

# CPC COOPERATIVE PATENT CLASSIFICATION

## D TEXTILES; PAPER

### TEXTILES OR FLEXIBLE MATERIALS NOT OTHERWISE PROVIDED FOR

#### D03 WEAVING

#### D03C SHEDDING MECHANISMS; PATTERN CARDS OR CHAINS; PUNCHING OF CARDS; DESIGNING PATTERNS

##### WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:  
[D03C 9/04](#) covered by [D03C 9/028](#)
2. 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>Dobbies</b>                                                                                                                                                   | <b>3/00</b> | <b>Jacquards (controlling jacquard by scanning design <a href="#">D03C 17/06</a>; for gripper Axminster looms <a href="#">D03D 39/08</a>)</b> |
| 1/005       | • { <a href="#">Electronic dobbies</a> }                                                                                                                         |             |                                                                                                                                               |
| 1/02        | • Single-lift dobbies, i.e. dobbies in which the same draw-knife or equivalent operates for every pick ( <a href="#">D03C 1/10</a> takes precedence)             | 3/02        | • Single-lift jacquards                                                                                                                       |
| 1/04        | • . Open-shed single-lift dobbies                                                                                                                                | 3/04        | • . of open-shed type                                                                                                                         |
| 1/06        | • Double-lift dobbies, i.e. dobbies in which separate draw-knives or equivalent operate on alternate picks                                                       | 3/06        | • Double-lift jacquards                                                                                                                       |
| 1/08        | • . reversible, i.e. correct sheds open automatically when the loom is driven backwards                                                                          | 3/08        | • . of open-shed type                                                                                                                         |
| 1/10        | • Centre-shed dobbies, i.e. shed formed by lifting some threads and lowering the others from central shed-closed position                                        | 3/10        | • Centre-shed jacquards                                                                                                                       |
| 1/12        | • Dobbies employing toothed gearing instead of draw-knives                                                                                                       | 3/12        | • Multiple-shed jacquards, i.e. jacquards which move warp threads to several different heights, e.g. for weaving pile fabrics                 |
| 1/14        | • Features common to dobbies of different types ( <a href="#">stop motions acting on defective operation of shedding mechanisms <a href="#">D03D 51/46</a></a> ) | 3/14        | • Jacquards not employing lifting-hooks, e.g. employing knotted cords in conjunction with keyhole slots                                       |
| 1/142       | • . { <a href="#">Leveling mechanisms</a> }                                                                                                                      | 3/16        | • Verdol or other jacquards having intermediate power-operated needles between reading needles and lifting-hooks                              |
| 1/144       | • . { <a href="#">linking to the heald frame</a> }                                                                                                               | 3/18        | • Selvedge jacquards                                                                                                                          |
| 1/146       | • . { <a href="#">Independent drive motor</a> }                                                                                                                  | 3/20        | • Electrically-operated jacquards                                                                                                             |
| 1/148       | • . { <a href="#">Eccentrics</a> }                                                                                                                               | 3/205       | • . { <a href="#">Independently actuated lifting cords</a> }                                                                                  |
| 1/16        | • . Arrangements of dobby in relation to loom                                                                                                                    | 3/22        | • Fluid-operated jacquards                                                                                                                    |
| 1/18        | • . Knives; Knife frames                                                                                                                                         | 3/24        | • Features common to jacquards of different types                                                                                             |
| 1/20        | • . Hooks; Lifters                                                                                                                                               | 3/26        | • . General arrangements of jacquards, or disposition in relation to loom                                                                     |
| 1/22        | • . Needles; Needle boxes; Needle boards                                                                                                                         | 3/28        | • . Pick-finding arrangements; Arrangements for preventing next shed from being opened during stopping of loom                                |
| 1/24        | • . Cylinders; Cylinder battens                                                                                                                                  | 3/30        | • . Arrangements wherein hooks are positively operated to close shed                                                                          |
| 1/26        | • . Facilitating engagement of lifting-hooks with draw-knives                                                                                                    | 3/32        | • . Jacquard driving mechanisms                                                                                                               |
| 1/28        | • . . by creating and then eliminating back-lash between hooks and knives                                                                                        | 3/34        | • . . Cylinder operating mechanisms                                                                                                           |
| 1/30        | • . . wherein all the hooks are disengaged from the knives, and selected hooks then re-engaged                                                                   | 3/36        | • . . Griffe operating mechanisms                                                                                                             |
| 1/32        | • . . wherein all the hooks are engaged with the knives, and unselected hooks then disengaged                                                                    | 3/38        | • . Comber boards                                                                                                                             |
| 1/34        | • . Arrangements wherein warp threads pass one another at different heights to avoid congestion                                                                  | 3/40        | • . Constructions of lifting-cords                                                                                                            |
| 1/36        | • . Card- or chain-saving arrangements, e.g. cross-border dobbies                                                                                                | 3/42        | • . Arrangements of lifting-cords                                                                                                             |
|             |                                                                                                                                                                  | 3/44        | • . Lingoies                                                                                                                                  |
|             |                                                                                                                                                                  | <b>5/00</b> | <b>Cam or other direct-acting shedding mechanisms, i.e. operating heald frames without intervening power-supplying devices</b>                |
|             |                                                                                                                                                                  | 5/005       | • { <a href="#">Leveling mechanisms</a> }                                                                                                     |
|             |                                                                                                                                                                  | 5/02        | • operated by rotating cams                                                                                                                   |

- 5/04 . . Construction or shape of cams ([cams in general F16H 53/00](#))
- 5/06 . operated by cam devices other than rotating cams
- 7/00 Leno or similar shedding mechanisms**
  - 7/005 . {Combined leno and patterned shedding motion}
  - 7/02 . Gauze healds
  - 7/04 . Mechanisms having discs oscillating about a weftwise axis and having apertures for warp threads
  - 7/06 . Mechanisms having eyed needles for moving warp threads from side to side of other warp threads
  - 7/08 . Devices for twisting warp threads repeatedly in the same direction
- 9/00 Healds; Heald frames (for leno shedding D03C 7/00)**
  - 9/02 . Healds
    - 9/022 . . {anti-buckling}
    - 9/024 . . {Eyelets}
    - 9/026 . . {Material used}
    - 9/028 . . . {Metal}
  - 2009/04 . . {Metal healds}
  - 9/06 . Heald frames
    - 9/0608 . . {Construction of frame parts}
    - 9/0616 . . . {Horizontal upper or lower rods}
    - 9/0625 . . . . {Composition or used material}
    - 9/0633 . . . . {Heald bars or their connection to other frame parts}
    - 9/0641 . . . . {Distance guides for keeping distance to the next frame}
    - 9/065 . . . {Side stays}
    - 9/0658 . . . {Intermediate supports or their connection to other frame parts}
    - 9/0666 . . {Connection of frame parts ([D03C 9/0633 and D03C 9/0658 take precedence](#))}
    - 9/0675 . . . {Corner connections between horizontal rods and side stays}
    - 9/0683 . . {Arrangements or means for the linking to the drive system}
    - 9/0691 . . {Arrangements of means for damping or noise reduction}
- 11/00 Selvage shedding mechanisms not forming part of main shedding mechanism ([selvage jacquards D03C 3/18](#); [leno selvage mechanism D03C 7/00](#))**
- 13/00 Shedding mechanisms not otherwise provided for**
  - 13/02 . {with independent drive motors ([D03C 1/146 and D03C 3/205 take precedence](#))}
  - 13/025 . . {with independent frame drives}
- 15/00 Pattern cards or chains**
  - 15/02 . Chains of metal, wood, or similar material with projecting pattern-indicating elements
  - 15/04 . Cards or paper perforated to indicate pattern
  - 15/06 . Apparatus for setting pegs in, or removing pegs from, pattern cards
  - 15/08 . Apparatus for interconnecting, e.g. by lacing, or disconnecting pattern cards
- 17/00 Card-punching apparatus ([marking record carriers in digital fashion G06K](#))**
  - 17/02 . manually-controlled, i.e. holes to be punched determined by the operator
  - 17/04 . . power-operated
- 17/06 . automatic, i.e. design scanned optically or otherwise to control punching apparatus or to control loom jacquard directly
- 19/00 Miscellaneous methods or devices concerned with designing or making patterns**
  - 19/005 . {Electronic}
- 2700/00 Shedding mechanisms**
  - 2700/01 . Shedding mechanisms using heald frames
  - 2700/0105 . . Cam-driven heald frame movement
  - 2700/0111 . . . Devices for levelling the heald frames; Coupling and uncoupling the drive for the heald frames; Devices for holding the shed open
    - 2700/0116 . . . Arrangements in which warp threads pass one another at different heights
    - 2700/0122 . . . Devices for adjusting the geometric and time parameters of shed opening
    - 2700/0127 . . Programme-controlled heald frame movement
    - 2700/0133 . . . with mechanical transmission
    - 2700/0138 . . . . using hooks or lifters
    - 2700/0144 . . . . . Single-lift mechanisms
    - 2700/015 . . . . . of closed-shed type
    - 2700/0155 . . . . . Double-lift mechanisms
    - 2700/0161 . . . . . of negatively-driven type
    - 2700/0166 . . . . . of positively-driven type
    - 2700/0172 . . . . . Constructional details
    - 2700/0177 . . . Devices for levelling the heald frames; Coupling and uncoupling the drive for the heald frames; Devices for holding the shed open
  - 2700/0183 . . . Devices for adjusting the geometric and time parameters of shed opening
  - 2700/0188 . . Heald frame return devices
  - 2700/0194 . . Frame-operating devices for ribbon looms
  - 2700/14 . . Heald frame lifting devices