

# CPC COOPERATIVE PATENT CLASSIFICATION

## B PERFORMING OPERATIONS; TRANSPORTING

(NOTES omitted)

### SHAPING

**B21 MECHANICAL METAL-WORKING WITHOUT ESSENTIALLY REMOVING MATERIAL; PUNCHING METAL** (casting, powder metallurgy [B22](#); shearing [B23D](#); working of metal by the action of a high concentration of electric current [B23H](#); soldering, welding, flame-cutting [B23K](#); other working of metal [B23P](#); punching sheet material in general [B26F](#); processes for changing of physical properties of metals [C21D](#), [C22F](#); electroforming [C25D 1/00](#))

(NOTES omitted)

## B21G MAKING NEEDLES, PINS OR NAILS OF METAL

### 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.

- |             |  |             |  |
|-------------|--|-------------|--|
| <b>1/00</b> | <b>Making needles used for performing operations</b> (forming heads on pin-like needles <a href="#">B21G 3/12</a> ; making U-shaped hairpins <a href="#">B21G 7/04</a> )               | <b>3/18</b> | • by operations not restricted to one of the groups <a href="#">B21G 3/12</a> - <a href="#">B21G 3/16</a> ( <a href="#">B21G 3/06</a> - <a href="#">B21G 3/10</a> take precedence) |
| 1/003       | • {Needles for special purposes, e.g. knitting, crochet, hat-pins}   | <b>3/20</b> | • • from wire of indefinite length (by rolling <a href="#">B21G 3/30</a> )   |
| 1/006       | • {Special treatments of pins or needles, e.g. annealing, straightening}   | <b>3/22</b> | • • • in pairs arranged head to head   |
| 1/02        | • of needles with eyes, e.g. sewing-needles, sewing-awls   | <b>3/24</b> | • • • by simultaneously forming the head of one nail and the adjacent point of another   |
| 1/04        | • • of needles specially adapted for use in machines or tools  | <b>3/26</b> | • • by cutting from strip or sheet material  |
| 1/06        | • of needles with hook or barb, e.g. crochet hooks   | <b>3/28</b> | • • by forging or pressing   |
| 1/08        | • of hollow needles or needles with hollow end, e.g. hypodermic needles, larding-needles ( <a href="#">B21G 1/10</a> takes precedence)   | <b>3/30</b> | • • by rolling   |
| 1/10        | • equipped with locking means for the material to be drawn through, e.g. for repairing tubeless tyres  | <b>3/32</b> | • Feeding material to be worked to nail or pin making machines   |
| 1/12        | • Securing, cleaning-off burrs, reconditioning polishing, grinding (takes precedence over <a href="#">B21G 1/02</a> - <a href="#">B21G 1/10</a> )                                      | <b>5/00</b> | <b>Making pins or nails with attached caps or with coated heads</b>  |
| <b>3/00</b> | <b>Making pins, nails, or the like</b> (of pins with individual caps <a href="#">B21G 5/00</a> ; of U-like shape <a href="#">B21G 7/00</a> ; of split-pins <a href="#">B21G 7/08</a> ) | <b>5/02</b> | • of drawing-pins or pins of drawing-pin type  |
| 3/005       | • {Nails or pins for special purposes, e.g. curtain pins}  | <b>7/00</b> | <b>Making pins of U-like shape or split-pins</b> (of paper fasteners or staples <a href="#">B21D 53/46</a> , <a href="#">B21F 45/16</a> )  |
| 3/02        | • of pins of the kind used in the tailoring trade or the house- hold   | <b>7/02</b> | • of U-like shape  |
| 3/04        | • • with locking or shielding device for the pin point, e.g. safety-pins   | <b>7/04</b> | • • of hairpins  |
| 3/06        | • of nails with shoulders  | <b>7/06</b> | • • • of undulated hairpins  |
| 3/08        | • of nails with head and two or more shanks or split shanks  | <b>7/08</b> | • of split-pins, e.g. cotter-pins  |
| 3/10        | • of undulated nails or pins   |             |  |
| 3/12        | • Upsetting; Forming heads   |             |  |
| 3/14        | • Reducing diameter of parts otherwise than by rolling   |             |  |
| 3/16        | • Pointing; with or without cutting  |             |  |