

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.

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| 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 |

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| 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} |

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| 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 |

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| 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

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| 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

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| 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

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| 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 |