

**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.

**Guidance heading:****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

**Guidance heading:****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	...	Synchromotors
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 13/08A</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

#### **B41P 2217/00      Printing machines of special types or for particular purposes**

- 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 27/10B](#))
- 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