

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.

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

- 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}	49/50	. . Miscellaneous devices or arrangements concerning insertion of weft and not otherwise provided for
47/368	. . . {Air chamber storage devices}	49/52	. Shuttle boxes (change-boxes D03D 43/00)
47/369	. . . {Communication systems}	49/54	. . Braking means; Swells
47/38	. . Weft pattern mechanisms	49/56	. . . Shuttle relief mechanisms, i.e. reducing shuttle swell pressure before picking
47/39	. wherein cane, straw, slats, material for hair-cloth or similar material is handled	49/58	. Shuttle guards
47/40	. Forming selvages	49/60	. Construction or operation of slay
47/42	. . by knitting or interlacing loops of weft	49/62	. . Reeds mounted on slay
47/44	. . . with additional selvage thread	49/64	. . wherein the slay dwells or moves slowly while the weft is being inserted
47/46	. . by sledge shuttle or other device passing selvage thread through loop of weft (by knitting D03D 47/44)	49/66	. . Shuttle races
47/48	. . by inserting cut end of weft in next shed, e.g. by tucking, by blowing	49/68	. Reeds or beat-up combs not mounted on the slay (loose reed stop motion D03D 51/42)
47/50	. . by adhesion	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)
49/00	Details or constructional features not peculiar to looms of a particular type (temples D03J 1/22)	51/00	Driving, starting, or stopping arrangements; Automatic stop motions {(loom control associated with fabric inspection on the loom D03J 1/007)}
49/02	. Construction of loom framework	51/002	. {Avoiding starting marks}
	<u>WARNING</u>	51/005	. {Independent drive motors (independent frame drives for dobbies D03C 1/146 , for other shedding mechanisms D03C 13/02)}
	This group is in the process of being reorganised to its subgroups	51/007	. {Loom optimisation}
49/022	. . {Protective hoods or curtains}	51/02	. General arrangements of driving mechanism
49/025	. . {Ground supports}	51/04	. Manual controls
49/027	. . {Arrangements or means for noise reduction}	51/06	. using particular methods of stopping
49/04	. Control of the tension in warp or cloth	51/08	. . stopping at definite point in weaving cycle, or moving to such point after stopping
49/06	. . Warp let-off mechanisms (construction of warp beam D02H)	51/085	. . . {Extraction of defective weft}
49/08	. . . Warp beam brakes	51/10	. . stopping suddenly
49/10	. . . Driving the warp beam to let the warp off	51/12	. for adjusting speed
49/12	. . Controlling warp tension by means other than let-off mechanisms	51/14	. for reducing speed temporarily
49/14	. . . Compensating for tension differences during shedding	51/16	. for varying speed cyclically
49/16	. . . Warp supplied by creel	51/18	. Automatic stop motions
49/18	. . Devices for indicating warp tension (measuring tension of threads in general G01L 5/04)	51/20	. . Warp stop motions
49/20	. . Take-up motions; Cloth beams (storage racks for beams D02H)	51/22	. . . mechanical
49/22	. . Back rests; Lease rods; Brest beams	51/24	. . . . wherein droppers are suspended on individual warp threads or small groups of threads
49/24	. Mechanisms for inserting shuttle in shed (shuttles per se D03J 5/00)	51/26	. . . . Detector healds
49/26	. . Picking mechanisms, e.g. for propelling gripper shuttles or dummy shuttles	51/28	. . . electrical
49/28	. . . Driving mechanisms for the picker stick	51/30	. . . . wherein droppers are suspended on individual warp threads or small groups of threads
49/30	. . . . operated by cam	51/32	. . . . Detector healds
49/32	. . . . operated by previously-loaded spring or equivalent	51/34	. . Weft stop motions
49/34	. . . . operated by liquid or gas pressure	51/36	. . . Centre weft forks
49/36	. . . Pickers; Arresting means therefor (check straps D03D 49/40)	51/38	. . . Side weft forks
49/38	. . . Picking sticks; Arresting means therefor (check straps D03D 49/40)	51/40	. . Shuttle stop motions
49/40	. . . Check straps; Lug straps; Similar strap components	51/42	. . . Loose reed mechanisms
49/42	. . whereby the shuttle is propelled by liquid or gas pressure	51/44	. . acting on defective operation of loom mechanisms
49/44	. . whereby the shuttle is propelled by electric or magnetic means	51/46	. . . of shedding mechanisms
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		
		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	2700/164	. . Beat-up means
2700/0114	. . . for conveyor belts, brakes, couplings, tyres or belts	2700/166	. . Shuttle changing means
2700/0118	. . . for absorbing shocks	2700/168	. . Driving mechanism for the warp or cloth beam; Shed forming devices
2700/0122	. . Tapes	2700/19	. Take-up motions, also in combination with warp let-off mechanisms; Breast beams
2700/0125	. . . for carrying liquids, e.g. typewriter tape	2700/25	. Devices for weft changing in looms
2700/0129	. . . Memory tapes	2700/26	. Driving or stopping arrangements for looms
2700/0133	. . characterised by the material of warp or weft	2700/265	. . Electric driving arrangements
2700/0137	. . . Combination of different materials	2700/30	. Warp stop motions
2700/014	. . . Warp or weft treated before weaving	2700/305	. . electrical
2700/0144	. . . Use of threads with different characteristics for subsequent treatments	2700/31	. Weft stop motions, also combined with warp stop motions
2700/0148	. . . with glass, carbon or asbestos fibres	2700/313	. . electrical
2700/0151	. . made of paper	2700/316	. . Feeler devices for the weft or the shuttle
2700/0155	. . Industrial fabrics	2700/50	. Pile-fabric looms; Pile fabrics
2700/0159	. . . Screens or filters	2700/53	. . Weaving of loop ribbons or chenille
2700/0162	. . . Paper making felts	2700/54	. . Wire-tapestry looms for warp pile fabrics
2700/0166	. . Fabrics with electric conductors	2700/58	. . Control devices for the warp pile
2700/017	. . Cleaning fabrics or footmats	2700/60	. . Pile fabric weaving in general
2700/0174	. . Fabrics for special use	2700/61	. . Fabrics for fasteners of the touch-and-close type
2700/0177	. . . Absorbing fabrics, e.g. for sanitary towels	2700/80	. Weaving of metallic fabrics
2700/0181	. . . for neckties or shawls	2700/81	. . Shed forming devices
2700/0185	. . . for linings	2700/82	. . Looms with fixed weft bobbins
2700/0188	. . . for curtains	2700/821	. . . Transfer of the weft from the bobbin to the insertion device
2700/0192	. . Fabrics with beads	2700/823	. . . Transfer of the weft after insertion
2700/0196	. . Reinforced fabrics	2700/825	. . . Insertion of the weft
2700/02	. Belts	2700/826	. . . . by means of gripper shuttles
2700/03	. Tubular fabrics or bags; Endless fabrics	2700/828	. . . . by means of gripper needles
2700/10	. Smallware looms	2700/83	. . Selvage forming
2700/101	. . Devices for driving the shuttles	2700/84	. . Transport or guiding of the warp; Warp beams
2700/103	. . Devices for weft insertion from fixed bobbins	2700/85	. . Cloth take-up mechanisms, also combined with warp let-off mechanisms; Breast beams
2700/105	. . Devices for forming the selvages	2700/86	. . Shuttle driving devices
2700/106	. . Devices for changing the shuttles or cops	2700/865	. . . Shuttles
2700/108	. . Devices for driving the warp or cloth beam	2700/87	. . Arrangements for the slay; Construction of the slay
2700/12	. Looms for weaving two or more fabrics at the same time	2700/88	. . Control devices; e.g. for weft or warp
2700/14	. Looms in which bulk supply of weft does not pass through the shed	2700/90	. Pickers or arresting means
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		