

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**B41L 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

B41L 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

B41L 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

B41L 1/06

- . . on single form sets

- B41L 1/08 . . . on continuous manifold assemblies
 - B41L 1/10 Separate folding or disposition of single webs
 - B41L 1/12 Severing webs to obtain single sheets or forms, e.g. by cutting, by bursting
 - B41L 1/14 Severing edge perforations from webs
 - B41L 1/16 . . . Carriers or supply devices for pressure-sensitive material, e.g. for carbon sheets; Carbon gloves
 - B41L 1/18 . . . for carbon webs; Continuous carbon supply mechanisms
 - B41L 1/20 . . . Manifolding assemblies, e.g. book-like assemblies {(Multi-copy labels [G09F 3/0288](#))}
 - B41L 1/22 . . . made up of single sheets or forms
 - B41L 1/24 Pads or books
 - B41L 1/26 . . . Continuous assemblies made up of webs
 - B41L 1/28 in rolled or wound form
 - B41L 1/30 folded longitudinally
 - B41L 1/32 folded transversely
 - B41L 1/321 {Stacks of sheets attached to a carrier strip or web}
 - B41L 1/323 {Uniting several webs, e.g. transversely}
 - B41L 1/325 {longitudinally}
 - B41L 1/326 {Severance lines; Perforations}
 - B41L 1/328 {Removing carbon sheets}
 - B41L 1/34 . . . for making masters for hectographic duplicators
 - B41L 1/36 . . . with pressure-sensitive layers or coating other than carbon ([sheet materials B41M 5/00](#))
- B41L 3/00 Platens or like sheet supports for manifolding using pressure-sensitive layers or intermediaries, e.g. for book-keeping purposes**
- B41L 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](#))}
 - B41L 3/04 Bars provided with pins engaging perforations in the elements
 - B41L 3/06 . . . with movable clamping or guiding means for the elements of the manifolding assembly
 - B41L 3/08 . . . with non-mechanical means for holding the elements in registered position, e.g. magnetic means
 - B41L 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
 - B41L 3/12 . . . Auxiliary devices
 - B41L 3/14 Magazines or storage compartments, e.g. for slips
 - B41L 3/16 Web-feeding arrangements
 - B41L 3/18 Displaceable covers, e.g. with windows
 - B41L 3/20 for facilitating manifolding in books

- B41L 3/22
 - . . Applications of ink ribbons; Holding, feeding, or guiding means therefor
- B41L 5/00** **Autographic registers or like manifolding apparatus using movable strips or webs (movable strip writing or reading apparatus [B42D 19/00](#))**
- B41L 5/02
 - . with means for limiting movements of webs fed by hand
- B41L 5/04
 - . with mechanisms for feeding webs or for arranging web feed; with web storage arrangements {(in [genral B65H](#))}
- B41L 5/06
 - . . by means of rollers, wheels, or chains, {e.g. with pins} transversely
- B41L 5/08
 - . . by reciprocating mechanisms
- B41L 5/10
 - . with mechanisms for feeding the pressure-sensitive web or webs separately from the other webs, e.g. transversely
- B41L 5/12
 - . with means for indicating exhaustion of web supply
- B41L 5/14
 - . with auxiliary means for printing, perforating, or severing the web
- B41L 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

- B41L 7/00** **Apparatus for directly duplicating from hectographic originals, i.e. for obtaining copies in mirror image**
- B41L 7/02
 - . by passing original and copy-sheet or -web between rollers
- B41L 7/04
 - . . with means for guiding original or copy-sheet or -web
- B41L 7/06
 - . . with means for severing copy-sheet or -web
- B41L 7/08
 - . . with means for moistening or drying
- B41L 9/00** **Apparatus for indirectly duplicating from hectographic originals by means of hectographic intermediaries or transfer surfaces, i.e. "dry duplicators"**
- B41L 9/02
 - . Containers for clay or gelatin
- B41L 9/04
 - . with flat supports over which gelatin-paper is stretched
- B41L 9/06
 - . . and with carriages for feeding the sheets
- B41L 9/08
 - . . and with devices for rolling-in and securing hectographic gelatin-paper webs
- B41L 9/10
 - . with rotary cylinders carrying sheets of hectographic gelatin-paper
- B41L 11/00** **Apparatus for directly duplicating from hectographic masters in mirror image, i.e. "wet duplicators" for producing positive copies**
- B41L 11/02
 - . with a flat support carrying the masters
- B41L 11/04
 - . . and with carriages for feeding the sheets
- B41L 11/06
 - . . for stack duplicating with pressure rollers
- B41L 11/08
 - . with rotary cylinders carrying the masters
- B41L 11/10
 - . with two rollers between which master is stretched
- B41L 11/12
 - . Driving gear; Control thereof
- B41L 11/14
 - . Constructional features of masters ([chemical aspects B41M](#))
- B41L 13/00** **Stencilling apparatus for office or other commercial use ([screen printing B41F 15/00](#); stencils, stencil materials, carriers therefor [B41N 1/24](#))**

- B41L 13/02
 - with flat stencil carriers
- B41L 13/04
 - with curved or rotary stencil carriers
- B41L 13/06
 - . with a single cylinder carrying the stencil
- B41L 13/08
 - . with stencil carried by two or more cylinders, e.g. through the intermediary of endless bands
- B41L 13/10
 - . . Clips or clamps for securing stencils to stencil carriers
- B41L 13/12
 - for special purposes, e.g. for reproducing Braille characters [{\(typewriters for Braille B41J 3/32\)}](#)
- B41L 13/14
 - Attachments, e.g. for punching, cutting, severing
- B41L 13/16
 - Driving gear; Control thereof
- B41L 13/18
 - Inking units
- B41L 15/00**
 - Letterpress printing apparatus specially adapted for office or other commercial purposes (in general [B41E](#); printing plates or foils, materials thereof or [B41N 1/00](#))**
- B41L 15/02
 - with flat printing surfaces, e.g. with flat type-beds, surfaces made of thin sheet material or moulded from plastics or rubber
- B41L 15/04
 - . of composed type locked in chases
- B41L 15/06
 - with curved printing surfaces, e.g. cylinders
- B41L 15/08
 - . with stereotypes
- B41L 15/10
 - for multicolour printing; for perfecting
- B41L 15/12
 - Driving gear; Control thereof
- B41L 15/14
 - Attachments, e.g. for punching, cutting, severing
- B41L 17/00**
 - Lithographic printing apparatus for office or other commercial purposes (in general [B41E](#); printing plates or foils, materials therefor [B41N 1/00](#))**
- B41L 17/02
 - for direct impression printing
- B41L 17/04
 - . with flat printing surfaces
- B41L 17/06
 - . with curved printing surfaces, e.g. cylinders
- B41L 17/08
 - for offset printing
- B41L 17/10
 - . with flat printing surfaces, e.g. co-operating with travelling offset cylinders
- B41L 17/12
 - . with curved printing surfaces, e.g. forme cylinders
- B41L 17/14
 - of two-cylinder type, e.g. co-operating forme and impression cylinders
- B41L 17/16
 - of three-cylinder type
- B41L 17/18
 - for multicolour printing, e.g. tandem machines; for perfecting
- B41L 17/20
 - without damping means, e.g. using heat-activatable inks, refrigerated printing surfaces
- B41L 17/22
 - Driving gear; Control thereof
- B41L 17/24
 - Attachments, e.g. for punching, cutting, severing
- B41L 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](#))**
- B41L 19/003
 - [{using heat, e.g. wax transfer}](#)

- B41L 19/006
 - {Auxiliary numbering devices}
- B41L 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)
- B41L 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)
- B41L 19/06
 - . with co-operating forme and impression cylinders
- B41L 19/08
 - . . by effecting relative movement of forme and impression cylinders during printing cycle
- B41L 19/10
 - . . . by projecting and retracting parts of the surfaces of the forme cylinders
- B41L 19/12
 - . . . by masking parts of the printing surfaces on the forme cylinders
- B41L 19/14
 - . . . by selective damping of the copy material
- B41L 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

- B41L 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})**
- B41L 21/02
 - for conveying sheets
- B41L 21/04
 - . Pins
- B41L 21/06
 - . Grippers
- B41L 21/08
 - . . Suction-operated grippers
- B41L 21/10
 - . . Combinations of endless conveyors and grippers
- B41L 21/12
 - for conveying webs
- B41L 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)**
- B41L 23/02
 - by damping, e.g. by moistening copy sheets in connection with hectographic printing
- B41L 23/04
 - . using friction rollers
- B41L 23/06
 - . using brushes
- B41L 23/08
 - . using spray elements
- B41L 23/10
 - . using endless bands
- B41L 23/12
 - . using absorbent pads
- B41L 23/14
 - . Ducts, containers, or like supply devices for liquids
- B41L 23/16
 - . Devices for tripping or lifting damping rollers; Supporting, adjusting, or removing arrangements therefor
- B41L 23/18
 - . Construction of damping rollers
- B41L 23/20
 - by heat drying, by cooling, by applying powders

B41L 23/22 . . Powdering devices, e.g. for preventing set-off

B41L 23/24 . Print-finishing devices, e.g. for glossing prints

B41L 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](#))**

B41L 25/005 . {Pre-damping etching devices}

B41L 25/02 . using friction rollers

B41L 25/04 . using brushes

B41L 25/06 . using spraying elements

B41L 25/08 . using endless bands

B41L 25/10 . using absorbent pads

B41L 25/12 . Ducts, containers, or like supply devices for liquids

B41L 25/14 . Inking rollers serving also to apply ink repellent {(in rotary lithographic machines [B41F 7/36](#))}

B41L 25/16 . Devices for tripping or lifting damping rollers; Supporting, adjusting, or removing arrangements therefor {(in rotary lithographic machines [B41F 7/40](#))}

B41L 25/18 . Construction of damping rollers

B41L 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](#))**

B41L 27/02 . adapted for inking by hand

B41L 27/04 . Ducts, containers, or supply devices or ink-level control devices (level control in general [G05D 9/00](#))

B41L 27/06 . . Duct blades or like supply devices

B41L 27/08 . . Troughs or like reservoirs with immersed, or partly immersed rollers

B41L 27/10 . . with ink-ejecting means, e.g. pumps

B41L 27/12 . . Feed or duct rollers (messenger or moving transfer rollers [B41L 27/16](#))

B41L 27/14 . . . adjustable for regulating supply

B41L 27/16 . . Messenger or other moving transfer rollers

B41L 27/18 . Continuous, e.g. endless-band apparatus

B41L 27/20 . for inking selected parts of printing formes

B41L 27/22 . Ink removing or collecting devices

B41L 27/24 . for inking from interior of cylinder

B41L 27/26 . Absorbent pads

B41L 27/28 . Construction of inking rollers

B41L 27/30 . Spray apparatus

B41L 27/32 . Arrangements for tripping, lifting, adjusting, or removing inking rollers; Supports, bearings or forks therefor

B41L 27/34 . . Lifting or adjusting devices

B41L 27/36 . . . Cam, eccentric, wedge, or the like devices

B41L 27/38 . . . fluid-pressure operated

B41L 27/40 . . . magnetically operated

B41L 29/00 **Devices for attaching printing elements or formes to supports** {(in printing presses in general [B41F 27/00](#))}

- B41L 29/02 . magnetic
- B41L 29/04 . for attaching printing elements to flat type-beds
- B41L 29/06 . for attaching elements to forme cylinders
- B41L 29/08 . for attaching print formes to flat type-beds
- B41L 29/10 . for attaching non-deformable curved printing formes to forme cylinders
- B41L 29/12 . for attaching flexible printing formes
- B41L 29/14 . . Clamping devices
- B41L 29/16 . . . operating automatically during operation of rotary machines to attach the printing formes to the forme cylinders
- B41L 29/18 electromagnetic, pneumatic, or hydraulic
- B41L 29/20 . . . for adjusting position of leading edges of flexible printing formes circumferentially of forme cylinders
- B41L 29/22 . for attaching printing formes to intermediate supports, e.g. adapter members

B41L 31/00 **Devices for removing flexible printing formes from forme cylinders**

B41L 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](#))}

B41L 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](#))}

- B41L 35/02 . Forme cylinders
- B41L 35/04 . . Registering devices
- B41L 35/06 . . . with means for displacing the cylinders
- B41L 35/08 . . . with means for displacing the printing formes on the cylinders
- B41L 35/10 . Impression cylinders
- B41L 35/12 . Bearings or supports for forme, offset, or transfer or impression cylinders
- B41L 35/14 . Means for heating or cooling forme or impression cylinders
- B41L 35/16 . Cylinder-tripping devices; Cylinder impression adjustments
- B41L 35/18 . . Arrangements or dispositions of cylinder bearings, forks, or supports
- B41L 35/20 . . . Eccentric bearings
- B41L 35/22 . . . Sliding bearings
- B41L 35/24 . . . Swinging bearings
- B41L 35/26 . . Cylinder lifting or adjusting devices
- B41L 35/28 . . . Cams, eccentrics, wedges, or the like
- B41L 35/30 . . . electrically or magnetically operated
- B41L 35/32 . . . fluid-pressure operated
- B41L 35/34 . Guards or covers, e.g. for safety purposes, for preventing egress or ingress of foreign matter

B41L 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](#))

- B41L 38/02 . attaching to impression cylinders
- B41L 38/04 . attaching of endless or like continuously-fed coverings

B41L 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](#))

- B41L 39/02 . Indicating devices, e.g. counters
- B41L 39/04 . Tripping devices or stop motions
- B41L 39/06 . . for starting or stopping operation of sheet or web feed
- B41L 39/08 . . for starting or stopping operation of cylinders {([B41L 19/16](#) takes precedence)}
- B41L 39/10 . . for starting or stopping operation of damping or inking units
- B41L 39/12 . . for starting or stopping the machine as a whole
- B41L 39/14 . . Automatic control of tripping devices by feelers, photoelectric devices, pneumatic devices, or other detectors
- B41L 39/16 . Programming systems for automatic control of sequence of operations

B41L 41/00 **Cleaning arrangements or devices** {(for printing presses in general [B41F 35/00](#))}

- B41L 41/02 . for forme cylinders
- B41L 41/04 . for inking rollers
- B41L 41/06 . for offset cylinders

B41L 43/00 **Auxiliary folding, collecting, or depositing of sheets or webs** (in general [B65H](#))

- B41L 43/02 . Folding
- B41L 43/04 . . lengthwise
- B41L 43/06 . . crosswise
- B41L 43/08 . . Folding-cylinders or drums
- B41L 43/10 . Collecting
- B41L 43/12 . . and stapling
- B41L 43/14 . Adding inserts
- B41L 43/16 . Depositing

Addressing machines or like series-printing machines

B41L 45/00 **Kinds or types of addressing machines or of like series-printing machines**

- B41L 45/02 . using printing plates
- B41L 45/04 . . composed on type-setting machines
- B41L 45/06 . . for addressing combined with other operations, e.g. franking, collating documents
- B41L 45/08 . with printing surfaces in the form of belts, or carried by chains

- B41L 45/10
 - . for addressing combined with other operations, e.g. franking, collating documents
- B41L 45/12
 - with separate devices for printing additional text or images, e.g. for printing receipts on blank sheets or webs
- B41L 47/00**
 - **Details of addressographs or like series-printing machines** ([common details of printing machines B41F 21/00 to B41F 35/00](#))
- B41L 47/02
 - Applications of printing surfaces in addressing machines or like series-printing machines ([printing surfaces in general B41N](#))
- B41L 47/04
 - . of flat or curved plates for relief printing
- B41L 47/06
 - . of flat or curved stencils
- B41L 47/08
 - . of flat or curved plates for hectographic printing
- B41L 47/10
 - . or printing surfaces in the form of belts or chains
- B41L 47/12
 - Auxiliary devices, e.g. for flattening plates, for assembling plates in predetermined order, for wetting stencils
- B41L 47/14
 - Devices or arrangements for storing or handling plates
- B41L 47/16
 - . Magazines
- B41L 47/18
 - . Devices for feeding the plates in their plane
- B41L 47/20
 - . Devices for feeding the plates otherwise than in their plane, e.g. transversely thereto
- B41L 47/22
 - . with means for presenting plates for repeated printing operations
- B41L 47/24
 - Mechanisms for conveying copy material through addressographs or like series-printing machines ([in general B65;](#))
- B41L 47/26
 - . for conveying or positioning single sheetlike articles, e.g. envelopes
- B41L 47/28
 - . with gauging-rulers or the like, e.g. for facilitating hand-printing of copy material fed from stacks
- B41L 47/30
 - . for conveying webs
- B41L 47/32
 - . . combined with devices for other purposes, e.g. for cutting, severing, gluing
- B41L 47/34
 - . . specially adapted for conveying chains of forms
- B41L 47/36
 - . for conveying sheets or webs for tabulating purposes; Tabulating mechanisms combined with sheet or web conveyers
- B41L 47/38
 - . . with clamping means for head or margin
- B41L 47/40
 - . . with means for automatically reciprocating sheet or web transversely to enable addresses to be printed in columns side by side
- B41L 47/42
 - Printing mechanisms
- B41L 47/44
 - . using flat platens
- B41L 47/46
 - . using line-contact members, e.g. rollers, cylinders
- B41L 47/48
 - . with inking or ink-ribbon devices
- B41L 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](#))
- B41L 47/52
 - . with movable counter-pressure plates for printing from selected areas of printing surfaces

- B41L 47/54
 - . with means for automatically reciprocating printing plate transversely to enable addresses to be printed in columns side by side
- B41L 47/56
 - Indicating, warning, control, or safety devices ([B41L 47/58 takes precedence](#))
- B41L 47/58
 - Arrangements or devices for selecting, or for facilitating selection of, text or image to be printed
- B41L 47/60
 - . Markings applied to printing plates, e.g. code marks, colours, clips, perforations, edge notches, projections
- B41L 47/62
 - . Selecting devices, e.g. cams, windows, positions indicators
- B41L 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
- B41L 49/00**
 - Accessories or attachments for addressographs or like series-printing machines**
- B41L 49/02
 - Counting, numbering, or dating devices
- B41L 49/04
 - Devices for applying selection markings to printing plates