered in order to perform a complete search.

- Group B31B 2170/30 is also impacted by reclassification into groups B31B 2170/00 and B31B 2170/30. All groups mentioned should be considered in order to perform a complete search.

### Notes

- Provided with covers, e.g. lids
- Provided with two or more compartments
- Formed by partitions or like inserts not integral with walls
- Collapsible; temporarily collapsed during manufacturing
- Collapsible into a flat condition
- Lined or internally reinforced
- By applying a liner to already made boxes, e.g. opening or distending of the liner or the box
- Using vacuum or pressure means to force the liner against the wall
- The lining material being a plunger, a web, a sheet or a bag to be forced into the box, e.g. by using heat
- Involving forming of the liner before inserting
- By folding a sheet or blank around an inner tubular liner
- Covered or externally reinforced
- By applying wrapping material only on the side wall part of a box
- Having integral corner posts or reinforcements
- Of drawer-and-shell type
- Having corrugated or pleated walls
- With square or cross bottom
- Having their openings facing in the direction of movement
- Having their openings facing transversally to the direction of movement
- By joining superimposed sheets, e.g. with separate bottom webs
- Starting from tubular webs
- Rectangular and flat, i.e. without structural provision for thickness of contents
- Obtained from essentially rectangular sheets
- Obtained from rhombus shaped sheets
Indexing scheme associated with group B31B70/00, relating to making of flexible containers

2160/106 . . [obtained from sheets cut from larger sheets or webs before finishing the bag forming operations]

2160/20 . with structural provision for thickness of contents

**WARNING**
Groups B31B 2160/20 and B31B 2160/30 are incomplete pending reclassification of documents from B31B 2160/00.
All groups listed in this Warning should be considered in order to perform a complete search.

2160/30 . pointed or tapered

2170/00 Construction of flexible containers

**WARNING**
Group B31B 2170/00 is incomplete pending reclassification of documents from groups B31B 2150/00 and B31B 2155/00.
Group B31B 2170/00 is also impacted by reclassification into groups B31B 2170/10 – B31B 2170/30.
All groups listed in this warning should be considered in order to perform a complete search.

2170/10 . interconnected

**WARNING**
Groups B31B 2170/10 – B31B 2170/204 are incomplete pending reclassification of documents from group B31B 2170/00.
Groups B31B 2170/00 - B31B 2170/204 should be considered in order to perform a complete search.

2170/20 . having multi-layered walls, e.g. laminated or lined

2170/202 . . [having liners applied in already made bags, e.g. including turning the bags inside out]

2170/204 . . [involving folding a web about an already tubular web]

2170/30 . having corrugated or pleated walls

**WARNING**
Groups B31B 2170/30 is incomplete pending reclassification of documents from groups B31B 2150/00, B31B 2155/00 and B31B 2170/00.
All groups listed in this warning should be considered in order to perform a complete search.

2241/000 Making bags or boxes intended for a specific use

**WARNING**
Groups B31B 2241/000 – B31B 2241/008 are impacted by reclassification into group B31B 2160/00.
Groups B31B 2241/000 – B31B 2241/008 and B31B 2160/00 should be considered in order to perform a complete search.

2241/001 . Making bottle carriers
2241/002 . Making egg cartons
2241/003 . Making cigarette boxes

2247/00 Manual operations for making bags or boxes

**WARNING**
Group B31B 2247/00 is impacted by reclassification into groups B31B 50/99 and B31B 70/99.
Groups B31B 2247/00, B31B 50/99 and B31B 70/99 should be considered in order to perform a complete search.

2241/005 . Making paper bottles
2241/006 . Making envelopes holding bar-shaped objects, e.g. cigar holders
2241/007 . Making recording disc envelopes
2241/008 . Making suction cleaner bags