

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

- 1/00 Devices for performing operations in connection with manifolding by means of pressure-sensitive layers or intermediaries, e.g. carbons; Accessories for manifolding purposes**
- 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
- 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
- 1/06 . . on single form sets
- 1/08 . . on continuous manifold assemblies
- 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
- 1/14 . . . Severing edge perforations from webs
- 1/16 . Carriers or supply devices for pressure-sensitive material, e.g. for carbon sheets; Carbon gloves
- 1/18 . . for carbon webs; Continuous carbon supply mechanisms
- 1/20 . Manifolding assemblies, e.g. book-like assemblies {[\(Multi-copy labels G09F 3/0288\)](#)}
- 1/22 . . made up of single sheets or forms
- 1/24 . . . Pads or books
- 1/26 . . Continuous assemblies made up of webs
- 1/28 . . . in rolled or wound form
- 1/30 . . . folded longitudinally
- 1/32 . . . folded transversely
- 1/321 {[Stacks of sheets attached to a carrier strip or web](#)}
- 1/323 {[Uniting several webs, e.g. transversely](#)}
- 1/325 {[longitudinally](#)}

- 1/326 {[Severance lines; Perforations](#)}
- 1/328 {[Removing carbon sheets](#)}
- 1/34 . . for making masters for hectographic duplicators
- 1/36 . . with pressure-sensitive layers or coating other than carbon ([sheet materials B41M 5/00](#))
- 3/00 Platens 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 {[\(clamps for platens B41F 1/36\)](#)}
- 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
- 3/08 . with non-mechanical means for holding the elements in registered position, e.g. magnetic means
- 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
- 3/12 . Auxiliary devices
- 3/14 . . Magazines or storage compartments, e.g. for slips
- 3/16 . . Web-feeding arrangements
- 3/18 . . Displaceable covers, e.g. with windows
- 3/20 . . for facilitating manifolding in books
- 3/22 . . Applications of ink ribbons; Holding, feeding, or guiding means therefor
- 5/00 Autographic registers or like manifolding apparatus using movable strips or webs ([movable strip writing or reading apparatus B42D 19/00](#))**
- 5/02 . with means for limiting movements of webs fed by hand

- 5/04 . with mechanisms for feeding webs or for arranging web feed; with web storage arrangements [{\(in genral B65H\)}](#)
- 5/06 . . by means of rollers, wheels, or chains, [{e.g. with pins}](#) transversely
- 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 [\(in general B41F; printing plates or foils, materials therefor B41N 1/00\)](#)**
- 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
- 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	47/00	Details of addressographs or like series-printing machines (common details of printing machines B41F 21/00 - B41F 35/00)
35/28	. . . Cams, eccentrics, wedges, or the like	47/02	. Applications of printing surfaces in addressing machines or like series-printing machines (printing surfaces in general B41N)
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
38/00	Devices for attaching coverings or make-ready devices; Guiding devices for coverings (make-ready devices B41N 6/00; blankets or like coverings B41N 10/00)	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
39/00	Indicating, counting, warning, control, or safety devices (ink-level control devices B41L 27/04; such devices in general, see relevant subclasses, e.g. counting in general G06M)	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 {(B41L 19/16 takes precedence)}	47/24	. Mechanisms for conveying copy material through addressographs or like series-printing machines (in general B65 ;))
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
41/00	Cleaning arrangements or devices {(for printing presses in general B41F 35/00)}	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
43/00	Auxiliary folding, collecting, or depositing of sheets or webs (in general B65H)	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 (applications of counting, numbering, or dating apparatus B41L 49/02)
43/10	. Collecting		
43/12	. . and stapling	47/52	. . with movable counter-pressure plates for printing from selected areas of printing surfaces
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		

- 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