

**CPC****COOPERATIVE PATENT CLASSIFICATION****B41C**

**PROCESSES FOR THE MANUFACTURE OR REPRODUCTION OF PRINTING SURFACES**([photomechanical processes for producing printing surfaces G03F](#); [photoelectrical processes for producing printing surfaces G03G](#))

**B41C 1/00****Forme preparation****B41C 1/003**

- . {the relief or intaglio pattern being obtained by imagewise deposition of a liquid, e.g. by an ink jet}

**B41C 1/006**

- . {the relief or intaglio pattern being obtained by abrasive means, e.g. by sandblasting}

**B41C 1/02**

- . Engraving; Heads therefor( [recording on record carriers, heads therefor G11B](#))

**B41C 1/025**

- . . {characterised by means for the liquid etching of substrates for the manufacturing of relief or intaglio printing forms, already provided with resist pattern}

**NOTE**

Attention is drawn to the title of class [B41](#) and to subclass [H04N](#) , in particular to the Notes following the title of that subclass and to the group [H04N 1/00](#)

**B41C 1/04**

- . . using heads controlled by an electric information signal

**B41C 1/045**

- . . . Mechanical engraving heads

**B41C 1/05**

- . . . Heat-generating engraving heads, e.g. laser beam, electron beam

**NOTE**

The fabrication of lithographic forms, screen printing forms or stencils with a laser beam or another high energetic radiation beam is not considered as involving an engraving. The preparation of such forms is covered by [B41C 1/10](#) and [B41C 1/14](#)

**B41C 1/055**

- . Thermographic processes for producing printing formes{e.g. with a thermal print head}([B41C 1/02](#) takes precedence; { fabrication of relief or intaglio plates by ablative recording with a laser beam [B41C 1/05](#) ; production of lithographic forms [B41C 1/10](#) ; producing of screen printing forms or stencils [B41C 1/14](#)})

**B41C 1/06**

- . Transferring([B41C 1/10](#) , [B41C 1/18](#) take precedence )

**B41C 1/08**

- . by embossing, e.g. with a typewriter( [typewriters adapted therefor B41J 3/38](#))

**B41C 1/10**

- . for lithographic printing; Master sheets for transferring a lithographic image to the forme{ chemical or electrical pretreatment [B41N 3/03](#)}( [neutralising or similar differentiation treatments of lithographic printing formes B41N 3/08](#))

- B41C 1/1008 . . {by removal or destruction of lithographic material on the lithographic support, e.g. by laser or spark ablation; by the use of materials rendered soluble or insoluble by heat exposure, e.g. by heat produced from a light to heat transforming system; by on the press exposure or on the press development, e.g. by the fountain of photolithographic materials}
- B41C 1/1016 . . . {characterised by structural details, e.g. protective layers, backcoat layers, several imaging layers([B41N 3/036 takes precedence](#))}
- B41C 1/1025 . . . {using materials comprising a polymeric matrix containing a polymeric particulate material, e.g. hydrophobic heat coalescing particles}
- B41C 1/1033 . . . {by laser or spark ablation}
- B41C 1/1041 . . {by modification of the lithographic properties without removal or addition of material, e.g. by the mere generation of a lithographic pattern}
- B41C 1/105 . . {by electrocoagulation, by electro-adhesion or by electro-releasing of material, e.g. a liquid from a gel}
- B41C 1/1058 . . {by providing a magnetic pattern, a ferroelectric pattern or a semiconductive pattern, e.g. by electrophotography}
- B41C 1/1066 . . {by spraying with powders, by using a nozzle, e.g. an ink jet system, by fusing a previously coated powder, e.g. with a laser}
- B41C 1/1075 . . {Mechanical aspects of on-press plate preparation([B41C 1/1008 to B41C 1/1066 take precedence](#))}
- B41C 1/1083 . . {Mechanical aspects of off-press plate preparation([B41C 1/1008 to B41C 1/1066 take precedence](#))}
- B41C 1/1091 . . {by physical transfer from a donor sheet having an uniform coating of lithographic material using thermal means as provided by a thermal head or a laser; by mechanical pressure, e.g. from a typewriter by electrical recording ribbon therefor}
- B41C 1/12 . Multicolour formes
- B41C 1/14 . for stencil-printing or silk-screen printing
- B41C 1/141 . . {by cutting or perforation with mechanical means; Electrical spark cutting}
- B41C 1/142 . . {using a galvanic or electroless metal deposition processing step}
- B41C 1/144 . . {by perforation using a thermal head}
- B41C 1/145 . . {by perforation using an energetic radiation beam, e.g. a laser}
- B41C 1/147 . . {by imagewise deposition of a liquid, e.g. from an ink jet; Chemical perforation by the hardening or solubilizing of the ink impervious coating or sheet}
- B41C 1/148 . . {by a traditional thermographic exposure using the heat- or light- absorbing properties of the pattern on the original, e.g. by using a flash}
- B41C 1/16 . Formes with areas rendered ink-resistant by covering with an amalgam; Printing plates for amalgam printing
- B41C 1/18 . Curved printing formes or printing cylinders([B41C 1/10](#) , [B41C 1/14 take precedence](#) )}
- B41C 1/182 . . {Sleeves; Endless belts}
- B41C 1/184 . . {by transfer of the design to the cylinder, e.g. from a lithographic printing plate; by drawing the pattern on the cylinder; by direct cutting of the pattern on the cylinder}
- B41C 1/186 . . {by casting}

B41C 1/188 . . {characterised by means for liquid etching of cylinders already provided with resist pattern}

**B41C 3/00                      Reproduction or duplicating of printing formes**

B41C 3/02 . Stereotyping( casting stereotype plates [B41D 3/00](#))

B41C 3/04 . to produce rubber printing blocks

B41C 3/06 . to produce printing blocks from plastics

B41C 3/08 . Electrotyping; Application of backing layers thereon

**B41C 2201/00                Location, type or constituents of the non-imaging layers in lithographic printing formes**

B41C 2201/02 . Cover layers; Protective layers

B41C 2201/04 . Intermediate layers

B41C 2201/06 . Backcoats; Back layers

B41C 2201/10 . characterised by inorganic compounds, e.g. pigments

B41C 2201/12 . characterised by non-macromolecular organic compounds

B41C 2201/14 . characterised by macromolecular organic compounds, e.g. binder, adhesives

**B41C 2210/00                Preparation or type or constituents of the imaging layers, in relation to lithographic printing forme preparation**

B41C 2210/02 . Positive working, i.e. the exposed (imaged) areas are removed

B41C 2210/04 . Negative working, i.e. the non-exposed (non-imaged) areas are removed

B41C 2210/06 . Developable by an alkaline solution

B41C 2210/08 . Developable by water or the fountain solution

B41C 2210/10 . Developable by an acidic solution

B41C 2210/12 . Developable by an organic solution

B41C 2210/14 . Multiple imaging layers

B41C 2210/20 . characterised by inorganic additives, e.g. pigments, salts

- B41C 2210/22
  - characterised by organic non-macromolecular additives, e.g. dyes, UV-absorbers, plasticisers
- B41C 2210/24
  - characterised by a macromolecular compound or binder obtained by reactions involving carbon-to-carbon unsaturated bonds, e.g. acrylics, vinyl polymers
- B41C 2210/26
  - characterised by a macromolecular compound or binder obtained by reactions not involving carbon-to-carbon unsaturated bonds
- B41C 2210/262
  - .. Phenolic condensation polymers, e.g. novolacs, resols
- B41C 2210/264
  - .. Polyesters; Polycarbonates
- B41C 2210/266
  - .. Polyurethanes; Polyureas