

**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( <a href="#">B41C 1/1008</a> to <a href="#">B41C 1/1066</a> take precedence )}
B41C 1/1083	..	{Mechanical aspects of off-press plate preparation( <a href="#">B41C 1/1008</a> to <a href="#">B41C 1/1066</a> 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{( <a href="#">B41C 1/10</a> , <a href="#">B41C 1/14</a> 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}
<b>B41C 3/00</b>		<b>Reproduction or duplicating of printing formes</b>
B41C 3/02	.	Stereotyping( casting stereotype plates <a href="#">B41D 3/00</a> )
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
<b>B41C 2201/00</b>		<b>Location, type or constituents of the non-imaging layers in lithographic printing formes</b>

- 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