

**CPC****COOPERATIVE PATENT CLASSIFICATION****B41P****INDEXING SCHEME RELATING TO PRINTING, LINING MACHINES, TYPEWRITERS, AND TO STAMPS****NOTE**

This subclass constitutes an internal scheme for indexing only.

**B41P 2200/00****Printing processes**

B41P 2200/10

. Relief printing

B41P 2200/11

. . Stereotype printing

B41P 2200/12

. . Flexographic printing

B41P 2200/13

. . Offset printing

B41P 2200/20

. Lithography

B41P 2200/21

. . Dry offset printing

B41P 2200/22

. . Wet offset printing

B41P 2200/30

. Heliography

B41P 2200/31

. . Pad printing

B41P 2200/312

. . . multicolor

B41P 2200/40

. Screen printing

B41P 2200/41

. . Offset printing

B41P 2200/42

. . Mimeographic printing, e.g. stencilling

**B41P 2213/00****Arrangements for actuating or driving printing presses; Auxiliary devices or processes**

B41P 2213/10

. Constitutive elements of driving devices ([driving reciprocating printing dies B41P 2219/10](#))

B41P 2213/11

. . Motors

B41P 2213/112

. . . Fluid motors

B41P 2213/114

. . . . Hydraulic motors

B41P 2213/116

. . . . . Linear hydraulic motors

B41P 2213/118

. . . . . Rotary hydraulic motors

B41P 2213/12

. . . . Pneumatic motors

B41P 2213/122

. . . . . Linear pneumatic motors

B41P 2213/124

. . . Electric motors

B41P 2213/126

. . . . Rotary electric motors

B41P 2213/128

. . . . Linear electric motors

B41P 2213/13

. . . . Solenoids

B41P 2213/20

. . Gearings

B41P 2213/202

. . . Helical gears

B41P 2213/204

. . . Bevel gears

B41P 2213/206	. . . Planetary gears
B41P 2213/208	. . . Harmonic drive
B41P 2213/25	. . Couplings; Clutches
B41P 2213/252	. . . Synchroclutches
B41P 2213/254	. . . Devices allowing two gears to engage with each other
B41P 2213/256	. . . . in a fixed angular position
B41P 2213/30	. . Rotary energy transmitters, i.e. electric energy couplers
B41P 2213/302	. . . using pneumatic energy, e.g. pressurised air
B41P 2213/304	. . . using hydraulic energy
B41P 2213/40	. Auxiliary devices or processes associated with the drives
B41P 2213/42	. . Vibration-dampers for machine parts ( <a href="#">for cylinders B41F 13/085</a> )
B41P 2213/44	. . Noise reduction
B41P 2213/46	. . Lubrication
B41P 2213/70	. Driving devices associated with particular installations or situations
B41P 2213/71	. . Inching drive mechanism, i.e. to obtain stepwise movement
B41P 2213/72	. . Driving devices for monocolour presses
B41P 2213/73	. . Driving devices for multicolour presses
B41P 2213/732	. . . with means for deviating torque over the printing units
B41P 2213/734	. . . each printing unit being driven by its own electric motor, i.e. electric shaft
B41P 2213/80	. Means enabling or facilitating exchange of cylinders ( <a href="#">exchanging tubular printing plates B41P 2227/20</a> )
B41P 2213/802	. . axially
B41P 2213/804	. . radially
B41P 2213/90	. Register control
B41P 2213/91	. . for sheet printing presses
<b>B41P 2215/00</b>	<b>Screen printing machines</b>
B41P 2215/10	. characterised by their constructional features
B41P 2215/11	. . Registering devices
B41P 2215/112	. . . with means for displacing the frame
B41P 2215/114	. . . with means for displacing the article
B41P 2215/12	. . Screens
B41P 2215/13	. . Devices for increasing ink penetration
B41P 2215/132	. . . by increasing pressure above the screen
B41P 2215/134	. . . by increasing pressure beneath the screen
B41P 2215/14	. . Devices or methods for reducing snap effect
B41P 2215/50	. Screen printing machines for particular purposes
B41P 2215/55	. . for printing compact discs
B41P 2215/56	. . for printing ceramic tiles
<b>B41P 2217/00</b>	<b>Printing machines of special types or for particular purposes</b>

- B41P 2217/10 . characterised by their constructional features
- B41P 2217/11 . . Machines with modular units, i.e. with units exchangeable as a whole
- B41P 2217/12 . . Machines with reversible printing units
- B41P 2217/13 . . Machines with double or multiple printing units for "flying" printing plates exchange
- B41P 2217/14 . . Machines with constructions allowing refurbishing, converting or updating existing presses
- B41P 2217/15 . . Machines with cylinders only supported on one side, e.g. cantilever construction
- B41P 2217/50 . Printing presses for particular purposes
- B41P 2217/51 . . for printing individualised books
- B41P 2217/52 . . for printing a long repeat length on webs
- B41P 2217/53 . . for printing on the interior of hollow articles
- B41P 2217/55 . . for printing compact discs
- B41P 2217/56 . . for printing ceramic tiles
- B41P 2217/60 . . Means for supporting the articles
- B41P 2217/61 . . . internally, e.g. for mugs or goblets
- B41P 2217/62 . . . externally, e.g. for bottles

**B41P 2219/00****Printing presses using a heated printing foil**

- B41P 2219/10 . Driving devices for the reciprocating die
- B41P 2219/11 . . Hydraulic or pneumatic motors
- B41P 2219/12 . . Electric motors
- B41P 2219/13 . . Gearings
- B41P 2219/132 . . . Cams or eccentrics
- B41P 2219/134 . . . Knee-lever
- B41P 2219/20 . Arrangements for moving, supporting or positioning the printing foil
- B41P 2219/21 . . Supports for the unwinding roll; Braking devices for the unwinding roll
- B41P 2219/22 . . Guiding or tensioning the printing foil
- B41P 2219/23 . . Winding up the printing foil
- B41P 2219/30 . Printing dies
- B41P 2219/31 . . Heating means
- B41P 2219/32 . . with means for attaching printing elements to the holder
- B41P 2219/33 . . Supports for printing dies
- B41P 2219/40 . Material or products to be decorated or printed
- B41P 2219/41 . . Web-like material
- B41P 2219/42 . . Sheet-like material
- B41P 2219/43 . . Three-dimensional articles
- B41P 2219/432 . . . Pencils
- B41P 2219/434 . . . Books, e.g. edge-gilding
- B41P 2219/50 . combined with existing presses

B41P 2219/51

- . Converting existing presses to foil printing presses

B41P 2219/60

- Using more than one printing foil

**B41P 2227/00****Mounting or handling printing plates; Forming printing surfaces in situ**

B41P 2227/10

- Attaching several printing plates on one cylinder

B41P 2227/11

- . in axial direction

B41P 2227/12

- . in circumferential direction

B41P 2227/20

- Means enabling or facilitating exchange of tubular printing or impression members, e.g. printing sleeves, blankets ([attaching cylindrical printing formes B41F 27/105](#))

B41P 2227/21

- . Means facilitating exchange of sleeves mounted on cylinders without removing the cylinder from the press

B41P 2227/30

- Detecting the correct position of printing plates on the cylinder

B41P 2227/40

- Adjusting means for printing plates on the cylinder

B41P 2227/41

- . axially

B41P 2227/42

- . circumferentially

B41P 2227/43

- . diagonally

B41P 2227/50

- Devices for storing printing plates

B41P 2227/60

- Devices for transferring printing plates

B41P 2227/61

- . using the sheet feed system

B41P 2227/62

- . Devices for introducing printing plates

B41P 2227/63

- . Devices for removing printing plates

B41P 2227/70

- Forming the printing surface directly on the form cylinder

**B41P 2231/00****Inking devices; Recovering printing ink**

B41P 2231/10

- Axially segmented ducter rollers

B41P 2231/12

- Axially segmented ink blades

B41P 2231/20

- Recovering printing ink

B41P 2231/21

- . by using mixtures of ink and water or repellant

**B41P 2233/00****Arrangements for the operation of printing presses**

B41P 2233/10

- Starting-up the machine

B41P 2233/11

- . Pre-inking

B41P 2233/12

- . Pre-wetting

B41P 2233/13

- . Pre-registering

B41P 2233/20

- Safety devices preventing damage

B41P 2233/21

- . by cutting the web in case of web break

B41P 2233/22

- . by deviating the web in case of web break

B41P 2233/23

- . by preventing the web winding up around cylinders

B41P 2233/30

- Measuring or controlling the consumption of ink

B41P 2233/50

- Marks on printed material

B41P 2233/51

- . for colour quality control

B41P 2233/52 . . for registering

#### **B41P 2235/00**

##### **Cleaning**

- B41P 2235/10 . characterised by the methods or devices
- B41P 2235/12 . . using laser energy
- B41P 2235/14 . . using ultrasonic energy
- B41P 2235/20 . . Wiping devices
- B41P 2235/21 . . . Scrapers, e.g. absorbent pads
- B41P 2235/22 . . . Rollers
- B41P 2235/23 . . . Brushes
- B41P 2235/24 . . . using rolls of cleaning cloth
- B41P 2235/242 . . . . Unwinding the cleaning cloth
- B41P 2235/244 . . . . Rewinding the cleaning cloth
- B41P 2235/246 . . . . Pressing the cleaning cloth against the cylinder
- B41P 2235/26 . . Spraying devices
- B41P 2235/27 . . Suction devices
- B41P 2235/30 . Recovering used solvents or residues
- B41P 2235/31 . . by filtering
- B41P 2235/32 . . by distilling
- B41P 2235/33 . . by burning
- B41P 2235/40 . Cleaning restricted areas on cylinders
- B41P 2235/50 . Selection of materials or products for cleaning

#### **B41P 2251/00**

##### **Details or accessories of printing machines not otherwise provided for**

- B41P 2251/10 . Pumps
- B41P 2251/11 . . Membrane pumps
- B41P 2251/112 . . Peristaltic pumps

#### **B41P 2700/00**

##### **Manifolding, printing or duplicating for office purposes**

- B41P 2700/10 . Hectographic line duplicators
- B41P 2700/12 . . with single master plates