

# CPC COOPERATIVE PATENT CLASSIFICATION

## 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.

### Manifolding by means of pressure-sensitive layers or intermediaries

		1/34	. . for making masters for hectographic duplicators
		1/36	. . with pressure-sensitive layers or coating other than carbon ( <a href="#">sheet materials B41M 5/00</a> )
<b>1/00</b>	<b>Devices for performing operations in connection with manifolding by means of pressure-sensitive layers or intermediaries, e.g. carbons; Accessories for manifolding purposes</b>	<b>3/00</b>	<b>Platens or like sheet supports for manifolding using pressure-sensitive layers or intermediaries, e.g. for book-keeping purposes</b>
1/02	. 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	3/02	. with stationary clamping means for holding the manifolding assembly in registered position, e.g. resilient clamps for holding non-perforated sheets <a href="#">{(clamps for platens B41F 1/36)}</a>
1/04	. Devices for performing operations subsequent to manifolding, e.g. for separating single sheets or webs from single form sets, continuous manifold assemblies from carbons	3/04	. . Bars provided with pins engaging perforations in the elements
		3/06	. with movable clamping or guiding means for the elements of the manifolding assembly
1/06	. . on single form sets	3/08	. with non-mechanical means for holding the elements in registered position, e.g. magnetic means
1/08	. . on continuous manifold assemblies	3/10	. with means for moving assembled elements step by step relative to platen or support, e.g. for column or line selection; Means for locating assembled elements when stationary
1/10	. . . Separate folding or disposition of single webs		
1/12	. . . Severing webs to obtain single sheets or forms, e.g. by cutting, by bursting	3/12	. Auxiliary devices
1/14	. . . Severing edge perforations from webs	3/14	. . Magazines or storage compartments, e.g. for slips
1/16	. Carriers or supply devices for pressure-sensitive material, e.g. for carbon sheets; Carbon gloves	3/16	. . Web-feeding arrangements
1/18	. . for carbon webs; Continuous carbon supply mechanisms	3/18	. . Displaceable covers, e.g. with windows
1/20	. Manifolding assemblies, e.g. book-like assemblies <a href="#">{(Multi-copy labels G09F 3/0288)}</a>	3/20	. . for facilitating manifolding in books
1/22	. . made up of single sheets or forms	3/22	. . Applications of ink ribbons; Holding, feeding, or guiding means therefor
1/24	. . . Pads or books		
1/26	. . Continuous assemblies made up of webs	<b>5/00</b>	<b>Autographic registers or like manifolding apparatus using movable strips or webs (<a href="#">movable strip writing or reading apparatus B42D 19/00</a>)</b>
1/28	. . . in rolled or wound form	5/02	. with means for limiting movements of webs fed by hand
1/30	. . . folded longitudinally	5/04	. with mechanisms for feeding webs or for arranging web feed; with web storage arrangements <a href="#">{(in genral B65H)}</a>
1/32	. . . folded transversely		
1/321	. . . . <a href="#">{Stacks of sheets attached to a carrier strip or web}</a>	5/06	. . by means of rollers, wheels, or chains, <a href="#">{e.g. with pins}</a> transversely
1/323	. . . . <a href="#">{Uniting several webs, e.g. transversely}</a>		
1/325	. . . . <a href="#">{longitudinally}</a>		
1/326	. . . . <a href="#">{Severance lines; Perforations}</a>		
1/328	. . . . <a href="#">{Removing carbon sheets}</a>		

- 5/08 . . by reciprocating mechanisms
- 5/10 . with mechanisms for feeding the pressure-sensitive web or webs separately from the other webs, e.g. transversely
- 5/12 . with means for indicating exhaustion of web supply
- 5/14 . with auxiliary means for printing, perforating, or severing the web
- 5/16 . Accessories, e.g. drawers for storing forms, for money ([cash registers G07G](#))

**Apparatus or machines for duplicating or printing for office or other commercial purposes**

- 7/00 Apparatus for directly duplicating from hectographic originals, i.e. for obtaining copies in mirror image**
  - 7/02 . by passing original and copy-sheet or -web between rollers
  - 7/04 . . with means for guiding original or copy-sheet or -web
  - 7/06 . . with means for severing copy-sheet or -web
  - 7/08 . . with means for moistening or drying
- 9/00 Apparatus for indirectly duplicating from hectographic originals by means of hectographic intermediaries or transfer surfaces, i.e. "dry duplicators"**
  - 9/02 . Containers for clay or gelatin
  - 9/04 . with flat supports over which gelatin-paper is stretched
  - 9/06 . . and with carriages for feeding the sheets
  - 9/08 . . and with devices for rolling-in and securing hectographic gelatin-paper webs
  - 9/10 . with rotary cylinders carrying sheets of hectographic gelatin-paper
- 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 1/24](#))**
  - 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 thereof or 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 thereof 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
- 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 surface, 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 surface 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 formes
- 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     . . . Cam, eccentric, wedge, 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
- 29/20     . . . for adjusting position of leading edges of flexible printing formes circumferentially of forme cylinders
- 29/22     . for attaching printing formes to intermediate supports, e.g. adapter members
- 31/00**     **Devices for removing flexible printing formes from forme cylinders**
- 33/00**     **Pressing flexible printing formes or sheets or webs of copy material against cylinders, e.g. for smoothing purposes** {(in printing presses in general [B41F 25/00](#))}
- 35/00**     **Cylinders for apparatus or machines for manifolding, duplicating, or printing for office or other commercial purposes** {(in printing presses in general [B41F 13/08](#))}
- 35/02     . Forme cylinders
- 35/04     . . Registering devices
- 35/06     . . . with means for displacing the cylinders
- 35/08     . . . with means for displacing the printing formes on the cylinders
- 35/10     . Impression cylinders

35/12	. Bearings or supports for forme, offset, or transfer or impression cylinders	45/02	. using printing plates
35/14	. Means for heating or cooling forme or impression cylinders	45/04	. . composed on type-setting machines
35/16	. Cylinder-tripping devices; Cylinder impression adjustments	45/06	. . for addressing combined with other operations, e.g. franking, collating documents
35/18	. . Arrangements or dispositions of cylinder bearings, forks, or supports	45/08	. with printing surfaces in the form of belts, or carried by chains
35/20	. . . Eccentric bearings	45/10	. . for addressing combined with other operations, e.g. franking, collating documents
35/22	. . . Sliding bearings	45/12	. with separate devices for printing additional text or images, e.g. for printing receipts on blank sheets or webs
35/24	. . . Swinging bearings		
35/26	. . Cylinder lifting or adjusting devices	<b>47/00</b>	<b>Details of addressographs or like series-printing machines (common details of printing machines <a href="#">B41F 21/00</a> - <a href="#">B41F 35/00</a>)</b>
35/28	. . . Cams, eccentrics, wedges, or the like	47/02	. Applications of printing surfaces in addressing machines or like series-printing machines ( <a href="#">printing surfaces in general B41N</a> )
35/30	. . . electrically or magnetically operated	47/04	. . of flat or curved plates for relief printing
35/32	. . . fluid-pressure operated	47/06	. . of flat or curved stencils
35/34	. Guards or covers, e.g. for safety purposes, for preventing egress or ingress of foreign matter	47/08	. . of flat or curved plates for hectographic printing
<b>38/00</b>	<b>Devices for attaching coverings or make-ready devices; Guiding devices for coverings (make-ready devices <a href="#">B41N 6/00</a>; blankets or like coverings <a href="#">B41N 10/00</a>)</b>	47/10	. . or printing surfaces in the form of belts or chains
38/02	. attaching to impression cylinders	47/12	. Auxiliary devices, e.g. for flattening plates, for assembling plates in predetermined order, for wetting stencils
38/04	. attaching of endless or like continuously-fed coverings	47/14	. Devices or arrangements for storing or handling plates
<b>39/00</b>	<b>Indicating, counting, warning, control, or safety devices (ink-level control devices <a href="#">B41L 27/04</a>; such devices in general, <a href="#">see relevant subclasses</a>, e.g. <a href="#">counting in general G06M</a>)</b>	47/16	. . Magazines
39/02	. Indicating devices, e.g. counters	47/18	. . Devices for feeding the plates in their plane
39/04	. Tripping devices or stop motions	47/20	. . Devices for feeding the plates otherwise than in their plane, e.g. transversely thereto
39/06	. . for starting or stopping operation of sheet or web feed	47/22	. . with means for presenting plates for repeated printing operations
39/08	. . for starting or stopping operation of cylinders {( <a href="#">B41L 19/16</a> takes precedence )}	47/24	. Mechanisms for conveying copy material through addressographs or like series-printing machines ( <a href="#">in general B65</a> ;) )
39/10	. . for starting or stopping operation of damping or inking units	47/26	. . for conveying or positioning single sheetlike articles, e.g. envelopes
39/12	. . for starting or stopping the machine as a whole	47/28	. . with gauging-rulers or the like, e.g. for facilitating hand-printing of copy material fed from stacks
39/14	. . Automatic control of tripping devices by feelers, photoelectric devices, pneumatic devices, or other detectors	47/30	. . for conveying webs
39/16	. Programming systems for automatic control of sequence of operations	47/32	. . . combined with devices for other purposes, e.g. for cutting, severing, gluing
<b>41/00</b>	<b>Cleaning arrangements or devices {(for printing presses in general <a href="#">B41F 35/00</a>)}</b>	47/34	. . . specially adapted for conveying chains of forms
41/02	. for forme cylinders	47/36	. . for conveying sheets or webs for tabulating purposes; Tabulating mechanisms combined with sheet or web conveyors
41/04	. for inking rollers	47/38	. . . with clamping means for head or margin
41/06	. for offset cylinders	47/40	. . . with means for automatically reciprocating sheet or web transversely to enable addresses to be printed in columns side by side
<b>43/00</b>	<b>Auxiliary folding, collecting, or depositing of sheets or webs (in general <a href="#">B65H</a>)</b>	47/42	. Printing mechanisms
43/02	. Folding	47/44	. . using flat platens
43/04	. . lengthwise	47/46	. . using line-contact members, e.g. rollers, cylinders
43/06	. . crosswise	47/48	. . with inking or ink-ribbon devices
43/08	. . Folding-cylinders or drums	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 ( <a href="#">applications of counting, numbering, or dating apparatus B41L 49/02</a> )
43/10	. Collecting		
43/12	. . and stapling		
43/14	. Adding inserts		
43/16	. Depositing		
<b>Addressing machines or like series-printing machines</b>		47/52	. . with movable counter-pressure plates for printing from selected areas of printing surfaces
<b>45/00</b>	<b>Kinds or types of addressing machines or of like series-printing machines</b>		

- 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 pre-setting 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