### SECTION B — PERFORMING OPERATIONS; TRANSPORTING

### **B31** MAKING PAPER ARTICLES; WORKING PAPER

#### Note(s)

- This class <u>covers</u> subject matter restricted to adaptations or associations of handling sheets, webs, or blanks peculiar to paper-working, e.g. bag or box making, machinery.
- 2. This class does not cover:
  - making articles directly from paper pulp, which is covered by D21J;
  - handling sheets, webs, or blanks of wider applicability, irrespective of whether described or claimed only for paper-working machinery, which is regarded as being of a more comprehensive nature and is covered by B65H.
- 3. In this class, the following term is used with the meaning indicated:
  - · "paper" covers material worked in a manner analogous to paper, e.g. plastics sheet materials, laminated materials or metal foils.

**B31B** MAKING BOXES, CARTONS, ENVELOPES, OR BAGS (incising, scoring, in general B26D 3/08; combined making and filling B65B)

### Note(s)

- 1. In this subclass, envelopes or bags are regarded as being essentially flexible containers, the final shape of which is determined by their contents
- 2. In this subclass, the following expression is used with the meaning indicated:
  - "boxes or cartons" includes bags formed similarly to cartons, trays with upstanding side-walls, barrels, tubes and cups, other than articles formed by winding.

### **Subclass index**

MAKING IN GENERAL	1/00, 47/00, 49/00
MAKING BOXES OR CARTONS	
Characterised by the method of making	
by folding a single piece	3/00, 5/00
by assembling pieces	13/00, 17/00
by other shaping under pressure Characterised by the kind of articles	
lined or reinforced articles	7/00, 9/00, 15/00
other specified articles	11/00, 13/00, 45/00
MAKING ENVELOPES OR BAGS	
Characterised by the method of making	
from sheets	21/00, 31/00-35/00
from webs	
by other shaping under pressure	43/00
Characterised by the kind of articles	
flat rectangular articles	
articles with bases provided for thickness	
other specified articles	25/00, 27/00, 39/00, 41/00, 45/00

## 1/00 Box, carton, envelope or bag making machinery characterised by performing specific operations (machinery for performing operations of general application, see the appropriate subclasses)

1/02 • Feeding or positioning sheets, blanks, or webs

1/04 • • Feeding sheets or blanks

1/06 • • • from stacks

1/08 • • • during envelope- or bag-making operations

1/10 • • Feeding or positioning webs

1/12 • • by air pressure or suction

- 1/14 Cutting, e.g. perforating, punching, slitting, trimming
- 1/16 • Cutting webs to form sheets or blanks
- 1/18 • Slitting webs longitudinally
- 1/20 • Cutting sheets or blanks
- 1/22 • Notching; Trimming edges of flaps
- 1/24 • Making window openings
- 1/25 Surface scoring (cutting through material B31B 1/14) [2]
- 1/26 Folding sheets, blanks, or webs

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1/28	<ul> <li>around mandrels, including bottom-forming operations</li> </ul>	3/46	• • and interconnecting side walls during such movement
1/30	• • the mandrels moving	3/48	• • • by folding or tucking in locking flaps
1/32	• • • in circular paths	3/50	• • • • by interengaging tongues and slots
1/34	• • • about their own axes	3/52	<ul> <li>by reciprocating or oscillating members, e.g.</li> </ul>
1/36	by continuously feeding same to stationary	3, 3 <b>-</b>	fingers other than plungers and dies
1,00	members, e.g. plates, ploughs, cores	3/60	<ul> <li>and having means for uniting opposed surfaces or</li> </ul>
1/38	• • the members being forming-tubes		edges, or for taping
1/40	• • • acting internally	3/64	<ul> <li>by applying heat or pressure</li> </ul>
1/42	• • • acting externally	3/72	<ul> <li>by applying and securing strips or sheets</li> </ul>
1/44	<ul> <li>by plungers moving through folding dies</li> </ul>	3/74	<ul> <li>and having means for effecting auxiliary operations</li> </ul>
1/46	<ul> <li>• and interconnecting side walls during such</li> </ul>		0 0 1
1740	movement	5/00	Machinery characterised by making boxes or cartons
1/48	• • • by folding or tucking in locking flaps		by folding single-piece sheets which can be set-up
1/50	• • • by interengaging tongues and slots		from a collapsed condition, including setting-up and
1/52	<ul> <li>by reciprocating or oscillating members, e.g.</li> </ul>	E (00	recollapsing to break creases
1,02	fingers other than plungers and dies	5/02	and having means for feeding or positioning sheets
1/54	• • operating on moving material	5/14	and having means for cutting, e.g. perforating,      punching elitting trimming.
1/56	<ul> <li>by rotary members co-operating with blades</li> </ul>	E /DC	punching, slitting, trimming
1/58	<ul> <li>by moving endless belts</li> </ul>	5/26	• and having means for folding sheets, blanks, or webs
1/60	<ul> <li>Uniting opposed surfaces or edges; Taping</li> </ul>	5/36	by continuously feeding same to stationary  members of plates playable some
1/62	<ul> <li>by adhesives</li> </ul>	F /CO	members, e.g. plates, ploughs, cores
1/64	<ul><li>by applying heat or pressure</li></ul>	5/60	<ul> <li>and having means for uniting opposed surfaces or edges, or for taping</li> </ul>
1/66	<ul> <li>high-frequency electric heating</li> </ul>	5/74	<ul> <li>and having means for effecting auxiliary operations</li> </ul>
1/68	by stitching, stapling, or riveting	5/76	<ul> <li>Opening and distending flattened articles</li> </ul>
1/70	• • by corner stapling		
1/70		5/78	• • • mechanically
1/74	by applying and securing strips or sheets     Available appropriate	5/80	• • • pneumatically
	Auxiliary operations     Opening and distanding flattened articles	7/00	Machinery characterised by making lined or
1/76	Opening and distending flattened articles		internally-reinforced boxes or cartons (B31B 11/00
1/78	• • mechanically		takes precedence)
1/80	• • pneumatically	7/02	<ul> <li>and having means for feeding or positioning sheets,</li> </ul>
1/82	Attaching windows		blanks, or webs
1/84	<ul> <li>Forming valves or applying valve inserts (connection of valves to inflatable elastic bodies</li> </ul>	7/14	<ul> <li>and having means for cutting, e.g. perforating,</li> </ul>
	B60C 29/00)		punching, slitting, trimming
1/86	Forming integral handles or mounting separate	7/26	<ul> <li>and having means for folding sheets, blanks, or webs</li> </ul>
1700	handles (making separate handles by multi-step	7/28	<ul> <li>around mandrels, including bottom-forming</li> </ul>
	processes B31D 1/06)		operations
1/88	Printing or embossing	7/30	<ul> <li>the mandrels moving</li> </ul>
1/90	<ul> <li>Attaching accessories not otherwise provided for,</li> </ul>	7/32	• • • in circular paths
-, -, -	e.g. opening or closure devices, tear strings	7/44	<ul> <li>by plungers moving through folding dies</li> </ul>
1/92	• • Delivering	7/46	<ul> <li>and interconnecting side walls during such</li> </ul>
1/94	• • singly or in succession		movement
1/96	• • • in overlapping arrangement	7/60	<ul> <li>and having means for uniting opposed surfaces or</li> </ul>
1/98	• • in stacks or bundles		edges, or for taping
1,00	in stacilo di banares	7/74	<ul> <li>and having means for effecting auxiliary operations</li> </ul>
		9/00	Machinery characterised by making boxes or cartons
<u>Machine</u>	ery for making boxes or cartons	3700	having shouldered walls
2/00	Madden all and to the mall and a second	9/02	<ul> <li>and having means for feeding or positioning sheets,</li> </ul>
3/00	Machinery characterised by making boxes or cartons	3702	blanks, or webs
	by folding single-piece sheets, blanks, or webs (B31B 5/00 takes precedence)	9/14	<ul> <li>and having means for cutting, e.g. perforating,</li> </ul>
3/02	<ul> <li>and having means for feeding or positioning sheets,</li> </ul>		punching, slitting, trimming
3/02	blanks, or webs	9/26	<ul> <li>and having means for folding sheets, blanks, or webs</li> </ul>
3/14	<ul> <li>and having means for cutting, e.g. perforating,</li> </ul>	9/60	<ul> <li>and having means for uniting opposed surfaces or</li> </ul>
57 14	punching, slitting, trimming		edges, or for taping
3/26	<ul> <li>and having means for folding sheets, blanks, or webs</li> </ul>	9/74	<ul> <li>and having means for effecting auxiliary operations</li> </ul>
3/28	around mandrels, including bottom-forming		
S, <b>20</b>	operations	11/00	Machinery characterised by making boxes or cartons
3/30	• • the mandrels moving		having partitions or like inserts not integral with
3/32	• • • in circular paths		walls (making partitions, inserts, or reinforcements for
3/34	• • • about their own axes	44.00	boxes or cartons B31D)
3/34	by continuously feeding same to stationary	11/02	<ul> <li>and having means for feeding or positioning sheets,</li> </ul>
5,50	members, e.g. plates, ploughs, cores	11/14	blanks, or webs
3/44	<ul> <li>by plungers moving through folding dies</li> </ul>	11/14	and having means for cutting, e.g. perforating,     punching slitting trimming.
5, 17	of branders moving anough rolaing ales		punching, slitting, trimming

11/26	<ul> <li>and having means for folding sheets, blanks, or webs</li> </ul>	19/10	<ul> <li>Feeding or positioning webs</li> </ul>
11/60	<ul> <li>and having means for uniting opposed surfaces or edges, or for taping</li> </ul>	19/14	<ul> <li>and having means for cutting, e.g. perforating, punching, slitting, trimming</li> </ul>
11/74	<ul> <li>and having means for effecting auxiliary operations</li> </ul>	19/16	<ul> <li>Cutting webs to form sheets or blanks</li> </ul>
		19/18	<ul> <li>Slitting webs longitudinally</li> </ul>
13/00	Machinery characterised by assembling drawer-and-	19/20	<ul> <li>Cutting sheets or blanks</li> </ul>
10 /00	shell boxes or cartons	19/26	<ul> <li>and having means for folding sheets, blanks, or webs</li> </ul>
13/02	<ul> <li>and having means for feeding or positioning sheets, blanks, or webs</li> </ul>	19/36	<ul> <li>by continuously feeding same to stationary members, e.g. plates, ploughs, cores</li> </ul>
13/14	<ul> <li>and having means for cutting, e.g. perforating, punching, slitting, trimming</li> </ul>	19/52	by reciprocating or oscillating members, e.g. fingers other than plungers and dies
13/26	<ul> <li>and having means for folding sheets, blanks, or webs</li> </ul>	19/60	<ul> <li>and having means for uniting opposed surfaces or</li> </ul>
13/28	<ul> <li>around mandrels, including bottom-forming operations</li> </ul>		edges, or for taping
13/30	• • the mandrels moving	19/62	• • by adhesives
13/32	• • • in circular paths	19/64	by applying heat or pressure     bigh from your problem in beating.
13/34	• • • about their own axes	19/66	• • high-frequency electric heating
13/60	<ul> <li>and having means for uniting opposed surfaces or</li> </ul>	19/68	by stitching, stapling, or riveting
	edges, or for taping	19/74	and having means for effecting auxiliary operations     Attaching windows
13/74	<ul> <li>and having means for effecting auxiliary operations</li> </ul>	19/82	Attaching windows     Forming values or applying value inserts
15/00	Machinery characterised by making covered or externally-reinforced boxes or cartons	19/84	<ul> <li>Forming valves or applying valve inserts (connection of valves to inflatable elastic bodies B60C 29/00)</li> </ul>
15/02	and having means for feeding or positioning sheets, blanks, or webs	19/86	<ul> <li>Forming integral handles or mounting separate handles (making separate handles by multi-step</li> </ul>
15/14	<ul> <li>and having means for cutting, e.g. perforating,</li> </ul>	19/88	processes B31D 1/06)  • Printing or embossing
15/26	<ul><li>punching, slitting, trimming</li><li>and having means for folding sheets, blanks, or webs</li></ul>	19/90	<ul> <li>Attaching accessories not otherwise provided for,</li> </ul>
15/20	<ul> <li>and having means for tolding sheets, blanks, of webs</li> <li>and having means for uniting opposed surfaces or</li> </ul>		e.g. opening or closure devices, tear strings
13/00	edges, or for taping	19/92	• • Delivering
15/74	<ul> <li>and having means for effecting auxiliary operations</li> </ul>	19/94	• • singly or in succession
10//	and naving means for effecting dammary operations	19/96	• • • in overlapping arrangement
17/00	Machinery characterised by making other boxes or cartons by assembling several separate sheets,	19/98	• • • in stacks or bundles
	blanks, or webs	21/00	Machinery characterised by making rectangular
17/02	<ul> <li>and having means for feeding or positioning sheets, blanks, or webs</li> </ul>		envelopes or bags of flat form, i.e. without structural provision at the base for thickness of contents, from
17/14	<ul> <li>and having means for cutting, e.g. perforating, punching, slitting, trimming</li> </ul>	21/02	<ul><li>sheets or blanks, e.g. from flattened tubes</li><li>and having means for feeding or positioning sheets or</li></ul>
17/26	<ul> <li>and having means for folding sheets, blanks, or webs</li> </ul>		blanks
17/28	<ul> <li>around mandrels, including bottom-forming operations</li> </ul>	21/14	<ul> <li>and having means for cutting, e.g. perforating, punching, slitting, trimming</li> </ul>
17/30	• • the mandrels moving	21/26	<ul> <li>and having means for folding sheets or blanks</li> </ul>
17/32	• • • in circular paths	21/60	<ul> <li>and having means for uniting opposed surfaces or</li> </ul>
17/44	by plungers moving through folding dies		edges, or for taping
17/46	• • and interconnecting side walls during such movement	21/74	and having means for effecting auxiliary operations
17/52	by reciprocating or oscillating members, e.g. fingers other than plungers and dies	23/00	Machinery characterised by making rectangular envelopes or bags of flat form, i.e. without structural
17/60	<ul> <li>and having means for uniting opposed surfaces or</li> </ul>		provision at the base for thickness of contents, from webs, e.g. from flattened tubular webs (machinery
17/74	<ul><li>edges, or for taping</li><li>and having means for effecting auxiliary operations</li></ul>		characterised by cutting sheets or blanks from webs and working them to form such envelopes or bags B31B 21/00)
		23/02	<ul> <li>and having means for feeding or positioning webs</li> </ul>
Machine	ry for making envelopes or bags	23/14	<ul> <li>and having means for cutting, e.g. perforating,</li> </ul>
	Note(s)		punching, slitting, trimming
	Machinery for making boxes or cartons as well as	23/26	<ul> <li>and having means for folding webs</li> </ul>
	envelopes or bags is classified in groups B31B 3/00-B31B 17/00.	23/60	<ul> <li>and having means for uniting opposed surfaces or edges, or for taping</li> </ul>
	2012 1//00.	23/74	<ul> <li>and having means for effecting auxiliary operations</li> </ul>

# 19/00 Machinery characterised by making rectangular envelopes or bags of flat form, i.e. without structural provision at the base for thickness of contents (B31B 21/00, B31B 23/00 take precedence)

19/02  $\phantom{0}$  • and having means for feeding or positioning sheets, blanks, or webs

### 25/00 Machinery characterised by making pointed or tapered envelopes or bags

punching, slitting, trimming

and having means for feeding or positioning sheets, blanks, or webs
 and having means for cutting, e.g. perforating,

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25/26	and having means for folding sheets, blanks, or webs	35/02	and having means for feeding or positioning sheets or
25/60	<ul> <li>and having means for rolding sheets, blanks, of webs</li> <li>and having means for uniting opposed surfaces or</li> </ul>	33/02	blanks
25/74	edges, or for taping  and having means for effecting auxiliary operations	35/14	and having means for cutting, e.g. perforating, punching, slitting, trimming
23//4	and naving means for effecting auxiliary operations	35/26	<ul> <li>and having means for folding sheets or blanks</li> </ul>
27/00	Machinery characterised by making interconnected envelopes or bags	35/60	and having means for uniting opposed surfaces or edges, or for taping
27/02	<ul> <li>and having means for feeding or positioning sheets, blanks, or webs</li> </ul>	35/74	and having means for effecting auxiliary operations
27/14	<ul> <li>and having means for cutting, e.g. perforating, punching, slitting, trimming</li> </ul>	37/00	Machinery characterised by making envelopes or bags with structural provision at the base for
27/26	and having means for folding sheets, blanks, or webs		thickness of contents, from webs, e.g. from tubular
27/60	and having means for uniting opposed surfaces or edges, or for taping		webs (machinery characterised by cutting sheets or blanks from webs and working them to form such envelopes or bags B31B 31/00)
27/74	<ul> <li>and having means for effecting auxiliary operations</li> </ul>	37/02	<ul> <li>and having means for feeding or positioning webs</li> </ul>
29/00	Machinery characterised by making envelopes or	37/14	<ul> <li>and having means for cutting, e.g. perforating,</li> </ul>
	bags with structural provision at the base for		punching, slitting, trimming
	thickness or contents (B31B 31/00-B31B 37/00 take precedence)	37/26	and having means for folding webs
29/02	<ul> <li>and having means for feeding or positioning sheets,</li> </ul>	37/60	<ul> <li>and having means for uniting opposed surfaces or edges, or for taping</li> </ul>
29/14	<ul><li>blanks, or webs</li><li>and having means for cutting, e.g. perforating,</li></ul>	37/74	<ul> <li>and having means for effecting auxiliary operations</li> </ul>
23/14	punching, slitting, trimming	39/00	Machinery characterised by making lined envelopes
29/26	<ul> <li>and having means for folding sheets, blanks, or webs</li> </ul>		or bags
29/60	<ul> <li>and having means for uniting opposed surfaces or edges, or for taping</li> </ul>	39/02	<ul> <li>and having means for feed or positioning sheets, blanks, or webs</li> </ul>
29/74	<ul> <li>and having means for effecting auxiliary operations</li> </ul>	39/14	<ul> <li>and having means for cutting, e.g. perforating,</li> </ul>
29/84	<ul> <li>Forming valves or applying valve inserts</li> </ul>	20.426	punching, slitting, trimming
	(connection of valves to inflatable elastic bodies B60C 29/00)	39/26 39/60	<ul> <li>and having means for folding sheets, blanks or webs</li> <li>and having means for uniting opposed surfaces or edges, or for taping</li> </ul>
31/00	Machinery characterised by making envelopes or	39/74	<ul> <li>and having means for effecting auxiliary operations</li> </ul>
	bags with structural provision at the base for thickness of contents, from sheets or blanks, e.g. from flattened tubes (B31B 33/00, B31B 35/00 take	39/84	Forming valves or applying valve inserts (connection of valves to inflatable elastic bodies B60C 29/00)
21 /02	precedence)	44 /00	Made and the second sec
31/02	and having means for feeding or positioning sheets or blanks	41/00	Machinery characterised by making envelopes or bags of other specific form or construction
31/14	and having means for cutting, e.g. perforating, punching, slitting, trimming	41/02	<ul> <li>and having means for feeding or positioning sheets, blanks, or webs</li> </ul>
31/26 31/60	<ul><li> and having means for folding sheets or blanks</li><li> and having means for uniting opposed surfaces or</li></ul>	41/14	and having means for cutting, e.g. perforating,      punching clitting trimming.
31/00	edges, or for taping	41/26	<ul><li>punching, slitting, trimming</li><li>and having means for folding sheets, blanks or webs</li></ul>
31/74	<ul> <li>and having means for effecting auxiliary operations</li> </ul>	41/60	<ul> <li>and having means for uniting opposed surfaces or</li> </ul>
		,	edges, or for taping
33/00	Machinery characterised by making envelopes or bags with structural provision at the base for	41/74	and having means for effecting auxiliary operations
	thickness of contents, from sheets or blanks, e.g. from flattened tubes, the longitudinal axes of the		
	envelopes or bags being parallel to the direction in which the sheets or blanks are fed	43/00	Machinery characterised by making containers by
33/02	and having means for feeding or positioning sheets or blanks		shaping, otherwise than by folding, sheet material under pressure
33/14	<ul> <li>and having means for cutting, e.g. perforating, punching, slitting, trimming</li> </ul>	45/00	Machinery characterised by making containers having corrugated or pleated walls
33/26	<ul> <li>and having means for folding sheets or blanks</li> </ul>	47/00	Hand took for making anyelones have beyon as
33/60	<ul> <li>and having means for uniting opposed surfaces or edges, or for taping</li> </ul>	47/00	Hand tools for making envelopes, bags, boxes or cartons
33/74	and having means for effecting auxiliary operations	47/02	for making envelopes or bags without preshaped bottoms
35/00	Machinery characterised by making envelopes or bags with structural provision at the base for	47/04	<ul> <li>for making envelopes or bags with preshaped bottoms</li> </ul>
	thickness of contents, from sheets or blanks, e.g. from flattened tubes, the longitudinal axes of the envelopes or bags being perpendicular to the direction in which the sheets or blanks are fed	49/00	Machinery, accessories or processes not provided for in groups B31B 1/00-B31B 47/00 (forms or constructions of boxes, cartons, envelopes or bags B65D) [2]

### Note(s)

Processes dependent on the use of specific machinery provided for in groups B31B 1/00-B31B 45/00 are classified in those groups.

49/02 • for making boxes or cartons

this subclass [2009.01]

for making envelopes or bags

**B31C** MAKING WOUND ARTICLES, e.g. WOUND TUBES (characteristics relating to the working of plastics B29; shaping of plastics or substances in a plastic state B29C)

49/04

### Note(s)

In this subclass, the following term is used with the meaning indicated:

• "winding" means forming two or more complete convolutions.

### **Subclass index**

Windi Windi Windi MAKING Tubes Cones Other	WOUND ARTICLES CHARACTERISED BY THE METHON ng around mandrels	OF THE ART	5/00 9/00 FICLES PRODUCED 1/00, 3/00, 5/00 7/00 9/00, 99/00
1/00	Forming paper tubes or pipes by feeding at right	7/04	• • on two or more mandrels
	angles to the winding mandrel centre line	7/06	• • • and inserting into a cone end a bottom to form a
1/02	<ul> <li>Machines therefor having additional mandrels</li> </ul>		container
1/04	<ul> <li>and forming a tube end into a container bottom</li> </ul>	7/08	<ul> <li>Forming pointed cones</li> </ul>
1/06	<ul> <li>and inserting into a tube end a bottom to form a container</li> </ul>	7/10	• • on two or more mandrels
1/08	<ul> <li>Accessories of machines therefor not otherwise provided for</li> </ul>	9/00	Simultaneous forming of cylindrical and conical shapes by winding separate webs, e.g. forming bottles (winding blanks B31B)
3/00	Forming paper tubes or pipes by feeding obliquely to		
	the winding mandrel centre line	11/00	Paper-winding machinery combined with other
3/02	<ul> <li>and inserting into a tube end a bottom to form a</li> </ul>	11 (00	machinery
	container	11/02	for additionally shaping the articles
3/04	Seam processing	11/04	<ul> <li>for applying impregnating by coating-substances during the winding</li> </ul>
5/00	Forming paper tubes or pipes without mandrels	11/06	<ul> <li>for drying the wound and impregnated articles</li> </ul>
7/00	Forming conical paper articles by winding (winding	99/00	Subject matter not provided for in other groups of

**MAKING OTHER PAPER ARTICLES** (manufacture by dry processes of articles made from particles or fibres consisting of wood or other lignocellulosic or like organic material B27N; making layered products not composed wholly of paper or cardboard B32B; making cardboard or paper D21F, D21H, making articles from wood pulp D21J)

### Note(s)

1/06

7/02

blanks B31B)

· Forming truncated cones

the articles being handles

This subclass <u>covers</u> the making, otherwise than by winding, of articles other than boxes, cartons, envelopes, bags, and tubes from paper, other than from paper pulp.

<b>1/00</b> 1/02	<ul><li>Multiple-step processes for making flat articles</li><li>the articles being labels or tags (means or processes</li></ul>	3/00	Making articles of cellular structure, e.g. insulating board
	for attaching threads D05)	3/02	<ul> <li>honeycombed structures</li> </ul>
1/04	<ul> <li>the articles being napkins, handkerchiefs, towels, doilies, or the like</li> </ul>	3/04	cellular packaging articles, e.g. for bottles

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5/00 Multiple-step processes for making threedimensional articles (assembly of garlands A41G 1/00; making receptacles or containers B31B; making tubes B31B, B31C) 5/02 • including pressing

• including folding or pleating, e.g. Chinese lanterns

99/00 Subject matter not provided for in other groups of this subclass [2006.01]

**B31F MECHANICAL WORKING OR DEFORMATION OF PAPER OR CARDBOARD** (cutting, trimming, in general B26; incising, scoring, in general B26D 3/08; making layered products not composed wholly of paper or cardboard B32B; multi-ply material of paper or cardboard, its manufacture D21H)

1/00 Mechanical deformation of paper or cardboard without removing material including combined deformation and laminating (embossing combined with application of ink, type marking presses, selective embossing machines B41F, B41J, B41K, B41M; machines or apparatus for embossing decorations or marks B44B 5/00; artists hand tools for embossing B44B 11/04; producing decorative effects by processes for stamping ornamental designs on surfaces B44C 1/24; mechanical deformation during paper or board making, kinds of paper or board D21) [2]

1/07 • Embossing (corrugating B31F 1/20) [3]

 Creasing (corrugating B31F 1/20; zig-zag folding B65H 45/20) [2]

1/10 • • by rotary tools

1/12 • Crêping paper

1/14 • • by doctor blades arranged crosswise to the web

1/16 • • by elastic belts

1/18 • • by tools arranged in the direction of web feed

Corrugating; Corrugating combined with laminating to other paper or cardboard layers (corrugating veneer B27D) [2]

1/22 • • Making webs in which the channel of each corrugation is longitudinal with the web feed

 Making webs in which the channel of each corrugation is transverse to the web feed 1/26 • • • by interengaging toothed cylinders [2]

1/28 • • • combined with uniting the corrugated webs to flat webs

1/29 • • by making use of rods, e.g. co-operating with a toothed cylinder [2]

1/30 • • • Tools secured to endless chains

1/32 • • Corrugating already corrugated webs

 Moistening and heating webs to facilitate mechanical deformation and drying deformed webs

5/00 Attaching together paper or cardboard sheets, strips, or webs; Reinforcing edges of paper or cardboard (means for applying adhesive or glue B05C; stapling in box or like making B31B; attaching the replacement web to the expiring web during web-roll changing B65H 19/18; apparatus for splicing webs during handling B65H 21/00)

5/02 • by crimpling or slotting

5/04 • by exclusive use of adhesives

5/06 • by adhesive tape

5/08 • • for reinforcing edges

7/00 Processes for working paper not otherwise provided for

7/02 • Breaking the coating on paper