

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