

# CPC COOPERATIVE PATENT CLASSIFICATION

## B PERFORMING OPERATIONS; TRANSPORTING

(NOTES omitted)

### PRINTING

## B41 PRINTING; LINING MACHINES; TYPEWRITERS; STAMPS

## B41C PROCESSES FOR THE MANUFACTURE OR REPRODUCTION OF PRINTING SURFACES (photomechanical processes for producing printing surfaces [G03F](#); photoelectrical processes for producing printing surfaces [G03G](#))

### WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

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| <p><b>1/00</b>    <b>Forme preparation</b></p> <p>1/003    . {the relief or intaglio pattern being obtained by imagewise deposition of a liquid, e.g. by an ink jet}</p> <p>1/006    . {the relief or intaglio pattern being obtained by abrasive means, e.g. by sandblasting}</p> <p>1/02    . Engraving; Heads therefor (recording on record carriers, heads therefor <a href="#">G11B</a>)</p> <p>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}</p> <p style="text-align: center;"><b><u>NOTE</u></b></p> <p style="text-align: center;">Attention is drawn to the title of class <a href="#">B41</a> and to subclass <a href="#">H04N</a>, in particular to the Notes following the title of that subclass and to the group <a href="#">H04N 1/00</a></p> <p>1/04    . . using heads controlled by an electric information signal</p> <p>1/045    . . . Mechanical engraving heads</p> <p>1/05    . . . Heat-generating engraving heads, e.g. laser beam, electron beam</p> <p style="text-align: center;"><b><u>NOTE</u></b></p> <p style="text-align: center;">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 <a href="#">B41C 1/10</a> and <a href="#">B41C 1/14</a></p> <p>1/055    . Thermographic processes for producing printing formes {, e.g. with a thermal print head} (<a href="#">B41C 1/02</a> takes precedence; {fabrication of relief or intaglio plates by ablative recording with a laser beam <a href="#">B41C 1/05</a>; production of lithographic forms <a href="#">B41C 1/10</a>; producing of screen printing forms or stencils <a href="#">B41C 1/14</a>})</p> <p>1/06    . Transferring (<a href="#">B41C 1/10</a>, <a href="#">B41C 1/18</a> take precedence)</p> <p>1/08    . by embossing, e.g. with a typewriter (typewriters adapted therefor <a href="#">B41J 3/38</a>)</p> | <p>1/10    . for lithographic printing; Master sheets for transferring a lithographic image to the forme {(chemical or electrical pretreatment <a href="#">B41N 3/03</a>)} (neutralising or similar differentiation treatments of lithographic printing formes <a href="#">B41N 3/08</a>)</p> <p>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}</p> <p>1/1016    . . . {characterised by structural details, e.g. protective layers, backcoat layers or several imaging layers}</p> <p>1/1025    . . . {using materials comprising a polymeric matrix containing a polymeric particulate material, e.g. hydrophobic heat coalescing particles}</p> <p>1/1033    . . . {by laser or spark ablation}</p> <p>1/1041    . {by modification of the lithographic properties without removal or addition of material, e.g. by the mere generation of a lithographic pattern}</p> <p>1/105    . . {by electrocoagulation, by electro-adhesion or by electro-releasing of material, e.g. a liquid from a gel}</p> <p>1/1058    . . {by providing a magnetic pattern, a ferroelectric pattern or a semiconductive pattern, e.g. by electrophotography}</p> <p>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}</p> <p>1/1075    . . {Mechanical aspects of on-press plate preparation (<a href="#">B41C 1/1008</a> - <a href="#">B41C 1/1066</a> take precedence)}</p> <p>1/1083    . . {Mechanical aspects of off-press plate preparation (<a href="#">B41C 1/1008</a> - <a href="#">B41C 1/1066</a> take precedence)}</p> <p>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}</p> <p>1/12    . Multicolour formes</p> |
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- 1/14 . for stencil-printing or silk-screen printing
- 1/141 . . {by cutting or perforation with mechanical means; Electrical spark cutting}
- 1/142 . . {using a galvanic or electroless metal deposition processing step}
- 1/144 . . {by perforation using a thermal head}
- 1/145 . . {by perforation using an energetic radiation beam, e.g. a laser}
- 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}
- 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}
- 1/16 . Formes with areas rendered ink-resistant by covering with an amalgam; Printing plates for amalgam printing
- 1/18 . Curved printing formes or printing cylinders {[\(B41C 1/10, B41C 1/14 take precedence\)](#)}
- 1/182 . . {Sleeves; Endless belts}
- 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}
- 1/186 . . {by casting}
- 1/188 . . {characterised by means for liquid etching of cylinders already provided with resist pattern}

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

- 3/02 . Stereotyping ([casting stereotype plates B41D 3/00](#))
- 3/04 . to produce rubber printing blocks
- 3/06 . to produce printing blocks from plastics
- 3/08 . Electrotyping; Application of backing layers thereon

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

- 2201/02 . Cover layers; Protective layers
- 2201/04 . Intermediate layers
- 2201/06 . Backcoats; Back layers
- 2201/10 . characterised by inorganic compounds, e.g. pigments
- 2201/12 . characterised by non-macromolecular organic compounds
- 2201/14 . characterised by macromolecular organic compounds, e.g. binder, adhesives

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

- 2210/02 . Positive working, i.e. the exposed (imaged) areas are removed
- 2210/04 . Negative working, i.e. the non-exposed (non-imaged) areas are removed
- 2210/06 . Developable by an alkaline solution
- 2210/08 . Developable by water or the fountain solution
- 2210/10 . Developable by an acidic solution
- 2210/12 . Developable by an organic solution
- 2210/14 . Multiple imaging layers
- 2210/16 . Waterless working, i.e. ink repelling exposed (imaged) or non-exposed (non-imaged) areas, not requiring fountain solution or water, e.g. dry lithography or driography
- 2210/20 . characterised by inorganic additives, e.g. pigments, salts

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