

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](#))

NOTE

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](#).

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.

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 manifolded 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	<ul style="list-style-type: none"> with a flat support carrying the masters
B41L 11/04	<ul style="list-style-type: none"> and with carriages for feeding the sheets
B41L 11/06	<ul style="list-style-type: none"> for stack duplicating with pressure rollers
B41L 11/08	<ul style="list-style-type: none"> with rotary cylinders carrying the masters
B41L 11/10	<ul style="list-style-type: none"> with two rollers between which master is stretched
B41L 11/12	<ul style="list-style-type: none"> Driving gear; Control thereof
B41L 11/14	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> with flat stencil carriers
B41L 13/04	<ul style="list-style-type: none"> with curved or rotary stencil carriers
B41L 13/06	<ul style="list-style-type: none"> with a single cylinder carrying the stencil
B41L 13/08	<ul style="list-style-type: none"> with stencil carried by two or more cylinders, e.g. through the intermediary of endless bands
B41L 13/10	<ul style="list-style-type: none"> Clips or clamps for securing stencils to stencil carriers
B41L 13/12	<ul style="list-style-type: none"> for special purposes, e.g. for reproducing Braille characters (typewriters for Braille B41J 3/32)
B41L 13/14	<ul style="list-style-type: none"> Attachments, e.g. for punching, cutting, severing
B41L 13/16	<ul style="list-style-type: none"> Driving gear; Control thereof
B41L 13/18	<ul style="list-style-type: none"> Inking units
B41L 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)
B41L 15/02	<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> of composed type locked in chases
B41L 15/06	<ul style="list-style-type: none"> with curved printing surfaces, e.g. cylinders
B41L 15/08	<ul style="list-style-type: none"> with stereotypes
B41L 15/10	<ul style="list-style-type: none"> for multicolour printing; for perfecting
B41L 15/12	<ul style="list-style-type: none"> Driving gear; Control thereof
B41L 15/14	<ul style="list-style-type: none"> Attachments, e.g. for punching, cutting, severing
B41L 17/00	Lithographic printing apparatus for office or other commercial purposes (in general B41F ; printing plates or foils, materials therefor B41N 1/00)
B41L 17/02	<ul style="list-style-type: none"> for direct impression printing
B41L 17/04	<ul style="list-style-type: none"> with flat printing surfaces
B41L 17/06	<ul style="list-style-type: none"> with curved printing surfaces, e.g. cylinders
B41L 17/08	<ul style="list-style-type: none"> for offset printing
B41L 17/10	<ul style="list-style-type: none"> with flat printing surfaces, e.g. co-operating with travelling offset cylinders
B41L 17/12	<ul style="list-style-type: none"> with curved printing surfaces, e.g. forme cylinders
B41L 17/14	<ul style="list-style-type: none"> 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