# CPC COOPERATIVE PATENT CLASSIFICATION

## D TEXTILES; PAPER

### TEXTILES OR FLEXIBLE MATERIALS NOT OTHERWISE PROVIDED FOR

#### D03 WEAVING

##### D03D WOVEN FABRICS; METHODS OF WEAVING; LOOMS

**NOTES**

1. Class D06 takes precedence over this subclass in respect of processes involving both weaving and finishing steps and in respect of the finished fabrics.
2. A method of weaving is classified in the group designating the fabric woven unless the method is characterised by the operation of a particular loom rather than by the production of a particular fabric. In this case, the method is classified in the group for the loom.
3. In this subclass, further classification in indexing scheme D10B for aspects relating to textiles is required.
4. In this subclass, if there is any doubt as to which of the essential features is the most important (this is usually the most restrictive feature), the groups designating woven fabrics should be considered in the order in which they appear at each level of indentation, except that groups designating woven pile fabrics are to be considered as taking precedence over groups designating other woven fabrics.

**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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<td>[Tapes or ribbons not otherwise provided for (D03D 1/0005, D03D 1/0011, D03D 1/06, D03D 1/08, D03D 1/0094 take precedence)]</td>
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<tr>
<td>3/06</td>
<td>Fabrics of varying width</td>
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<tr>
<td>3/08</td>
<td>Arched, corrugated, or like fabrics</td>
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</tbody>
</table>

5/00 Selvedges

7/00 Woven fabrics designed to be resilient, i.e. to recover from compressive stress

9/00 Open-work fabrics (ladder-tape fabrics D03D 1/08)

11/00 Double or multi-ply fabrics not otherwise provided for

11/02 Fabrics formed with pockets, tubes, loops, folds, tucks, or flaps (fabrics for curtain heading tapes D03D 1/06; fabrics consisting of a single tube D03D 3/02)

13/00 Woven fabrics characterised by the special disposition of the warp or weft threads, e.g. with curved weft threads, with discontinuous warp threads, with diagonal warp or weft

13/002 With diagonal warps or wefts

13/004 [with weave pattern being non-standard or providing special effects]

13/006 With additional leno yarn

13/008 characterised by weave density or surface weight

15/00 Woven fabrics characterised by the material or construction of the yarn or other warp or weft elements used

15/0005 Antistatic fabrics

15/0011 [using glass fibres]

15/0016 using threads comprising a mineral

15/0022 using threads with beads

15/0027 using bicomponent threads

15/0033 using coloured threads

15/0038 [using threads made of delicate fibers]

15/0044 [using knitted threads]

15/005 [using leather threads]
particular looms; Methods of weaving characterised by the operation of a particular loom

- 15/0055. [using magnetic threads]
- 15/0061. [using threads with microdenier fibers]
- 15/0066. [using threads with a noble metal]
- 15/0072. [using paper threads]
- 15/0077. [using fancy or textured threads (chenille yarns are in D03D 27/18)]
- 15/0083. [using threads having a particular sectional shape]
- 15/0088. [Flat threads]
- 15/0094. [using threads with different diameters]
- 15/02. the warp or weft elements being of stiff material, e.g. wire, cane, slat
- 15/04. woven to produce shapes or effects upon differential shrinkage
- 15/06. using scaffolding threads, i.e. threads removed after weaving
- 15/08. using stretchable or elastic threads (woven fabrics whose elastic or stretch properties are due to the manner of weaving D03D 17/00)
- 15/10. using threads having high or low coefficients of friction
- 15/12. using heat-resistant or fireproof threads
- 17/00. Woven fabrics having elastic or stretch properties due to manner of weaving (woven fabrics using stretchable or elastic threads D03D 15/08)
- 19/00. Gauze or leno-woven fabrics
- 21/00. Lappet- or swivel-woven fabrics
- 23/00. General weaving methods not special to the production of any particular woven fabric or the use of any particular loom; Weaves not provided for in any other single group
- 25/00. Woven fabrics not otherwise provided for
- 25/005. [Three-dimensional woven fabrics]
- 27/00. Woven pile fabrics
- 27/02. wherein the pile is formed by warp or weft
- 27/04. [Welt pile fabrics]
- 27/06. [Warp pile fabrics]
- 27/08. [Terry fabrics]
- 27/10. [Fabrics woven face-to-face, e.g. double velvet]
- 27/12. wherein pile tufts are inserted during weaving
- 27/14. [with tufts around warps]
- 27/16. [with tufts around wefts]
- 27/18. [Chenille fabrics]
- 29/00. Hand looms
- 31/00. Lappet, swivel or other looms for forming embroidery-like decoration on fabrics
- 33/00. Multiple looms, i.e. two or more looms assembled together, whether or not they have mechanisms in common (D03D 35/00 takes precedence)
- 35/00. Smallware looms, i.e. looms for weaving ribbons or other narrow fabrics (D03D 47/00 takes precedence)
- 35/005. [Shuttles]
- 37/00. Circular looms (looms for weaving separate fabrics disposed in a circle or polygon D03D 33/00)
- 39/00. Pile-fabric looms
- 39/02. Axminster looms, i.e. wherein pile tufts are inserted during weaving
- 39/04. Spool Axminster looms
- 39/06. Tuft yarn tube or spool frames
- 39/08. Gripper Axminster looms
- 39/083. [Selecting mechanisms]
- 39/086. [Gripper details]
- 39/10. Wire-tapestry looms, e.g. for weaving velvet or Brussels or Wilton carpets, the pile being formed over weftwise wires
- 39/12. [Mechanisms for operating the pile wires]
- 39/14. Construction of the pile wires, e.g. pile wires which cut
- 39/16. Double-plush looms, i.e. for weaving two pile fabrics face-to-face
- 39/18. Separating the two plush layers, e.g. by cutting
- 39/20. Looms forming pile over warpwise wires
- 39/22. Terry looms
- 39/223. [Cloth control]
- 39/226. [Sley control]
- 39/24. Devices for cutting the pile on the loom (pile wires which cut D03D 39/14; separating two plush layers D03D 39/18)
- 41/00. Looms not otherwise provided for, e.g. for weaving chenille yarn; Details peculiar to these looms
- 41/001. [Hair-cloth looms]
- 41/002. [Looms for weaving reed, straw or wood]
- 41/004. [Looms for three-dimensional fabrics]
- 41/005. [Linear-shed multiphase looms]
- 41/007. [Vertical looms]
- 41/008. [Looms for weaving flat yarns]
- 43/00. Looms with change-boxes
- 43/02. with drop boxes
- 43/04. Operating mechanisms
- 43/06. with rotary boxes
- 43/08. Operating mechanisms
- 43/10. Weft catchers, i.e. means for preventing entanglement of wefts
- 45/00. Looms with automatic weft replenishment (automatic replenishment in smallware looms D03D 35/00, in circular looms D03D 37/00; bobbins rewound on loom D03J 1/12)
- 45/02. Controlling replenishment
- 45/04. Pin feelers or other detectors for initiating replenishment (weft stop motions D03D 51/34)
- 45/06. . . . mechanical
- 45/08. . . . of the side-slip type
- 45/10. . . . electrical
- 45/12. . . . optical
- 45/14. . . . Storing the need for replenishment or the colour required until the spent shuttle returns to the replenishing end of the loom
- 45/16. . . . selecting thereby weft of correct colour
- 45/18. Shuttle feelers or other devices for preventing replenishment if shuttle is incorrectly positioned in shuttle box (shuttle stop motions D03D 51/40)
- 45/20. Changing bobbins, cops, or other shuttle stock
- 45/22. . . . effected with shuttle in normal shuttle box
- 45/24. . . . effected otherwise than in normal box
- 45/26. . . . Magazines
- 45/28. . . . for one type of thread, e.g. same colour
Looms; Methods of weaving characterised by the operation of particular looms

47/00 Looms in which bulk supply of weft does not pass through shed, e.g. shuttleless looms, gripper shuttle looms, dummy shuttle looms (circular looms D03D 37/00)

47/24 by gripper or dummy shuttle (travelling-wave-shed looms D03D 47/26; inserting mechanisms for shuttles D03D 49/24; gripper or dummy shuttles per se D03J 5/06)

47/00

47/25 inserted from only one side of loom

47/26 Travelling-wave-shed looms

47/26 1. Preparation of weft

47/26 2. [Shedding, weft insertion or beat-up mechanisms]

47/26 3. [Weft insertion and beat-up mechanisms]

47/26 4. [Beat-up mechanisms (D03D 47/263 takes precedence)]

47/26 5. [Weft insertion mechanisms (D03D 47/263 takes precedence)]

47/26 6. [Shedding mechanisms]

47/26 7. [Mechanisms for compensating warp tension]

47/27 Drive or guide mechanisms for weft inserting

47/27 1. [Rapiers]

47/27 2. [Rapiers]

47/27 3. [Rapiers]

47/27 4. [Drive mechanisms]

47/27 5. [Details or arrangement of sprocket wheels]

47/27 6. [Guide mechanisms (for shuttles D03D 49/24)]

47/27 7. [for pneumatic looms]

47/28 wherein the weft itself is projected into the shed

47/30 by gas jet

47/30 1. [Construction of the nozzles]

47/30 2. [Main nozzles]

47/30 3. [Auxiliary nozzles]

47/30 4. [Air supply systems]

47/30 5. [Arrangements or lay out of air supply systems]

47/30 6. [Construction or details of parts, e.g. valves, ducts]

47/30 7. [Control or handling of the weft at or after arrival]

47/30 8. [Detection means therefor]

47/30 9. [Stretching or holding the weft]

47/30 10. [Weft removal (extraction of defective weft after stopping at definite point in weaving cycle D03D 51/085)]

47/30 11. [Displaying data]

47/32 by liquid jet

47/34 Handling the weft between bulk storage and weft-inserting means

47/34 1. [Knot detection]

47/34 2. [Rotating bobbins]

47/34 3. [Yarn brakes (D03D 47/364 takes precedence)]

47/36 Measuring and cutting the weft (for Devices for measuring and temporary storing the weft (cutting weft threads D03D 49/70))

47/36 1. [Drum-type weft feeding devices]

47/36 2. [with yarn feeding devices, e.g. stopping pins (D03D 47/367 takes precedence)]

47/36 3. [Construction or control of the yarn retaining devices]

47/36 4. [Yarn braking means acting on the drum]

47/36 5. [Brushes]

47/36 6. [Conicals]
Looms: Methods of weaving characterised by the operation of particular looms

47/367 . . . [Monitoring yarn quantity on the drum]
47/368 . . . [Air chamber storage devices]
47/369 . . . [Communication systems]
47/38 . . . [Welt pattern mechanisms]
47/39 . . . wherein cane, straw, slats, material for hair-cloth or similar material is handled
47/40 . . . Forming selvedges
47/42 . . . by knitting or interlacing loops of weft
47/44 . . . with additional selvedge thread
47/46 . . . by selvedge shuttle or other device passing selvedge thread through loop of weft (by knitting D03D 47/44)
47/48 . . . by inserting cut end of weft in next shed, e.g. by tucking, by blowing
47/50 . . . by adhesion
49/00 Details or constructional features not peculiar to looms of a particular type (temples D03J 1/22)
49/02 . . . Construction of loom framework

WARNING
This group is in the process of being reorganised to its subgroups

49/022 . . . (Protective hoods or curtains)
49/025 . . . (Ground supports)
49/027 . . . (Arrangements or means for noise reduction)
49/04 . . . Control of the tension in warp or cloth
49/06 . . . Warp let-off mechanisms (construction of warp beam D02H)
49/08 . . . Warp beam brakes
49/10 . . . Driving the warp beam to let the warp off
49/12 . . . Controlling warp tension by means other than let-off mechanisms
49/14 . . . Compensating for tension differences during shedding
49/16 . . . Warp supplied by creel
49/18 . . . Devices for indicating warp tension (measuring tension of threads in general G01L 5/04)
49/20 . . . Take-up motions; Cloth beams (storage racks for beams D02H)
49/22 . . . Back rests; Lease rods; Brest beams
49/24 . . . Mechanisms for inserting shuttle in shed (shuttles per se D03J 5/00)
49/26 . . . Picking mechanisms, e.g. for propelling gripper shuttles or dummy shuttles
49/28 . . . Driving mechanisms for the picker stick
49/30 . . . operated by cam
49/32 . . . operated by previously-loaded spring or equivalent
49/34 . . . operated by liquid or gas pressure
49/36 . . . Pickers; Arresting means therefor (check straps D03D 49/40)
49/38 . . . Picking sticks; Arresting means therefor (check straps D03D 49/40)
49/40 . . . Check straps; Lug straps; Similar strap components
49/42 . . . whereby the shuttle is propelled by liquid or gas pressure
49/44 . . . whereby the shuttle is propelled by electric or magnetic means
49/46 . . . wherein the shuttle is pushed or pulled positively (travelling-wave-shed looms D03D 47/26)
49/48 . . . positioning shuttle in readiness for picking
49/50 . . . Miscellaneous devices or arrangements concerning insertion of weft and not otherwise provided for
49/52 . . . Shuttle boxes (change-boxes D03D 43/00)
49/54 . . . Braking means; Swells
49/56 . . . Shuttle relief mechanisms, i.e. reducing shuttle swell pressure before picking
49/58 . . . Shuttle guards
49/60 . . . Construction or operation of slay
49/62 . . . Reeds mounted on slay
49/64 . . . wherein the slay dwells or moves slowly while the weft is being inserted
49/66 . . . Shuttle races
49/68 . . . Reeds or beat-up combs not mounted on the slay (loose reed stop motion D03D 51/42)
49/70 . . . Devices for cutting weft threads (cutting weft in looms with automatic weft replenishment D03D 45/50; apparatus for slitting fabric D03J 1/08)

51/00 Driving, starting, or stopping arrangements; Automatic stop motions (loom control associated with fabric inspection on the loom D03J 1/007)
51/002 . . . (Avoiding starting marks)
51/005 . . . (Independent drive motors (independent frame drives for dobies D03C 1/146, for other shedding mechanisms D03C 13/02))
51/007 . . . (Loom optimisation)
51/02 . . . General arrangements of driving mechanism
51/04 . . . Manual controls
51/06 . . . using particular methods of stopping
51/08 . . . stopping at definite point in weaving cycle, or moving to such point after stopping
51/085 . . . [Extraction of defective weft]
51/10 . . . stopping suddenly
51/12 . . . for adjusting speed
51/14 . . . for reducing speed temporarily
51/16 . . . for varying speed cyclically
51/18 . . . Automatic stop motions
51/20 . . . Warp stop motions
51/22 . . . mechanical
51/24 . . . wherein droppers are suspended on individual warp threads or small groups of threads
51/26 . . . Detector heads
51/28 . . . electrical
51/30 . . . wherein droppers are suspended on individual warp threads or small groups of threads
51/32 . . . Detector heads
51/34 . . . Weft stop motions
51/36 . . . Centre weft forks
51/38 . . . Side weft forks
51/40 . . . Shuttle stop motions
51/42 . . . Loose reed mechanisms
51/44 . . . acting on defective operation of loom mechanisms
51/46 . . . of shedding mechanisms

2700/00 Woven fabrics; Methods of weaving; Looms
2700/01 . . . (Woven fabrics; General weaving methods
2700/0103 . . . Elastic fabrics
2700/0107 . . . for collars or cuffs
2700/0111 ... Double or multi-ply fabrics
2700/0114 ... for conveyor belts, brakes, couplings, tyres or belts
2700/0118 ... for absorbing shocks
2700/0122 ... Tapes
2700/0125 ... for carrying liquids, e.g. typewriter tape
2700/0129 ... Memory tapes
2700/0133 ... characterised by the material of warp or weft
2700/0137 ... Combination of different materials
2700/014 ... Warp or weft treated before weaving
2700/0144 ... Use of threads with different characteristics for subsequent treatments
2700/0148 ... with glass, carbon or asbestos fibres
2700/0151 ... made of paper
2700/0155 ... Industrial fabrics
2700/0159 ... Screens or filters
2700/0162 ... Paper making felts
2700/0166 ... Fabrics with electric conductors
2700/017 ... Cleaning fabrics or footmats
2700/0174 ... Fabrics for special use
2700/0177 ... Absorbing fabrics, e.g. for sanitary towels
2700/0181 ... for neckties or shawls
2700/0185 ... for linings
2700/0188 ... for curtains
2700/0192 ... Fabrics with beads
2700/0196 ... Reinforced fabrics
2700/02 ... Belts
2700/03 ... Tubular fabrics or bags; Endless fabrics
2700/10 ... Smallware looms
2700/101 ... Devices for driving the shuttles
2700/103 ... Devices for weft insertion from fixed bobbins
2700/105 ... Devices for forming the selvedges
2700/106 ... Devices for changing the shuttles or cops
2700/108 ... Devices for driving the warp or cloth beam
2700/12 ... Looms for weaving two or more fabrics at the same time
2700/14 ... Looms in which bulk supply of weft does not pass through the shed
2700/1404 ... Weft bobbin supports
2700/1409 ... Transfer of weft to the shuttle
2700/1413 ... Transfer or weft of different colours or types
2700/1418 ... Simultaneous transfer of several wefts
2700/1422 ... with weft treatment, e.g. dyeing or twisting
2700/1427 ... Unwinding of weft from a fixed bobbin
2700/1431 ... Weft supplying or guiding
2700/1436 ... Weft tensioning devices
2700/144 ... Weft cutting devices
2700/1445 ... Weft braking devices
2700/145 ... Weft clamping devices
2700/1454 ... Weft controlling devices
2700/1459 ... Weft measuring and storing devices
2700/1463 ... Weft preparation by the action of a fluid, e.g. for accumulating or braking the weft
2700/1468 ... Transfer of weft after insertion
2700/1472 ... Weft insertion
2700/1477 ... by gripper shuttles
2700/1481 ... with forced movement
2700/1486 ... by means other than gripper shuttles
2700/149 ... by needles
2700/1495 ... by pneumatic or hydraulic means
2700/16 ... Circular looms
2700/162 ... Weft inserting means

2700/164 ... Beat-up means
2700/166 ... Shuttle changing means
2700/168 ... Driving mechanism for the warp or cloth beam; Shed forming devices
2700/19 ... Take-up motions, also in combination with warp let-off mechanisms; Breast beams
2700/25 ... Devices for weft changing in looms
2700/26 ... Driving or stopping arrangements for looms
2700/265 ... Electric driving arrangements
2700/30 ... Warp stop motions
2700/305 ... electrical
2700/31 ... Weft stop motions, also combined with warp stop motions
2700/313 ... electrical
2700/316 ... Feeder devices for the weft or the shuttle
2700/50 ... Pile-fabric looms; Pile fabrics
2700/53 ... Weaving of loop ribbons or chenille
2700/54 ... Wire-tapestry looms for warp pile fabrics
2700/58 ... Control devices for the warp pile
2700/60 ... Pile fabric weaving in general
2700/61 ... Fabrics for fasteners of the touch-and-close type
2700/80 ... Weaving of metallic fabrics
2700/81 ... Shed forming devices
2700/82 ... Looms with fixed weft bobbins
2700/821 ... Transfer of the weft from the bobbin to the insertion device
2700/823 ... Transfer of the weft after insertion
2700/825 ... Insertion of the weft
2700/826 ... by means of gripper shuttles
2700/828 ... by means of gripper needles
2700/83 ... Selvedge forming
2700/84 ... Transport or guiding of the warp; Warp beams
2700/85 ... Cloth take-up mechanisms, also combined with warp let-off mechanisms; Breast beams
2700/86 ... Shuttle driving devices
2700/865 ... Shuttles
2700/87 ... Arrangements for the slay; Construction of the slay
2700/88 ... Control devices; e.g. for weft or warp
2700/90 ... Pickers or arresting means