**B41C**

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

**Definition statement**

*This place covers:*

Processes for the manufacture or reproduction of printing surfaces.

Printing forme precursors and printing formes.

**References**

*Limiting references*

*This place does not cover:*

<table>
<thead>
<tr>
<th>Photomechanical production of textured or patterned surfaces</th>
<th><strong>G03F</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrography; electrophotography; magnetography</td>
<td><strong>G03G</strong></td>
</tr>
</tbody>
</table>

**B41C 1/00**

**Forme preparation**

**Definition statement**

*This place covers:*

Printing formes and methods of making the same for printing methods using said formes.

Methods for making printing plate precursors and printing plates wherein the imaging exposure is heat or infrared light.

**Relationships with other classification places**

Group **B41M 1/00** and its hierarchical lower subgoupes cover the printing methods using the printing formes made in accordance with the methods as covered by **B41C 1/00**.

**References**

*Informative references*

Attention is drawn to the following places, which may be of interest for search:

<table>
<thead>
<tr>
<th>Apparatus for applying liquids or other fluent materials to surfaces, in general</th>
<th><strong>B05C</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Processes for applying liquids or other fluent materials to surfaces, in general</td>
<td><strong>B05D</strong></td>
</tr>
<tr>
<td>Stamps; Stamping</td>
<td><strong>B41K</strong></td>
</tr>
<tr>
<td>Photomechanical production of textured or patterned surfaces by UV exposure; Apparatus therefor</td>
<td><strong>G03F 7/20</strong></td>
</tr>
<tr>
<td>Processing photosensitive materials for the production of textured or patterned surfaces; Apparatus therefor</td>
<td><strong>G03F 7/26</strong></td>
</tr>
</tbody>
</table>
B41C 1/003
{the relief or intaglio pattern being obtained by imagewise deposition of a liquid, e.g. by an ink jet}

Definition statement
This place covers:
Methods for preparing relief printing formes, flexographic printing formes, intaglio printing formes and gravure printing formes.
Printing formes obtained by said methods.

B41C 1/006
{the relief or intaglio pattern being obtained by abrasive means, e.g. by sandblasting}

Definition statement
This place covers:
Methods for preparing relief printing formes, flexographic printing formes, intaglio printing formes and gravure printing formes.
Printing formes obtained by said methods.

B41C 1/06
Transferring (B41C 1/10, B41C 1/18 take precedence)

Definition statement
This place covers:
Methods for preparing printing formes by transferring the design to the printing forme, e.g. transferring by heat or by pressure.

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)}

Definition statement
This place covers:
The compositions of the different types of image-forming layers.
The following table shows the relevant classification places for different layers of lithographic printing plate precursors and lithographic printing plates:

<table>
<thead>
<tr>
<th>Layer</th>
<th>CPC main trunk symbol; CPC indexing code (2000-series)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protective layer(s); Cover layer(s)</td>
<td>B41C 1/1016; B41C 2201/02</td>
</tr>
</tbody>
</table>
B41C 1/10 (continued)

<table>
<thead>
<tr>
<th>Imageable layer</th>
<th>B41C 1/1008; B41C 1/1025; B41C 1/1033; B41C 1/1041; B41C 1/105; B41C 1/1058; B41C 1/1066; subgroups of B41C 2210/00</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd/3rd imageable layer</td>
<td>B41C 1/1016; B41C 2210/14</td>
</tr>
<tr>
<td>Intermediate layer</td>
<td>B41C 1/1016; B41C 2201/04</td>
</tr>
<tr>
<td>Hydrophilic layer</td>
<td>B41N 3/034; B41N 3/036; B41N 3/038; B41C 2201/04</td>
</tr>
<tr>
<td>Substrate</td>
<td>B41N 1/08; B41N 1/083; B41N 1/086; B41N 1/14</td>
</tr>
<tr>
<td>Backcoat layer(s)</td>
<td>B41C 1/1016; B41C 2201/06</td>
</tr>
</tbody>
</table>

*If the invention lies in the constituents of the non-imaging layers, Indexing Codes B41C 2201/10, B41C 2201/12 and/or B41C 2201/14 shall be given accordingly in addition to the Indexing Codes specifying the location or the type of the layers.

**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}

**Definition statement**

This place covers:

Methods for preparing lithographic printing formes 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.

Lithographic printing forme precursors and lithographic printing formes characterised by the compositions of the image-forming layers. Said compositions of the image-forming layers are specifically adapted to the methods for preparing lithographic printing formes covered by this group.

**References**

*Informative references*

Attention is drawn to the following places, which may be of interest for search:

| Printing plates or foils; Materials therefor (i.e. substrates of printing plate precursors or printing plates) | B41N 1/00 |

**B41C 1/1016**

{characterised by structural details, e.g. protective layers, backcoat layers or several imaging layers}

**Definition statement**

This place covers:

The lithographic printing plates or the plate precursors with different layers including particular details to the different layers not including the single imaging layer.
Special rules of classification

Usually the hydrophilic coating of the substrate is classified in B41N 3/03 and its hierarchical lower subgroups (see the table in the definition statement of the subgroup B41C 1/10). However, if an application claims a conventional method for making lithographic printing plates having a highly unusual hydrophilic layer, then the appropriate classification entry is B41C 1/1016, since B41N 3/03 does not relate to the preparation of printing plates per se.

B41C 1/1075

{Mechanical aspects of on-press plate preparation (B41C 1/1008 - B41C 1/1066 take precedence)}

Definition statement

This place covers:
Apparatuses for lithographic printing plate preparation when using heat or infrared exposure.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

| Printing machines or presses | B41F |

B41C 1/1083

{Mechanical aspects of off-press plate preparation (B41C 1/1008 - B41C 1/1066 take precedence)}

Definition statement

This place covers:
Apparatuses for lithographic printing plate preparation when using heat or infrared exposure.

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}

Definition statement

This place covers:
Only forme preparation for lithographic printing.

Relationships with other classification places

Thermographic and transfer processes for producing other than lithographic printing formes are classified in B41C 1/055 and B41C 1/06. If an independent claim is directed to such a process in general either group B41C 1/055 or B41C 1/06 is given. If a dependent claim concerns lithography then the Indexing Code B41C 1/1091 is given.
B41C 1/182

{Sleeves; Endless belts}

Definition statement
This place covers:
The sleeves and endless belts having a printing layer thereon.

B41C 3/00

Reproduction or duplicating of printing formes

Definition statement
This place covers:
Reproduction or duplicating of printing formes, including:

stereotyping, reproduction or duplicating of printing formes to produce rubber printing blocks or to produce printing blocks from plastics. And further, electrotyping and application of backing layers thereon.

References

Informative references
Attention is drawn to the following places, which may be of interest for search:

| Shaping elastic or deformable material, e.g. rubber, plastics material, to form printing surfaces | B41D 7/00 |
| Stamps | B41K |