

# 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}

##### WARNING

Group [D03D 1/0035](#) is impacted by reclassification into group [D03D 1/0043](#).

Groups [D03D 1/0035](#) and [D03D 1/0043](#) should be considered in order to perform a complete search.

- 1/0041 . . {Cut or abrasion resistant}
- 1/0043 . . {for elongated members, i.e. sleeves}

##### WARNING

Group [D03D 1/0043](#) is incomplete pending reclassification of documents from groups [D03D 1/0035](#) and [D03D 3/02](#).

Groups [D03D 1/0035](#), [D03D 3/02](#) and [D03D 1/0043](#) should be considered in order to perform a complete search.

- 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

##### WARNING

Group [D03D 3/02](#) is impacted by reclassification into group [D03D 1/0043](#).

Groups [D03D 1/0043](#) and [D03D 3/02](#) should be considered in order to perform a complete search.

- 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	<ul style="list-style-type: none"> <li>Fabrics formed with pockets, tubes, loops, folds, tucks, or flaps (<a href="#">fabrics for curtain heading tapes D03D 1/06</a>; <a href="#">fabrics consisting of a single tube D03D 3/02</a>)</li> </ul>	15/247	<ul style="list-style-type: none"> <li>. . . {Mineral}</li> </ul>
		15/25	<ul style="list-style-type: none"> <li>. . . Metal</li> </ul>
		15/258	<ul style="list-style-type: none"> <li>. . . . Noble metal</li> </ul>
		15/267	<ul style="list-style-type: none"> <li>. . . Glass</li> </ul>
		15/275	<ul style="list-style-type: none"> <li>. . . Carbon fibres</li> </ul>
13/00	<p><b>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</b></p> <p><b>WARNING</b></p> <p>Group <a href="#">D03D 13/00</a> is impacted by reclassification into group <a href="#">D07B 7/021</a>.</p> <p>Groups <a href="#">D03D 13/00</a> and <a href="#">D07B 7/021</a> should be considered in order to perform a complete search.</p>	15/283	<ul style="list-style-type: none"> <li>. . synthetic polymer-based, e.g. polyamide or polyester fibres (<a href="#">cellulose-based artificial fibres D03D 15/225</a>)</li> </ul>
		15/292	<ul style="list-style-type: none"> <li>. . Conjugate, i.e. bi- or multicomponent, fibres or filaments</li> </ul> <p><b>WARNING</b></p> <p>Group <a href="#">D03D 15/292</a> is incomplete pending reclassification of documents from group <a href="#">D03D 15/47</a>.</p> <p>Groups <a href="#">D03D 15/47</a> and <a href="#">D03D 15/292</a> should be considered in order to perform a complete search.</p>
13/002	<ul style="list-style-type: none"> <li>{With diagonal warps or wefts}</li> </ul>		
13/004	<ul style="list-style-type: none"> <li>{with weave pattern being non-standard or providing special effects}</li> </ul>		
13/006	<ul style="list-style-type: none"> <li>{With additional leno yarn}</li> </ul>		
13/008	<ul style="list-style-type: none"> <li>{characterised by weave density or surface weight}</li> </ul>	15/30	<ul style="list-style-type: none"> <li>. characterised by the structure of the fibres or filaments</li> </ul> <p><b>WARNING</b></p> <p>Group <a href="#">D03D 15/30</a> is incomplete pending reclassification of documents from group <a href="#">D03D 15/00</a>.</p> <p>Groups <a href="#">D03D 15/00</a> and <a href="#">D03D 15/30</a> should be considered in order to perform a complete search.</p>
15/00	<p><b>Woven fabrics characterised by the material, structure or properties of the fibres, filaments, yarns, threads or other warp or weft elements used</b></p> <p><b>WARNING</b></p> <p>Group <a href="#">D03D 15/00</a> is impacted by reclassification into groups <a href="#">D03D 15/20</a>, <a href="#">D03D 15/208</a>, <a href="#">D03D 15/217</a>, <a href="#">D03D 15/225</a>, <a href="#">D03D 15/233</a>, <a href="#">D03D 15/242</a>, <a href="#">D03D 15/25</a>, <a href="#">D03D 15/275</a>, <a href="#">D03D 15/283</a>, <a href="#">D03D 15/30</a>, <a href="#">D03D 15/37</a>, <a href="#">D03D 15/40</a>, <a href="#">D03D 15/41</a>, <a href="#">D03D 15/50</a>, <a href="#">D03D 15/52</a>, <a href="#">D03D 15/527</a>, <a href="#">D03D 15/547</a>, <a href="#">D03D 15/553</a>, <a href="#">D03D 15/573</a>, <a href="#">D03D 15/587</a>, <a href="#">D03D 15/60</a>, <a href="#">D03D 15/62</a>, and <a href="#">D03D 15/67</a>.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>	15/33	<ul style="list-style-type: none"> <li>. . Ultrafine fibres, e.g. microfibres or nanofibres</li> </ul>
		15/37	<ul style="list-style-type: none"> <li>. . with specific cross-section or surface shape</li> </ul> <p><b>WARNING</b></p> <p>Group <a href="#">D03D 15/37</a> is incomplete pending reclassification of documents from groups <a href="#">D03D 15/00</a> and <a href="#">D03D 15/44</a>.</p> <p>Groups <a href="#">D03D 15/00</a>, <a href="#">D03D 15/44</a>, and <a href="#">D03D 15/37</a> should be considered in order to perform a complete search.</p>
15/20	<ul style="list-style-type: none"> <li>. characterised by the material of the fibres or filaments constituting the yarns or threads</li> </ul> <p><b>WARNING</b></p> <p>Groups <a href="#">D03D 15/20</a>, <a href="#">D03D 15/208</a>, <a href="#">D03D 15/217</a>, <a href="#">D03D 15/225</a>, <a href="#">D03D 15/242</a>, <a href="#">D03D 15/25</a>, <a href="#">D03D 15/275</a>, and <a href="#">D03D 15/283</a> are incomplete pending reclassification of documents from group <a href="#">D03D 15/00</a>.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>	15/40	<ul style="list-style-type: none"> <li>. characterised by the structure of the yarns or threads</li> </ul> <p><b>WARNING</b></p> <p>Groups <a href="#">D03D 15/40</a> and <a href="#">D03D 15/41</a> are incomplete pending reclassification of documents from group <a href="#">D03D 15/00</a>.</p> <p>Groups <a href="#">D03D 15/00</a>, <a href="#">D03D 15/40</a>, and <a href="#">D03D 15/41</a> should be considered in order to perform a complete search.</p>
15/208	<ul style="list-style-type: none"> <li>. . cellulose-based</li> </ul>	15/41	<ul style="list-style-type: none"> <li>. . with specific twist</li> </ul>
15/217	<ul style="list-style-type: none"> <li>. . . natural from plants, e.g. cotton</li> </ul>	15/43	<ul style="list-style-type: none"> <li>. . with differing diameters</li> </ul>
15/225	<ul style="list-style-type: none"> <li>. . . artificial, e.g. viscose</li> </ul>	15/44	<ul style="list-style-type: none"> <li>. . with specific cross-section or surface shape</li> </ul> <p><b>WARNING</b></p> <p>Group <a href="#">D03D 15/44</a> is impacted by reclassification into group <a href="#">D03D 15/37</a>.</p> <p>Groups <a href="#">D03D 15/44</a> and <a href="#">D03D 15/37</a> should be considered in order to perform a complete search.</p>
15/233	<ul style="list-style-type: none"> <li>. . protein-based, e.g. wool or silk</li> </ul> <p><b>WARNING</b></p> <p>Group <a href="#">D03D 15/233</a> is incomplete pending reclassification of documents from groups <a href="#">D03D 15/00</a> and <a href="#">D03D 15/63</a>.</p> <p>Groups <a href="#">D03D 15/00</a>, <a href="#">D03D 15/63</a> and <a href="#">D03D 15/233</a> should be considered in order to perform a complete search.</p>	15/46	<ul style="list-style-type: none"> <li>. . . Flat yarns, e.g. tapes or films</li> </ul>
15/235	<ul style="list-style-type: none"> <li>. . . {Cashmere or silk}</li> </ul>		
15/242	<ul style="list-style-type: none"> <li>. . inorganic, e.g. basalt</li> </ul>		

15/47	<ul style="list-style-type: none"> <li>. . multicomponent, e.g. blended yarns or threads (<a href="#">multicomponent fibres or filaments D03D 15/292</a>)</li> </ul> <p><b>WARNING</b></p> <p>Group <a href="#">D03D 15/47</a> is impacted by reclassification into group <a href="#">D03D 15/292</a>.</p> <p>Groups <a href="#">D03D 15/47</a> and <a href="#">D03D 15/292</a> should be considered in order to perform a complete search.</p>	15/60	<ul style="list-style-type: none"> <li>. . characterised by the warp or weft elements other than yarns or threads</li> </ul> <p><b>WARNING</b></p> <p>Groups <a href="#">D03D 15/60</a> and <a href="#">D03D 15/62</a> are incomplete pending reclassification of documents from group <a href="#">D03D 15/00</a>.</p> <p>Groups <a href="#">D03D 15/00</a>, <a href="#">D03D 15/60</a>, and <a href="#">D03D 15/62</a> should be considered in order to perform a complete search.</p>
15/49	<ul style="list-style-type: none"> <li>. . textured (<a href="#">chenille D03D 27/18</a>); curled; crimped</li> </ul>	15/62	<ul style="list-style-type: none"> <li>. . Cords or ropes</li> </ul>
15/497	<ul style="list-style-type: none"> <li>. . {Knitted threads}</li> </ul>	15/63	<ul style="list-style-type: none"> <li>. . Straps, e.g. leather straps</li> </ul> <p><b>WARNING</b></p> <p>Group <a href="#">D03D 15/63</a> is impacted by reclassification into group <a href="#">D03D 15/233</a>.</p> <p>Groups <a href="#">D03D 15/63</a> and <a href="#">D03D 15/233</a> should be considered in order to perform a complete search.</p>
15/50	<ul style="list-style-type: none"> <li>. . characterised by the properties of the yarns or threads</li> </ul> <p><b>WARNING</b></p> <p>Groups <a href="#">D03D 15/50</a>, <a href="#">D03D 15/527</a>, <a href="#">D03D 15/547</a>, <a href="#">D03D 15/553</a>, <a href="#">D03D 15/573</a>, and <a href="#">D03D 15/587</a> are incomplete pending reclassification of documents from group <a href="#">D03D 15/00</a>.</p> <p>All groups listed in this Warning should be considered in order to perform a complete search.</p>		
15/507	<ul style="list-style-type: none"> <li>. . magnetic</li> </ul>	15/65	<ul style="list-style-type: none"> <li>. . Paper</li> </ul>
15/513	<ul style="list-style-type: none"> <li>. . heat-resistant or fireproof</li> </ul> <p><b>WARNING</b></p> <p>Group <a href="#">D03D 15/513</a> is impacted by reclassification into group <a href="#">D03D 15/52</a>.</p> <p>Groups <a href="#">D03D 15/513</a> and <a href="#">D03D 15/52</a> should be considered in order to perform a complete search.</p>	15/67	<ul style="list-style-type: none"> <li>. . Metal wires</li> </ul> <p><b>WARNING</b></p> <p>Group <a href="#">D03D 15/67</a> is incomplete pending reclassification of documents from groups <a href="#">D03D 15/00</a> and <a href="#">D03D 15/593</a>.</p> <p>Groups <a href="#">D03D 15/00</a>, <a href="#">D03D 15/593</a>, and <a href="#">D03D 15/67</a> should be considered in order to perform a complete search.</p>
15/52	<ul style="list-style-type: none"> <li>. . thermal insulating, e.g. heating or cooling</li> </ul> <p><b>WARNING</b></p> <p>Group <a href="#">D03D 15/52</a> is incomplete pending reclassification of documents from groups <a href="#">D03D 15/00</a> and <a href="#">D03D 15/513</a>.</p> <p>Groups <a href="#">D03D 15/00</a>, <a href="#">D03D 15/513</a>, and <a href="#">D03D 15/52</a> should be considered in order to perform a complete search.</p>	15/68	<ul style="list-style-type: none"> <li>. . Scaffolding threads, i.e. threads removed after weaving</li> </ul>
		15/69	<ul style="list-style-type: none"> <li>. . {Threads with beads}</li> </ul>
		<b>17/00</b>	<b>Woven fabrics having elastic or stretch properties due to manner of weaving (fabrics using stretchable or elastic threads <a href="#">D03D 15/56</a>)</b>
		<b>19/00</b>	<b>Gauze or leno-woven fabrics</b>
		<b>21/00</b>	<b>Lappet- or swivel-woven fabrics</b>
		<b>23/00</b>	<b>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</b>
15/527	<ul style="list-style-type: none"> <li>. . waterproof or water repellent</li> </ul>	<b>25/00</b>	<b>Woven fabrics not otherwise provided for</b>
15/533	<ul style="list-style-type: none"> <li>. . antistatic; electrically conductive</li> </ul>	25/005	<ul style="list-style-type: none"> <li>. . {Three-dimensional woven fabrics}</li> </ul>
15/54	<ul style="list-style-type: none"> <li>. . coloured</li> </ul>	<b>27/00</b>	<b>Woven pile fabrics</b>
15/547	<ul style="list-style-type: none"> <li>. . with optical functions other than colour, e.g. comprising light-emitting fibres</li> </ul>	27/02	<ul style="list-style-type: none"> <li>. . wherein the pile is formed by warp or weft</li> </ul>
15/553	<ul style="list-style-type: none"> <li>. . . with metallic effect (<a href="#">metal D03D 15/25</a>)</li> </ul>	27/04	<ul style="list-style-type: none"> <li>. . Weft pile fabrics</li> </ul>
15/56	<ul style="list-style-type: none"> <li>. . elastic</li> </ul>	27/06	<ul style="list-style-type: none"> <li>. . Warp pile fabrics</li> </ul>
15/567	<ul style="list-style-type: none"> <li>. . Shapes or effects upon shrinkage</li> </ul>	27/08	<ul style="list-style-type: none"> <li>. . . Terry fabrics</li> </ul>
15/573	<ul style="list-style-type: none"> <li>. . Tensile strength</li> </ul>	27/10	<ul style="list-style-type: none"> <li>. . Fabrics woven face-to-face, e.g. double velvet</li> </ul>
15/58	<ul style="list-style-type: none"> <li>. . characterised by the coefficients of friction</li> </ul>	27/12	<ul style="list-style-type: none"> <li>. . wherein pile tufts are inserted during weaving</li> </ul>
15/587	<ul style="list-style-type: none"> <li>. . adhesive; fusible</li> </ul>	27/14	<ul style="list-style-type: none"> <li>. . with tufts around warps</li> </ul>
15/593	<ul style="list-style-type: none"> <li>. . Stiff materials, e.g. cane or slat</li> </ul> <p><b>WARNING</b></p> <p>Group <a href="#">D03D 15/593</a> is impacted by reclassification into group <a href="#">D03D 15/67</a>.</p> <p>Groups <a href="#">D03D 15/593</a> and <a href="#">D03D 15/67</a> should be considered in order to perform a complete search.</p>	27/16	<ul style="list-style-type: none"> <li>. . with tufts around wefts</li> </ul>
		27/18	<ul style="list-style-type: none"> <li>. . Chenille fabrics</li> </ul>
		<b><u>Looms; Methods of weaving characterised by the operation of particular looms</u></b>	
		<b>29/00</b>	<b>Hand looms</b>

<b>31/00</b>	<b>Lappet, swivel or other looms for forming embroidery-like decoration on fabrics</b>	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
<b>33/00</b>	<b>Multiple looms, i.e. two or more looms assembled together, whether or not they have mechanisms in common (<a href="#">D03D 35/00</a> takes precedence)</b>	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 ( <a href="#">shuttle stop motions D03D 51/40</a> )
<b>35/00</b>	<b>Smallware looms, i.e. looms for weaving ribbons or other narrow fabrics (<a href="#">D03D 47/00</a> takes precedence)</b>		
35/005	. {Shuttles}	45/20	. Changing bobbins, cops, or other shuttle stock
		45/22	. . effected with shuttle in normal shuttle box
<b>37/00</b>	<b>Circular looms (looms for weaving separate fabrics disposed in a circle or polygon <a href="#">D03D 33/00</a>)</b>	45/24	. . effected otherwise than in normal box
		45/26	. . Magazines
<b>39/00</b>	<b>Pile-fabric looms</b>	45/28	. . . for one type of thread, e.g. same colour
39/02	. Axminster looms, i.e. wherein pile tufts are inserted during weaving	45/30	. . . . rotary
		45/32	. . . for several types of thread, e.g. multicolour
39/04	. . Spool Axminster looms	45/34	. Shuttle changing
39/06	. . . Tuft yarn tube or spool frames	45/36	. . fresh shuttle being substituted for spent shuttle in the same cell of shuttle box
39/08	. . Gripper Axminster looms		
39/083	. . . {Selecting mechanisms}	45/38	. . Shuttle box with an extra cell which is used only during replenishment
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	45/40	. . . the spent shuttle being received in the normal cell and the fresh shuttle being picked from the extra cell
39/12	. . Mechanisms for operating the pile wires	45/42	. . . the spent shuttle being received in the extra cell and the fresh shuttle being picked from the normal cell
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	45/44	. . Magazines
		45/46	. . . for one type of thread, e.g. single colour
39/18	. . Separating the two plush layers, e.g. by cutting	45/48	. . . for several types of threads, e.g. multicolour
39/20	. Looms forming pile over warpwise wires	45/50	. Cutting, holding, manipulating, or disposing of, weft ends
39/22	. Terry looms		
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}		
39/24	. Devices for cutting the pile on the loom ( <a href="#">pile wires which cut D03D 39/14</a> ; <a href="#">separating two plush layers D03D 39/18</a> )	45/54	. . Cutting fresh weft and holding the piece attached to the fabric
		45/56	. . Cutting depleted and fresh wefts at selvage
<b>41/00</b>	<b>Looms not otherwise provided for, e.g. for weaving chenille yarn; Details peculiar to these looms</b>	45/58	. . Removing tip bunch or fresh weft end from fresh bobbin
41/001	. {Hair-cloth looms}	45/60	. . . substantially by air stream or suction
41/002	. {Looms for weaving reed, straw or wood}	45/62	. . Disposing of waste pieces of cut weft end ( <a href="#">D03D 45/58</a> takes precedence)
41/004	. {Looms for three-dimensional fabrics}		
41/005	. {Linear-shed multiphase looms}	<b>47/00</b>	<b>Looms in which bulk supply of weft does not pass through shed, e.g. shuttleless looms, gripper shuttle looms, dummy shuttle looms (<a href="#">circular looms D03D 37/00</a>)</b>
41/007	. {Vertical looms}		
41/008	. {Looms for weaving flat yarns}		
<b>43/00</b>	<b>Looms with change-boxes</b>	47/02	. wherein loops of continuous weft thread are inserted, i.e. double picks
43/02	. with drop boxes		
43/04	. . Operating mechanisms	47/04	. . by a reciprocating needle having a permanently-threaded eye
43/06	. with rotary boxes		
43/08	. . Operating mechanisms	47/06	. . by a pivoted needle having a permanently-threaded eye
43/10	. Weft catchers, i.e. means for preventing entanglement of wefts	47/08	. . . the path of the needle being modified by cams, linkages, or other means
<b>45/00</b>	<b>Looms with automatic weft replenishment (<a href="#">automatic replenishment in smallware looms D03D 35/00</a>, in circular looms <a href="#">D03D 37/00</a>; bobbins rewound on loom <a href="#">D03J 1/12</a>)</b>	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
45/02	. Controlling replenishment	47/125	. . {Weft holding devices (if the weft is reinserted in the next shed <a href="#">D03D 47/48</a> ; in jet looms <a href="#">D03D 47/308</a> )}
45/04	. . Pirm feelers or other detectors for initiating replenishment ( <a href="#">weft stop motions D03D 51/34</a> )		
45/06	. . . mechanical	47/14	. . by a gripper needle taking the end of the weft through the shed
45/08	. . . . of the side-slip type		
45/10	. . . electrical		

- 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](#)}
- 51/005 . {[Independent drive motors \(independent frame drives for dobbies D03C 1/146, for other shedding mechanisms D03C 13/02\)](#)}
- 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 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