

CPC COOPERATIVE PATENT CLASSIFICATION

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, 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.

Woven fabrics; Methods of weaving other than those characterised by the operation of a particular loom

1/00 Woven fabrics designed to make specified articles

- 1/0005 . {Woven fabrics for safety belts}
- 1/0011 . {Woven fabrics for labels}
- 1/0017 . {Woven household fabrics}
- 1/0023 . . {Mops or wipes}
- 1/0029 . . {Doormats}
- 1/0035 . {Protective fabrics}
- 1/0041 . . {Cut or abrasion resistant}
- 1/0047 . . {Camouflage fabrics}
- 1/0052 . . {Antiballistic fabrics}
- 1/0058 . . {Electromagnetic radiation resistant}
- 1/0064 . . {Noise dampening}
- 1/007 . . {UV radiation protecting}
- 1/0076 . {Photovoltaic fabrics}
- 1/0082 . {Fabrics for printed circuit boards}
- 1/0088 . {Fabrics having an electronic function}
- 1/0094 . {Belts ([D03D 1/0005](#) takes precedence)}
- 1/02 . Inflatable articles
- 1/04 . Sack- or bag-like articles
- 1/06 . Curtain heading tapes
- 1/08 . Ladder tapes ([ladder tapes for venetian blinds E06B 9/382](#))

3/00 Woven fabrics characterised by their shape

- 3/005 . {Tapes or ribbons not otherwise provided for ([D03D 1/0005](#), [D03D 1/0011](#), [D03D 1/06](#), [D03D 1/08](#), [D03D 1/0094](#) take precedence)}
- 3/02 . Tubular fabrics
- 3/04 . Endless fabrics
- 3/06 . Fabrics of varying width
- 3/08 . Arched, corrugated, or like fabrics

5/00 Selvages

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}
- 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 ([fabrics using stretchable or elastic threads D03D 15/08](#))

19/00	Gauze or leno-woven fabrics	41/00	Looms not otherwise provided for, e.g. for weaving chenille yarn; Details peculiar to these looms
21/00	Lappet- or swivel-woven fabrics	41/001	• {Hair-cloth looms}
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	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}
25/00	Woven fabrics not otherwise provided for	43/00	Looms with change-boxes
25/005	• {Three-dimensional woven fabrics}	43/02	• with drop boxes
27/00	Woven pile fabrics	43/04	• . Operating mechanisms
27/02	• wherein the pile is formed by warp or weft	43/06	• with rotary boxes
27/04	• . Weft pile fabrics	43/08	• . Operating mechanisms
27/06	• . Warp pile fabrics	43/10	• Weft catchers, i.e. means for preventing entanglement of wefts
27/08	• . . Terry fabrics	45/00	Looms with automatic weft replenishment
27/10	• . Fabrics woven face-to-face, e.g. double velvet		(automatic replenishment in smallware looms D03D 35/00 , in circular looms D03D 37/00 ; bobbins rewound on loom D03J 1/12)
27/12	• wherein pile tufts are inserted during weaving	45/02	• Controlling replenishment
27/14	• . with tufts around warps	45/04	• . Pirn feelers or other detectors for initiating replenishment (weft stop motions D03D 51/34)
27/16	• . with tufts around wefts	45/06	• . . mechanical
27/18	• Chenille fabrics	45/08	• . . . of the side-slip type
Looms; Methods of weaving characterised by the operation of particular looms		45/10	• . . electrical
29/00	Hand looms	45/12	• . . optical
31/00	Lappet, swivel or other looms for forming embroidery-like decoration on fabrics	45/14	• . Storing the need for replenishment or the colour required until the spent shuttle returns to the replenishing end of the loom
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)	45/16	• . . selecting thereby weft of correct colour
35/00	Smallware looms, i.e. looms for weaving ribbons or other narrow fabrics (D03D 47/00 takes precedence)	45/18	• . Shuttle feelers or other devices for preventing replenishment if shuttle is incorrectly positioned in shuttle box (shuttle stop motions D03D 51/40)
35/005	• {Shuttles}	45/20	• Changing bobbins, cops, or other shuttle stock
37/00	Circular looms (looms for weaving separate fabrics disposed in a circle or polygon D03D 33/00)	45/22	• . effected with shuttle in normal shuttle box
39/00	Pile-fabric looms	45/24	• . effected otherwise than in normal box
39/02	• Axminster looms, i.e. wherein pile tufts are inserted during weaving	45/26	• . Magazines
39/04	• . Spool Axminster looms	45/28	• . . for one type of thread, e.g. same colour
39/06	• . . Tuft yarn tube or spool frames	45/30	• . . . rotary
39/08	• . Gripper Axminster looms	45/32	• . . for several types of thread, e.g. multicolour
39/083	• . . {Selecting mechanisms}	45/34	• Shuttle changing
39/086	• . . {Gripper details}	45/36	• . fresh shuttle being substituted for spent shuttle in the same cell of shuttle box
39/10	• Wire-tapestry looms, e.g. for weaving velvet or Brussels or Wilton carpets, the pile being formed over weftwise wires	45/38	• . Shuttle box with an extra cell which is used only during replenishment
39/12	• . Mechanisms for operating the pile wires	45/40	• . . the spent shuttle being received in the normal cell and the fresh shuttle being picked from the extra cell
39/14	• . Construction of the pile wires, e.g. pile wires which cut	45/42	• . . the spent shuttle being received in the extra cell and the fresh shuttle being picked from the normal cell
39/16	• Double-plush looms, i.e. for weaving two pile fabrics face-to-face	45/44	• . Magazines
39/18	• . Separating the two plush layers, e.g. by cutting	45/46	• . . for one type of thread, e.g. single colour
39/20	• Looms forming pile over warpwise wires	45/48	• . . for several types of threads, e.g. multicolour
39/22	• Terry looms	45/50	• Cutting, holding, manipulating, or disposing of, weft ends
39/223	• . {Cloth control}	45/52	• . Cutting weft of depleted shuttle near shuttle and holding the piece attached to the fabric
39/226	• . {Sley control}	45/54	• . Cutting fresh weft and holding the piece attached to the fabric
39/24	• Devices for cutting the pile on the loom (pile wires which cut D03D 39/14 ; separating two plush layers D03D 39/18)	45/56	• . Cutting depleted and fresh wefts at selvage

- 45/58 . . Removing tip bunch or fresh weft end from fresh bobbin
- 45/60 . . . substantially by air stream or suction
- 45/62 . . Disposing of waste pieces of cut weft end ([D03D 45/58 takes precedence](#))
- 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](#))**
- 47/02 . wherein loops of continuous weft thread are inserted, i.e. double picks
- 47/04 . . by a reciprocating needle having a permanently-threaded eye
- 47/06 . . by a pivoted needle having a permanently-threaded eye
- 47/08 . . . the path of the needle being modified by cams, linkages, or other means
- 47/10 . . by a forked needle pushing loop of weft through shed
- 47/12 . wherein single picks of weft thread are inserted, i.e. with shedding between each pick
- 47/125 . . {Weft holding devices (If the weft is reinserted in the next shed [D03D 47/48](#); in jet looms [D03D 47/308](#))}
- 47/14 . . by a gripper needle taking the end of the weft through the shed
- 47/16 . . by a gripper needle entering the shed empty and drawing the weft as it retracts
- 47/18 . . two weft inserters meeting at or near the middle of the shed and transferring the weft from one to the other
- 47/20 . . Constructional features of the thread-engaging device on the inserters
- 47/22 . . . adapted for working a loop of weft part-way inserted in the shed and then straightened-out
- 47/23 . . . Thread grippers ([in dummy or gripper shuttles D03J 5/06](#))
- 47/233 {Carrying grippers}
- 47/236 {Drawing grippers}
- 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](#))
- 47/25 . . . inserted from only one side of loom
- 47/26 . . Travelling-wave-shed looms
- 47/261 . . . {Preparation of weft}
- 47/262 . . . {Shedding, weft insertion or beat-up mechanisms}
- 47/263 {Weft insertion and beat-up mechanisms}
- 47/265 {Beat-up mechanisms ([D03D 47/263 takes precedence](#))}
- 47/266 {Weft insertion mechanisms ([D03D 47/263 takes precedence](#))}
- 47/267 {Shedding mechanisms}
- 47/268 . . . {Mechanisms for compensating warp tension}
- 47/27 . Drive or guide mechanisms for weft inserting
- 47/271 . . {Rapiers}
- 47/272 . . . {Rapier bands}
- 47/273 . . . {Rapier rods}
- 47/275 . . {Drive mechanisms}
- 47/276 . . . {Details or arrangement of sprocket wheels}
- 47/277 . . {Guide mechanisms ([for shuttles D03D 49/24](#))}
- 47/278 . . . {for pneumatic looms}
- 47/28 . wherein the weft itself is projected into the shed
- 47/30 . . by gas jet
- 47/3006 . . . {Construction of the nozzles}
- 47/3013 {Main nozzles}
- 47/302 {Auxiliary nozzles}
- 47/3026 . . . {Air supply systems}
- 47/3033 {Controlling the air supply}
- 47/304 {Controlling of the air supply to the auxiliary nozzles}
- 47/3046 {Weft yarn selection}
- 47/3053 {Arrangements or lay out of air supply systems}
- 47/306 {Construction or details of parts, e.g. valves, ducts}
- 47/3066 . . . {Control or handling of the weft at or after arrival}
- 47/3073 {Detection means therefor}
- 47/308 {Stretching or holding the weft}
- 47/3086 {Weft removal ([extraction of defective weft after stopping at definite point in weaving cycle D03D 51/085](#))}
- 47/3093 . . . {Displaying data}
- 47/32 . . by liquid jet
- 47/34 . Handling the weft between bulk storage and weft-inserting means
- 47/342 . . {knot detection}
- 47/345 . . {Rotating bobbins}
- 47/347 . . {Yarn brakes ([D03D 47/364 takes precedence](#))}
- 47/36 . . Measuring and cutting the weft {; [Devices for measuring and temporary storing the weft \(\[cutting weft threads D03D 49/70\]\(#\)\)](#)}
- 47/361 . . . {Drum-type weft feeding devices}
- 47/362 {with yarn retaining devices, e.g. stopping pins ([D03D 47/367 takes precedence](#))}
- 47/363 {Construction or control of the yarn retaining devices}
- 47/364 {Yarn braking means acting on the drum}
- 47/365 {Brushes}
- 47/366 {Conical}
- 47/367 {Monitoring yarn quantity on the drum}
- 47/368 . . . {Air chamber storage devices}
- 47/369 . . . {Communication systems}
- 47/38 . . Weft pattern mechanisms
- 47/39 . wherein cane, straw, slats, material for hair-cloth or similar material is handled
- 47/40 . Forming selvages
- 47/42 . . by knitting or interlacing loops of weft
- 47/44 . . . with additional selvage thread
- 47/46 . . by selvage shuttle or other device passing selvage 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}	51/002	. {Avoiding starting marks}
49/027	. . {Arrangements or means for noise reduction}		WARNING
49/04	. Control of the tension in warp or cloth		Not complete, see D03D 51/00
49/06	. . Warp let-off mechanisms (construction of warp beam D02H)	51/005	. {Independent drive motors (independent frame drives for dobbies D03C 1/146 , for other shedding mechanisms D03C 13/02)}
49/08	. . . Warp beam brakes		WARNING
49/10	. . . Driving the warp beam to let the warp off		Not complete pending the completion of a reclassification, see also groups D03D 51/00 and D03D 51/02
49/12	. . Controlling warp tension by means other than let-off mechanisms	51/007	. {Loom optimisation}
49/14	. . . Compensating for tension differences during shedding		WARNING
49/16	. . . Warp supplied by creel		Not complete pending the completion of a reclassification, see also groups D03D 51/00 and D03D 51/02
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)	51/002	. General arrangements of driving mechanism
49/22	. . Back rests; Lease rods; Brest beams	51/04	. Manual controls
49/24	. Mechanisms for inserting shuttle in shed (shuttles per se D03J 5/00)	51/06	. using particular methods of stopping
49/26	. . Picking mechanisms, e.g. for propelling gripper shuttles or dummy shuttles	51/08	. . stopping at definite point in weaving cycle, or moving to such point after stopping
49/28	. . . Driving mechanisms for the picker stick	51/085	. . . {Extraction of defective weft}
49/30	. . . . operated by cam	51/10	. . stopping suddenly
49/32	. . . . operated by previously-loaded spring or equivalent	51/12	. for adjusting speed
49/34	. . . . operated by liquid or gas pressure	51/14	. for reducing speed temporarily
49/36	. . . Pickers; Arresting means therefor (check straps D03D 49/40)	51/16	. for varying speed cyclically
49/38	. . . Picking sticks; Arresting means therefor (check straps D03D 49/40)	51/18	. Automatic stop motions
49/40	. . . Check straps; Lug straps; Similar strap components	51/20	. Warp stop motions
49/42	. . whereby the shuttle is propelled by liquid or gas pressure	51/22	. . . mechanical
49/44	. . whereby the shuttle is propelled by electric or magnetic means	51/24	. . . . wherein droppers are suspended on individual warp threads or small groups of threads
49/46	. . wherein the shuttle is pushed or pulled positively (travelling-wave-shed looms D03D 47/26)	51/26	. . . . Detector healds
49/48	. . positioning shuttle in readiness for picking	51/28	. . . electrical
49/50	. . Miscellaneous devices or arrangements concerning insertion of weft and not otherwise provided for	51/30	. . . . wherein droppers are suspended on individual warp threads or small groups of threads
49/52	. Shuttle boxes (change-boxes D03D 43/00)	51/32	. . . . Detector healds
49/54	. . Braking means; Swells	51/34	. . Weft stop motions
49/56	. . . Shuttle relief mechanisms, i.e. reducing shuttle swell pressure before picking	51/36	. . Centre weft forks
49/58	. Shuttle guards	51/38	. . Side weft forks
49/60	. Construction or operation of slay	51/40	. Shuttle stop motions
49/62	. . Reeds mounted on slay	51/42	. . Loose reed mechanisms
49/64	. . wherein the slay dwells or moves slowly while the weft is being inserted	51/44	. acting on defective operation of loom mechanisms
49/66	. . Shuttle races	51/46	. . . of shedding mechanisms
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)}		
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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 selvages
- 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 of 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 . . Feeler 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 . . Selvage 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