CPC  COOPERATIVE PATENT CLASSIFICATION

B  PERFORMING OPERATIONS; TRANSPORTING
(NOTES omitted)

PRINTING

B41  PRINTING; LINING MACHINES; TYPEWRITERS; STAMPS

B41L  APPARATUS OR DEVICES FOR MANIFOLDING, DUPLICATING, OR PRINTING FOR OFFICE OR OTHER COMMERCIAL PURPOSES; ADDRESSING MACHINES OR LIKE SERIES-PRINTING MACHINES (printing presses or machines for industrial purposes B41F; stamps, stamping or numbering devices B41K)

NOTES
1. This subclass does not cover constituent parts common to manifolding by means of pressure-sensitive layers or intermediaries, to apparatus or machines for duplicating or printing for office or other commercial purposes, or to addressing machines or like series-printing machines, which are covered by subclass B41F.
2. In this subclass, as indicated by the references, groups B41L 15/00 and B41L 17/00 are intended to cover letterpress and lithographic printing apparatus only in so far as it is specially adapted for office or other commercial purposes; the general constructions or features of apparatus of these types are classified in subclass B41F. Constructions or features determining classification in these groups are, for example: ease of operation by clerical staff, cleanliness of operation in non-industrial environments, the use of printing surfaces constructed for the production of a limited number of copies.
3. In this subclass, the following terms are used with the meanings indicated:
   • “manifolding” means the obtaining of several copies simultaneously by means of pressure-sensitive layers when making an original;
   • “duplicating” means the obtaining of successive copies from a master, e.g. a hectographic image;
   • “stencilling” involves the use of a printing surface which is perforated to form the image, the ink flowing through the perforations on the copy material.

WARNING
In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Manifolding by means of pressure-sensitive layers or intermediaries

<table>
<thead>
<tr>
<th>1/00</th>
<th>Devices for performing operations in connection with manifolding by means of pressure-sensitive layers or intermediaries, e.g. carbons; Accessories for manifolding purposes</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/02</td>
<td>. Devices for preparatory operations, e.g. for bringing together sheets or webs and interposed carbons; Devices combined with devices for printing, for coating with carbon, for folding</td>
</tr>
<tr>
<td>1/04</td>
<td>. Devices for performing operations subsequent to manifolding, e.g. for separating single sheets or webs from single form sets, continuous manifold assemblies from carbons</td>
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<tr>
<td>1/06</td>
<td>. on single form sets</td>
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<tr>
<td>1/08</td>
<td>. on continuous manifold assemblies</td>
</tr>
<tr>
<td>1/10</td>
<td>. . Separate folding or disposition of single webs</td>
</tr>
<tr>
<td>1/12</td>
<td>. . Severing webs to obtain single sheets or forms, e.g. by cutting, by bursting</td>
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<tr>
<td>1/14</td>
<td>. . Severing edge perforations from webs</td>
</tr>
<tr>
<td>1/16</td>
<td>. Carriers or supply devices for pressure-sensitive material, e.g. for carbon sheets; Carbon gloves</td>
</tr>
<tr>
<td>1/18</td>
<td>. for carbon webs; Continuous carbon supply mechanisms</td>
</tr>
<tr>
<td>1/20</td>
<td>. Manifolding assemblies, e.g. book-like assemblies {multi-copy labels G09F 3/0288}</td>
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<tr>
<td>1/22</td>
<td>. . made up of single sheets or forms</td>
</tr>
<tr>
<td>1/24</td>
<td>. . Pads or books</td>
</tr>
<tr>
<td>1/26</td>
<td>. . Continuous assemblies made up of webs</td>
</tr>
<tr>
<td>1/28</td>
<td>. . in rolled or wound form</td>
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<tr>
<td>1/30</td>
<td>. . folded longitudinally</td>
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<tr>
<td>1/32</td>
<td>. . folded transversely</td>
</tr>
<tr>
<td>1/321</td>
<td>. . . . [Stacks of sheets attached to a carrier strip or web]</td>
</tr>
<tr>
<td>1/323</td>
<td>. . . . [Uniting several webs, e.g. transversely]</td>
</tr>
<tr>
<td>1/325</td>
<td>. . . . [longitudinally]</td>
</tr>
<tr>
<td>1/326</td>
<td>. . . . [Severance lines; Perforations]</td>
</tr>
<tr>
<td>1/328</td>
<td>. . . . [Removing carbon sheets]</td>
</tr>
<tr>
<td>1/34</td>
<td>. . for making masters for hectographic duplicators</td>
</tr>
<tr>
<td>1/36</td>
<td>. . with pressure-sensitive layers or coating other than carbon (sheet materials B41M 5/00)</td>
</tr>
</tbody>
</table>

3/00  Platen or like sheet supports for manifolding using pressure-sensitive layers or intermediaries, e.g. for book-keeping purposes

| 3/02 | . with stationary clamping means for holding the manifolding assembly in registered position, e.g. resilient clamps for holding non-perforated sheets {clamps for platen B41F 1/36} |
Apparatus or machines for duplicating or printing for office or other commercial purposes

11/00 Apparatus for directly duplicating from hectographic masters in mirror image, i.e. "wet duplicators" for producing positive copies

11/02 . . with a flat support carrying the masters
11/04 . . and with carriages for feeding the sheets
11/06 . . for stack duplicating with pressure rollers
11/08 . . with rotary cylinders carrying the masters
11/10 . . with two rollers between which master is stretched
11/12 . . Driving gear; Control thereof
11/14 . . Constructional features of masters (chemical aspects B41M)

13/00 Stencilling apparatus for office or other commercial use (screen printing B41F 15/00; stencils, stencil materials, carriers therefor B41N 1/00)

13/02 . . with flat stencil carriers
13/04 . . with curved or rotary stencil carriers
13/06 . . with a single cylinder carrying the stencil
13/08 . . with stencil carried by two or more cylinders, e.g. through the intermediary of endless bands
13/10 . . . Clips or clamps for securing stencils to stencil carriers
13/12 . . for special purposes, e.g. for reproducing Braille characters (typewriters for Braille B41J 3/32)
13/14 . . Attachments, e.g. for punching, cutting, severing
13/16 . . Driving gear; Control thereof
13/18 . . Inking units

15/00 Letterpress printing apparatus specially adapted for office or other commercial purposes (in general B41F; printing plates or foils, materials therefor B41N 1/00)

15/02 . . with flat printing surfaces, e.g. with flat type-beds, surfaces made of thin sheet material or moulded from plastics or rubber
15/04 . . of composed type locked in chases
15/06 . . with curved printing surfaces, e.g. cylinders
15/08 . . with stereotypes
15/10 . . for multicolour printing; for perfecting
15/12 . . Driving gear; Control thereof
15/14 . . Attachments, e.g. for punching, cutting, severing

17/00 Lithographic printing apparatus for office or other commercial purposes (in general B41F; printing plates or foils, materials therefor B41N 1/00)

17/02 . . for direct impression printing
17/04 . . with flat printing surfaces
17/06 . . with curved printing surfaces, e.g. cylinders
17/08 . . for offset printing
17/10 . . with flat printing surfaces, e.g. co-operating with travelling offset cylinders
17/12 . . with curved printing surfaces, e.g. forme cylinders
17/14 . . of two-cylinder type, e.g. co-operating forme and impression cylinders
17/16 . . of three-cylinder type
17/18 . . for multicolour printing, e.g. tandem machines; for perfecting
17/20 . . without damping means, e.g. using heat-activatable inks, refrigerated printing surfaces
17/22 . . Driving gear; Control thereof
17/24 . . Attachments, e.g. for punching, cutting, severing
Apparatus or machines for duplicating or printing for office or other commercial purposes

19/00 Duplicating or printing apparatus or machines for office or other commercial purposes, of special types or for particular purposes and not otherwise provided for (addressographs B41L 45/00)

19/003 . using heat, e.g. wax transfer
19/006 . Auxiliary numbering devices
19/02 . having forme cylinders carrying a plurality of printing surfaces, or for performing letterpress and lithographic processes selectively or in combination (in general B41F 11/00)
19/04 . for printing from selected parts of one or more printing surfaces in one cycle, e.g. line printing (by inking selected areas B41L 27/20)

19/06 . with co-operating forme and impression cylinders
19/08 . by effecting relative movement of forme and impression cylinders during printing cycle
19/10 . by projecting and retracting parts of the surfaces of the forme cylinders
19/12 . by masking parts of the printing surfaces on the forme cylinders
19/14 . by selective damping of the copy material
19/16 . by selective tripping of impression cylinders

Common details of, or accessories for, apparatus or machines for manifolding, duplicating, or printing for office or other commercial purposes

21/00 Devices for conveying sheets or webs of copy material through the apparatus or machines for manifolding, duplicating, or printing (mechanisms for conveying copy material through addressographs or like series-printing machines B41L 47/24; (feeding sheets or webs to or from printing apparatus or machines B65H; in printing presses in general B41F 21/00)

21/02 . for conveying sheets
21/04 . Pins
21/06 . Grippers
21/08 . Suction-operated grippers
21/10 . Combinations of endless conveyors and grippers
21/12 . for conveying webs

23/00 Devices for treating the surfaces of sheets, webs, or other articles in connection with printing (as a final step in the manufacture of such articles, see the relevant places, e.g. B29C 71/00, D21H 23/00 or D21H 25/00; after-treatment of prints B41M 7/00)

23/02 . by damping, e.g. by moistening copy sheets in connection with hectographic printing
23/04 . using friction rollers
23/06 . using brushes
23/08 . using spray elements
23/10 . using endless bands
23/12 . using absorbent pads
23/14 . Ducts, containers, or like supply devices for liquids
23/16 . Devices for tripping or lifting damping rollers; Supporting, adjusting, or removing arrangements therefor

23/18 . Construction of damping rollers
23/20 . by heat drying, by cooling, by applying powders
23/22 . Powdering devices, e.g. for preventing set-off
23/24 . Print-finishing devices, e.g. for glossing prints

25/00 Devices for damping printing surfaces, e.g. moistening printing surfaces in connection with lithographic printing (applying liquids or other fluent materials to surfaces in general B05)

25/005 . [Pre-damping etching devices]
25/02 . using friction rollers
25/04 . using brushes
25/06 . using spraying elements
25/08 . using endless bands
25/10 . using absorbent pads
25/12 . Ducts, containers, or like supply devices for liquids
25/14 . Inking rollers serving also to apply ink repellent ((in rotary lithographic machines B41F 7/36))

25/16 . Devices for tripping or lifting damping rollers; Supporting, adjusting, or removing arrangements therefor ((in rotary lithographic machines B41F 7/40))

25/18 . Construction of damping rollers

27/00 Inking arrangements or devices (inking units for stencilling apparatus B41L 13/18; applying liquids or other fluent materials to surfaces, in general B05)

27/02 . adapted for inking by hand
27/04 . Ducts, containers, or supply devices or ink-level control devices (level control in general G05D 9/00)
27/06 . Duct blades or like supply devices
27/08 . Troughs or like reservoirs with immersed, or partly immersed rollers
27/10 . with ink-ejecting means, e.g. pumps
27/12 . Feed or duct rollers (messenger or moving transfer rollers B41L 27/16)

27/14 . adjustable for regulating supply
27/16 . Messenger or other moving transfer rollers
27/18 . Continuous, e.g. endless-band apparatus
27/20 . for inking selected parts of printing forms
27/22 . Ink removing or collecting devices
27/24 . for inking from interior of cylinder
27/26 . Absorbent pads
27/28 . Construction of inking rollers
27/30 . Spray apparatus

27/32 . Arrangements for tripping, lifting, adjusting, or removing inking rollers; Supports, bearings or forks therefor

27/34 . Lifting or adjusting devices
27/36 . Cams, eccentrics, wedges, or the like devices
27/38 . Fluid-pressure operated
27/40 . magnetically operated

29/00 Devices for attaching printing elements or formes to supports ((in printing presses in general B41F 27/00))

29/02 . magnetic
29/04 . for attaching printing elements to flat type-beds
29/06 . for attaching elements to forme cylinders
29/08 . for attaching print formes to flat type-beds
29/10 . for attaching non-deformable curved printing formes to forme cylinders
29/12 . for attaching flexible printing formes
29/14 . Clamping devices
29/16 . operating automatically during operation of rotary machines to attach the printing formes to the forme cylinders

29/18 . electromagnetic, pneumatic, or hydraulic
Common details of, or accessories for, apparatus or machines for manifolding, duplicating, or printing for office or...

39/16 Programming systems for automatic control of sequence of operations

41/00 Cleaning arrangements or devices { (for printing presses in general B41F 35/00) }

41/02 . . for forme cylinders

41/04 . . for inking rollers

41/06 . . for offset cylinders

43/00 Auxiliary folding, collecting, or depositing of sheets or webs (in general B65H)

43/02 . Folding

43/04 . . lengthwise

43/06 . . crosswise

43/08 . . Folding-cylinders or drums

43/10 . Collecting

43/12 . . and stapling

43/14 . Adding inserts

43/16 . Depositing

Addressing machines or like series-printing machines

45/00 Kinds or types of addressing machines or of like series-printing machines

45/02 . using printing plates

45/04 . . composed on type-setting machines

45/06 . . for addressing combined with other operations, e.g. franking, collating documents

45/08 . . with printing surfaces in the form of belts, or carried by chains

45/10 . . for addressing combined with other operations, e.g. franking, collating documents

45/12 . . with separate devices for printing additional texts or images, e.g. for printing receipts on blank sheets or webs

47/00 Details of addressographs or like series-printing machines (common details of printing machines B41F 21/00 - B41F 35/00)

47/02 . Applications of printing surfaces in addressing machines or like series-printing machines (printing surfaces in general B41N)

47/04 . . of flat or curved plates for relief printing

47/06 . . of flat or curved stencils

47/08 . . of flat or curved plates for hectographic printing

47/10 . . of printing surfaces in the form of belts or chains

47/12 . Auxiliary devices, e.g. for flattening plates, for assembling plates in predetermined order, for wetting stencils

47/14 . . Devices or arrangements for storing or handling plates

47/16 . . Magazines

47/18 . . Devices for feeding the plates in their plane

47/20 . . Devices for feeding the plates otherwise than in their plane, e.g. transversely thereto

47/22 . . with means for presenting plates for repeated printing operations

47/24 . . Mechanisms for conveying copy material through addressographs or like series-printing machines (in general B65:)

47/26 . . for conveying or positioning single sheetlike articles, e.g. envelopes

47/28 . . with gauging-rulers or the like, e.g. for facilitating hand-printing of copy material fed from stacks

47/30 . . for conveying webs
Addressing machines or like series-printing machines

47/32 . . . combined with devices for other purposes, e.g. for cutting, severing, gluing
47/34 . . . specially adapted for conveying chains of forms
47/36 . . for conveying sheets or webs for tabulating purposes; Tabulating mechanisms combined with sheet or web conveyors
47/38 . . . with clamping means for head or margin
47/40 . . . with means for automatically reciprocating sheet or web transversely to enable addresses to be printed in columns side by side
47/42 . . Printing mechanisms
47/44 . . using flat platens
47/46 . . using line-contact members, e.g. rollers, cylinders
47/48 . . with inking or ink-ribbon devices
47/50 . . using multiple impression-members or -surfaces, e.g. for printing series of addresses with standing context, for printing from selected parts of printing surfaces (applications of counting, numbering, or dating apparatus B41L 49/02)
47/52 . . with movable counter-pressure plates for printing from selected areas of printing surfaces
47/54 . . with means for automatically reciprocating printing plate transversely to enable addresses to be printed in columns side by side
47/56 . . Indicating, warning, control, or safety devices (B41L 47/58 takes precedence)
47/58 . . Arrangements or devices for selecting, or for facilitating selection of, text or image to be printed
47/60 . . Markings applied to printing plates, e.g. code marks, colours, clips, perforations, edge notches, projections
47/62 . . Selecting devices, e.g. cams, windows, positions indicators
47/64 . . . Automatic selecting devices with or without overriding manual control, e.g. with scanning-fingers, with presetting controls operable by push-buttons, with programme control by punched tapes

49/00 Accessories or attachments for addressographs or like series-printing machines
49/02 . . Counting, numbering, or dating devices
49/04 . . Devices for applying selection markings to printing plates