

CPC COOPERATIVE PATENT CLASSIFICATION

D TEXTILES; PAPER

TEXTILES OR FLEXIBLE MATERIALS NOT OTHERWISE PROVIDED FOR

D05 SEWING; EMBROIDERING; TUFTING

D05B SEWING (appliances for the tailoring trade [A41H](#); sewing tables [A47B 29/00](#); sewing in bookbinding [B42B 2/00](#); sewing machines modified for knitting [D04B 39/08](#))

NOTE

In this subclass, the groups designating sewing apparatus or machines cover also sewing processes dependent on their use, and the thread seams produced thereby

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.

1/00	General types of sewing apparatus or machines without mechanism for lateral movement of the needle or the work or both	3/12	• for fastening articles by sewing
1/02	• for making single-thread seams	3/14	• • perforated or press buttons
1/04	• • Running-stitch seams	3/16	• • shank buttons
1/06	• • Single chain-stitch seams	3/18	• • hooks or eyelets
1/08	• for making multi-thread seams	3/20	• • labels (labelling fabrics otherwise than by sewing B65C 5/00 ; labels or securing means therefor, in general G09F 3/00)
1/10	• • Double chain-stitch seams	3/22	• • Article-, e.g. button-, feed mechanisms therefor { (work-handling elements for attaching small textile pieces D05B 35/066) }
1/12	• • Lock-stitch seams	3/24	• formed by general-purpose sewing machines modified by attachments, e.g. by detachable devices
1/14	• • Combined or alternative chain-stitch and lock-stitch seams	3/243	• • { for embroidering, e.g. monograms }
1/16	• • Pseudo-lock-stitch seams in which the thread loops do not positively interlock (shoe or welt sewing machines D05B 15/02)	3/246	• • { for darning }
1/18	• • Seams for protecting or securing edges (zig-zag sewing machines D05B 3/02, D05B 3/04)	5/00	Sewing machines for temporarily connecting articles, e.g. pairs of socks
1/20	• • • Overedge seams	7/00	Linking machines, e.g. for joining knitted fabrics
1/22	• • • • combined with joining or securing seams	9/00	Hem-stitch sewing machines
1/24	• for making blind-stitch seams	11/00	Machines for sewing quilts or mattresses (control of workpiece-holding frames, or of sewing machines, in order to obtain particular seam configuration D05B 21/00)
1/26	• for making fluid-tight seams (sewing machines for concurrently making thread and welded seams D05B 17/00)	11/005	• { for sewing the edges of mattresses }
Special-purpose or automatic sewing apparatus or machines { (surgical sewing machines A61B 17/0491) }		13/00	Machines for sewing sacks
3/00	Sewing apparatus or machines with mechanism for lateral movement of the needle or the work or both for making ornamental pattern seams, for sewing buttonholes, for reinforcing openings or for fastening articles, e.g. buttons, by sewing (program-controlled sewing machines D05B 19/00; with devices for automatically controlling movement of work-carrier D05B 21/00)	13/02	• for closing filled bags or sacks (combined with bag- or sack-filling apparatus B65B)
3/02	• with mechanisms for needle-bar movement	15/00	Machines for sewing leather goods (making pseudo-lock-stitch seams D05B 1/16)
3/025	• • { with a pair of needles mounted on the needle-bar }	15/005	• { Corner sewing of suitcases or bags }
3/04	• with mechanisms for work feed	15/02	• Shoe sewing machines
3/06	• for sewing buttonholes ({ detachable devices D05B 3/24 ; } buttonholes A41F 1/02)	15/025	• • { for sewing moccasin-type seams }
3/08	• • for buttonholes with eyelet ends	15/04	• • for lock-stitch work (D05B 15/08 takes precedence)
3/10	• for making piped openings	15/06	• • Welt sewing machines
		15/08	• • • for lock-stitch work
		15/10	• • Lining sewing machines

17/00	Sewing machines for concurrently making thread and welded seams (for making non-welded fluid-tight seams D05B 1/26)	25/00	Sewing units consisting of combinations of several sewing machines
19/00	Program-controlled sewing machines (with devices for automatically controlling movement of work-carrier D05B 21/00; devices for stopping drive when sewing tools have reached a predetermined position D05B 69/22)	<u>Sewing-machine elements for feeding, positioning, handling, or treating the work</u>	
19/003	. {Zig-zag sewing machines with electric or electronic programming}	27/00	Work-feeding means
19/006	. {Control knobs or display means (D05B 19/085 , D05B 19/105 take precedence)}	27/02	. with feed dogs having horizontal and vertical movements
19/02	. Sewing machines having electronic memory or microprocessor control unit	27/04	. . arranged above the workpieces
19/04	. . characterised by memory aspects	27/06	. . arranged above and below the workpieces
19/06	. . . Physical exchange of memory	27/08	. . with differential feed motions
19/08	. . . Arrangements for inputting stitch or pattern data to memory {; Editing stitch or pattern data}	27/10	. with rotary circular feed members
19/085 {Physical layout of switches or displays; Switches co-operating with the display}	27/12	. . rotating continuously
19/10	. . . Arrangements for selecting combinations of stitch or pattern data from memory {; Handling data in order to control stitch format, e.g. size, direction, mirror image}	27/14	. . rotating discontinuously
19/105 {Physical layout of switches or displays; Switches co-operating with the display}	27/16	. . with differential feed motions
19/12	. . characterised by control of operation of machine	27/18	. . Feed cups
19/14	. . . Control of needle movement, e.g. varying amplitude or period of needle movement	27/185	. . . {Guides or supports for the work presented to the feed cups, e.g. uncurling guides}
19/16	. . . Control of workpiece movement, e.g. modulation of travel of feed dog	27/20	. constituted by sewing needles
21/00	Sewing machines with devices for automatically controlling movement of work-carrier relative to stitch-forming mechanism in order to obtain particular configuration of seam, e.g. program-controlled for sewing collars or for attaching pockets	27/22	. with means for setting length of stitch
21/002	. {consisting of lateral displacement of the workpieces by a feed-dog or a fluted presser foot}	27/24	. Feed-dog lifting and lowering devices
21/005	. {to obtain spiral seams (fixed or adjustable pin holding the work for spiral stitching D05B 35/107)}	27/26	. in machines for sewing leather
21/007	. {to obtain circular or elliptical seams (fixed or adjustable pin holding the work for circular stitching D05B 35/107)}	29/00	Pressers; Presser feet (for feeding D05B 27/04)
23/00	Sewing apparatus or machines not otherwise provided for (for making zip closures A44B 19/00)	29/02	. Presser-control devices
23/001	. {Straw hat sewing machines}	29/04	. Pressers in machines for sewing leather
23/002	. {Hat hemming sewing machines}	29/06	. Presser feet
23/003	. {Sewing machines for straw cases, wisps of straw or canvas shoes}	29/08	. . comprising relatively-movable parts
23/004	. {Sewing machines for ribbing corsets}	29/10	. . with rollers
23/005	. {Sewing machines specially adapted for binding or uniting carpets}	29/12	. Presser-foot attachment
23/006	. {Sewing machines for making cylindrical articles}	31/00	Workpiece holders or hold-downs in machines for sewing leather
23/007	. {Sewing units for assembling parts of knitted panties or closing the stocking toe part}	31/02	. Welt guides
23/008	. . {Line closers, i.e. sewing units for forming the body portion of the panty hose}	33/00	Devices incorporated in sewing machines for supplying or removing the work
23/009	. . {Toe closers}	33/003	. {by equal steps of adjustable length, e.g. for automatically positioning successive buttonhole locations}
		33/006	. {Feeding workpieces separated from piles, e.g. unstacking}
		33/02	. and connected, for synchronous operation, with the work-feeding devices of the sewing machine
		35/00	Work-feeding or -handling elements not otherwise provided for
		35/02	. for facilitating seaming; Hem-turning elements; Hemmers {(D05B 35/062 takes precedence)}
		35/04	. . with movable tools
		35/06	. for attaching bands, ribbons, strips, or tapes or for binding
		35/062	. . {with hem-turning (D05B 35/066 takes precedence)}
		35/064	. . {for attaching slide fasteners (connection of the interlocking member to the stringer tape A44B 19/40)}
		35/066	. . {for attaching small textile pieces, e.g. labels, belt loops}
		35/068	. . . {for attaching belt loops}
		35/08	. for ruching, gathering, casing, or filling lace, ribbons, or bindings; Pleating devices; Cuttlers; Gathering feet; Crimpers; Curlers; Rufflers
		35/085	. . {for making folds transversely to the sewing direction}

35/10	• Edge guides	55/10	• Needle bars for multiple-needle sewing machines
35/102	• • {Edge guide control systems with edge sensors}	55/12	• • with provision for varying the distance between the needles
35/105	• • {Guiding while stretching the workpiece, e.g. by means of weighted clips}	55/14	• Needle-bar drives
35/107	• • {Fixed or adjustable pin holding the work, e.g. for circular or spiral stitching}	55/16	• • with provision for disengaging individual needle bars
35/12	• Indicators for positioning work, e.g. with graduated scales	57/00	Loop takers, e.g. loopers
37/00	Devices incorporated in sewing machines for slitting, grooving, or cutting (severing sewing-threads D05B 65/00)	57/02	• for chain-stitch sewing machines, e.g. oscillating
37/02	• Slitting or grooving devices	57/04	• • rotary
37/04	• Cutting devices	57/06	• for overedge-stitch sewing machines
37/06	• • with oscillating tools	57/08	• for lock-stitch sewing machines
37/063	• • • {in synchronism with the movement of the needle bar or the work-feeding means}	57/10	• • Shuttles
37/066	• • • • {Pinking}	57/12	• • • oscillating
37/08	• • with rotatable tools	57/14	• • • with rotary hooks
37/085	• • • {Pinking}	57/143	• • • • {Vertical axis type}
37/10	• • with heated tools	57/146	• • • • {Inclined axis type}
39/00	Workpiece carriers (for automatically controlling movement of work-carrier to obtain particular configuration of seam D05B 21/00; in general A41H 15/00)	57/16	• • • with bobbin casings guided in tracks
39/005	• {Quilting frames}	57/18	• • • with bobbin casings held by removable caps
41/00	Work-collecting devices	57/20	• • • with bobbin casings held by magnetic forces
<u>Sewing-machine elements for supplying, handling, or treating thread material</u>		57/22	• • with spool-size bobbin for lower thread
43/00	Spool-pin assemblies incorporated in sewing machines	57/24	• • • with lower-thread packages mounted for controlled sliding movements
45/00	Applications of measuring devices for determining the length of threads used in sewing machines (measuring devices in embroidery machines D05C, in general G01B)	57/26	• Bobbin holders or casings; Bobbin holder or case guards; Bobbin discharge devices
47/00	Needle-thread tensioning devices; Applications of tensometers	57/265	• • {for looptakers with vertical axis}
47/02	• Manually-controlled tensioning devices	57/28	• Applications of bobbins for storing the lower thread
47/04	• Automatically-controlled tensioning devices	57/30	• Driving-gear for loop takers
47/06	• Applications of tensometers (application of tension indicators in handling thin or filamentary material B65H 59/40 ; for embroidery machines D05C 11/08 ; tensometers in general G01L)	57/32	• • in chain-stitch sewing machines
49/00	Take-up devices, e.g. levers, for the needle thread	57/34	• • in overedge-stitch sewing machines
49/02	• operated by cams or linkages	57/36	• • in lock-stitch sewing machines
49/04	• rotary	57/38	• • • Shuttle drives
49/06	• for machines for sewing leather	59/00	Applications of bobbin-winding or -changing devices; Indicating or control devices associated therewith
51/00	Applications of needle-thread guards; Thread-break detectors (for embroidery machines D05C 11/00)	59/02	• Devices for determining or indicating the length of thread still on the bobbin
53/00	Thread- or cord-laying mechanisms; Thread fingers	59/04	• Devices for changing the bobbin
55/00	Needle holders; Needle bars (needles D05B 85/00)	61/00	Loop holders; Loop spreaders; Stitch-forming fingers
55/02	• Devices for fastening needles to needle bars	63/00	Devices associated with the loop-taker thread, e.g. for tensioning
55/04	• Devices for inserting needles	63/02	• Loop-taker thread take-up levers
55/06	• Needle guides; Needle protectors (finger-protecting devices D05B 83/00)	63/04	• Loop-taker thread guards
55/08	• Driving arrangements for curved needles	65/00	Devices for severing the needle or lower thread
		65/003	• {the thread being engaged manually against the cutting edge of a fixedly arranged knife}
		65/006	• {with heated tools}
		65/02	• controlled by the sewing mechanisms {(D05B 65/006 takes precedence)}
		65/04	• controlled by the workpieces {(D05B 65/006 takes precedence)}
		65/06	• and for disposing of the severed thread end {; Catching or wiping devices for the severed thread }
		67/00	Devices incorporated in sewing machines for lubricating, waxing, or colouring the threads
		<u>Driving-gear, control, lubricating, or cooling devices for sewing machines</u>	
		69/00	Driving-gear; Control devices

69/02	. Mechanical drives
69/04	. . Manual drives
69/06	. . Pedal drives
69/08	. Fluid drives, e.g. pneumatic
69/10	. Electrical or electromagnetic drives
69/12	. . using rotary electric motors
69/125	. . . {Arrangement of clutch-brake construction}
69/14	. Devices for changing speed or for reversing direction of rotation
69/16	. . mechanical
69/18	. . electric {, e.g. foot pedals}
69/20	. Control devices responsive to the number of stitches made
69/22	. Devices for stopping drive when sewing tools have reached a predetermined position (electric motor control systems in general H02P)
69/24	. . Applications of devices for indicating or ascertaining sewing-tool position
69/26	. . with automatic means to reduce speed of drive, e.g. in one or more steps
69/28	. Applications of servo devices for tool-positioning purposes
69/30	. Details (work-feeding drives D05B 27/00; needle-bar drives D05B 55/14; loop-taker drives D05B 57/30)
69/32	. . Vibration-minimising devices
69/34	. . Hand-wheel clutches
69/36	. Devices for stopping drive when abnormal conditions occur, e.g. thread breakage
71/00	Lubricating or cooling devices
71/02	. Loop-taker lubricating devices
71/04	. Needle cooling devices

Casings, supports, covers, or accessories for sewing machines; Sewing machines combined with auxiliary devices serving purposes other than sewing

73/00	Casings
73/005	. {Doors or covers for accessing inner parts of the machine; Security devices therefor}
73/02	. Upper casings
73/04	. Lower casings
73/06	. . for free-arm sewing machines
73/08	. . for column-type sewing machines
73/10	. . Devices for converting free-arm sewing machines into flat-bed machines
73/12	. . Slides; Needle plates
75/00	Frames, stands, tables, or other furniture adapted to carry sewing machines (furniture aspects A47B, A47C)
75/02	. for drop-head sewing machines
75/04	. with noise-suppressing devices
75/06	. Arrangements, e.g. hinges, for mounting sewing-machine casings to frames, stands, or tables
77/00	Covers, or portable enclosures, for sewing machines
79/00	Incorporations or adaptations of lighting equipment
81/00	Sewing machines incorporating devices serving purposes other than sewing, e.g. for blowing air, for grinding

83/00 Guards or like devices for preventing injury to operator (machine safety devices in general F16P)

Needles; Needle threaders; Seam-ripping devices

85/00	Needles (surgical needles A61B 17/06; manufacture of needles B21G 1/00)
85/003	. {with two tips and an eye in the middle}
85/006	. {Hooked needles}
85/02	. with slotted eyes {, i.e. with a slit leading to the eye for thread insertion}
85/04	. Spring or bearded needles
85/06	. Curved needles
85/08	. Flexible needles
85/10	. Hollow needles
85/12	. Coated needles
85/14	. Latch needles
87/00	Needle- {or looper-} threading devices
87/02	. with mechanical means for moving thread through needle {or looper} eye
87/04	. with optical devices to assist threading
89/00	Seam-ripping devices

Hand sewing

91/00	Tools, implements, or accessories for hand sewing (needles, needle threaders D05B 85/00, D05B 87/00; appliances for the tailoring trade A41H)
91/02	. Bodkins
91/04	. Thimbles; Finger shields; Palm protectors
91/06	. Work holders or supports
91/08	. . Mushrooms; Darning eggs
91/10	. . Hoops or frames (for embroidery D05C)
91/12	. Tool receptacles
91/14	. Thread-spool pins
91/16	. Thread-spool receptacles
93/00	Stitches; Stitch seams
93/02	. strengthened by auxiliary elements, e.g. rivets, staples
95/00	Preparatory or finishing operations in connection with hand sewing
95/04	. Softening material prior to sewing
95/06	. Flattening, pounding, or pressing stitched seams (in shoemaking A43D 8/44)
97/00	Hand sewing processes or apparatus for special work or not otherwise provided for
97/02	. Hand-guided apparatus
97/04	. for darning
97/06	. . using apparatus with latch or bearded needles
97/08	. using special threads or wires
97/10	. for attaching buttons or fasteners
97/12	. for attaching patches or like small pieces of fabric