

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, 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 . . {Mobs 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 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}
- 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	39/10	• Wire-tapestry looms, e.g. for weaving velvet or Brussels or Wilton carpets, the pile being formed over weftwise wires
15/04	• woven to produce shapes or effects upon differential shrinkage	39/12	• • Mechanisms for operating the pile wires
15/06	• using scaffolding threads, i.e. threads removed after weaving	39/14	• • Construction of the pile wires, e.g. pile wires which cut
15/08	• using stretchable or elastic threads (woven fabrics whose elastic or stretch properties are due to the manner of weaving D03D 17/00)	39/16	• Double-plush looms, i.e. for weaving two pile fabrics face-to-face
15/10	• using threads having high or low coefficients of friction	39/18	• • Separating the two plush layers, e.g. by cutting
15/12	• using heat-resistant or fireproof threads	39/20	• Looms forming pile over warpwise wires
17/00	Woven fabrics having elastic or stretch properties due to manner of weaving (fabrics using stretchable or elastic threads D03D 15/08)	39/22	• Terry looms
19/00	Gauze or leno-woven fabrics	39/223	• • {Cloth control}
21/00	Lappet- or swivel-woven fabrics	39/226	• • {Sley control}
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	39/24	• Devices for cutting the pile on the loom (pile wires which cut D03D 39/14; separating two plush layers D03D 39/18)
25/00	Woven fabrics not otherwise provided for	41/00	Looms not otherwise provided for, e.g. for weaving chenille yarn; Details peculiar to these looms
25/005	• {Three-dimensional woven fabrics}	41/001	• {Hair-cloth looms}
27/00	Woven pile fabrics	41/002	• {Looms for weaving reed, straw or wood}
27/02	• wherein the pile is formed by warp or weft	41/004	• {Looms for three-dimensional fabrics}
27/04	• • Weft pile fabrics	41/005	• {Linear-shed multiphase looms}
27/06	• • Warp pile fabrics	41/007	• {Vertical looms}
27/08	• • • Terry fabrics	41/008	• {Looms for weaving flat yarns}
27/10	• • Fabrics woven face-to-face, e.g. double velvet	43/00	Looms with change-boxes
27/12	• wherein pile tufts are inserted during weaving	43/02	• with drop boxes
27/14	• • with tufts around warps	43/04	• • Operating mechanisms
27/16	• • with tufts around wefts	43/06	• with rotary boxes
27/18	• Chenille fabrics	43/08	• • Operating mechanisms
		43/10	• Weft catchers, i.e. means for preventing entanglement of wefts
<u>Looms; Methods of weaving characterised by the operation of particular looms</u>		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)
29/00	Hand looms	45/02	• Controlling replenishment
31/00	Lappet, swivel or other looms for forming embroidery-like decoration on fabrics	45/04	• • Pirn feelers or other detectors for initiating replenishment (weft stop motions D03D 51/34)
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)	45/06	• • • mechanical
35/00	Smallware looms, i.e. looms for weaving ribbons or other narrow fabrics (D03D 47/00 takes precedence)	45/08	• • • • of the side-slip type
35/005	• {Shuttles}	45/10	• • • electrical
37/00	Circular looms (looms for weaving separate fabrics disposed in a circle or polygon D03D 33/00)	45/12	• • • optical
39/00	Pile-fabric looms	45/14	• • Storing the need for replenishment or the colour required until the spent shuttle returns to the replenishing end of the loom
39/02	• Axminster looms, i.e. wherein pile tufts are inserted during weaving	45/16	• • • selecting thereby weft of correct colour
39/04	• • Spool Axminster looms	45/18	• • Shuttle feelers or other devices for preventing replenishment if shuttle is incorrectly positioned in shuttle box (shuttle stop motions D03D 51/40)
39/06	• • • Tuft yarn tube or spool frames	45/20	• Changing bobbins, cops, or other shuttle stock
39/08	• • Gripper Axminster looms	45/22	• • effected with shuttle in normal shuttle box
39/083	• • • {Selecting mechanisms}	45/24	• • effected otherwise than in normal box
39/086	• • • {Gripper details}	45/26	• • Magazines
		45/28	• • • for one type of thread, e.g. same colour
		45/30	• • • • rotary
		45/32	• • • for several types of thread, e.g. multicolour
		45/34	• Shuttle changing
		45/36	• • fresh shuttle being substituted for spent shuttle in the same cell of shuttle box
		45/38	• • Shuttle box with an extra cell which is used only during replenishment

- 45/40 . . . the spent shuttle being received in the normal cell and the fresh shuttle being picked from the extra cell
- 45/42 . . . the spent shuttle being received in the extra cell and the fresh shuttle being picked from the normal cell
- 45/44 . . Magazines
- 45/46 . . . for one type of thread, e.g. single colour
- 45/48 . . . for several types of threads, e.g. multicolour
- 45/50 . Cutting, holding, manipulating, or disposing of, weft ends
- 45/52 . . Cutting weft of depleted shuttle near shuttle and holding the piece attached to the fabric
- 45/54 . . Cutting fresh weft and holding the piece attached to the fabric
- 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}
- 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}
- WARNING**
Not complete, see [D03D 51/00](#)
- 51/005 . {Independent drive motors ([independent frame drives for dobies D03C 1/146](#), for other shedding mechanisms [D03C 13/02](#))}
- WARNING**
Not complete pending the completion of a reclassification, see also groups [D03D 51/00](#) and [D03D 51/02](#)
- 51/007 . {Loom optimisation}
- WARNING**
Not complete pending the completion of a reclassification, see also groups [D03D 51/00](#) and [D03D 51/02](#)
- 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 healds
- 51/28 . . . electrical
- 51/30 wherein droppers are suspended on individual warp threads or small groups of threads
- 51/32 Detector healds
- 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	2700/1472	. . 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
<hr/>			
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		