

**CPC****COOPERATIVE PATENT CLASSIFICATION****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

**D05B 1/00**

**General types of sewing apparatus or machines without mechanism for lateral movement of the needle or the work or both**

- D05B 1/02 . for making single-thread seams
- D05B 1/04 . . Running-stitch seams
- D05B 1/06 . . Single chain-stitch seams
- D05B 1/08 . for making multi-thread seams
- D05B 1/10 . . Double chain-stitch seams
- D05B 1/12 . . Lock-stitch seams
- D05B 1/14 . . Combined or alternative chain-stitch and lock-stitch seams
- D05B 1/16 . . Pseudo-lock-stitch seams in which the thread loops do not positively interlock (shoe or welt sewing machines [D05B 15/02](#))
- D05B 1/18 . . Seams for protecting or securing edges (zig-zag sewing machines [D05B 3/02](#), [D05B 3/04](#))
- D05B 1/20 . . . Overedge seams
- D05B 1/22 . . . . combined with joining or securing seams
- D05B 1/24 . for making blind-stitch seams
- D05B 1/26 . for making fluid-tight seams (sewing machines for concurrently making thread and welded seams [D05B 17/00](#))

**Special-purpose or automatic sewing apparatus or machines** {(Surgical sewing machines [A61B 17/0491](#))}

**D05B 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** (programme-controlled sewing machines [D05B 19/00](#); with devices for automatically controlling movement of work-carrier [D05B 21/00](#))

- D05B 3/02 . with mechanisms for needle-bar movement
- D05B 3/025 . . {with a pair of needles mounted on the needle-bar}
- D05B 3/04 . with mechanisms for work feed
- D05B 3/06 . for sewing buttonholes ({detachable devices [D05B 3/24](#);} buttonholes [A41F 1/02](#))
- D05B 3/08 . . for buttonholes with eyelet ends

- D05B 3/10
  - for making piped openings
- D05B 3/12
  - for fastening articles by sewing
- D05B 3/14
  - . perforated or press buttons
- D05B 3/16
  - . shank buttons
- D05B 3/18
  - . hooks or eyelets
- D05B 3/20
  - . labels (labelling fabrics otherwise than by sewing [B65C 5/00](#); labels or securing means therefor, in general [G09F 3/00](#))
- D05B 3/22
  - . Article-, e.g. button-, feed mechanisms therefor {(work-handling elements for attaching small textile pieces [D05B 35/066](#))}
- D05B 3/24
  - formed by general-purpose sewing machines modified by attachments, e.g. by detachable devices
- D05B 3/243
  - . {for embroidering, e.g. monograms}
- D05B 3/246
  - . {for darning}
- D05B 5/00** **Sewing machines for temporarily connecting articles, e.g. pairs of socks**
- D05B 7/00** **Linking machines, e.g. for joining knitted fabrics**
- D05B 9/00** **Hem-stitch sewing machines**
- D05B 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](#))
- D05B 11/005
  - {for sewing the edges of mattresses}
- D05B 13/00** **Machines for sewing sacks**
- D05B 13/02
  - for closing filled bags or sacks (combined with bag- or sack-filling apparatus [B65B](#))
- D05B 15/00** **Machines for sewing leather goods** (making pseudo-lock-stitch seams [D05B 1/16](#))
- D05B 15/005
  - {Corner sewing of suitcases or bags}
- D05B 15/02
  - Shoe sewing machines
- D05B 15/025
  - . {for sewing moccasin-type seams}
- D05B 15/04
  - . for lock-stitch work ([D05B 15/08](#) takes precedence)
- D05B 15/06
  - . Welt sewing machines
- D05B 15/08
  - . . for lock-stitch work
- D05B 15/10
  - . Lining sewing machines
- D05B 17/00** **Sewing machines for concurrently making thread and welded seams** (for making non-welded fluid-tight seams [D05B 1/26](#))

**D05B 19/00**

**Programme-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](#))

**WARNING**

Group [D05B 19/003](#) is no longer used for classification of new documents. The backlog of this group is being continuously reclassified to groups [D05B 19/02](#) to [D05B 19/16](#)

- [D05B 19/003](#) . {Zig-zag sewing machines with electric or electronic programming}
- [D05B 19/006](#) . {Control knobs or display means ([D05B 19/085](#), [D05B 19/105](#) take precedence)}
- [D05B 19/02](#) . Sewing machines having electronic memory or micro-processor control unit
- [D05B 19/04](#) . . characterised by memory aspects
- [D05B 19/06](#) . . . Physical exchange of memory
- [D05B 19/08](#) . . . Arrangements for inputting stitch or pattern data to memory; {Editing stitch or pattern data}
- [D05B 19/085](#) . . . . {Physical layout of switches or displays; Switches co-operating with the display}
- [D05B 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}
- [D05B 19/105](#) . . . . {Physical layout of switches or displays; Switches co-operating with the display}
- [D05B 19/12](#) . . characterised by control of operation of machine
- [D05B 19/14](#) . . . Control of needle movement, e.g. varying amplitude or period of needle movement
- [D05B 19/16](#) . . . Control of workpiece movement, e.g. modulation of travel of feed dog

**D05B 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. programme-controlled for sewing collars, for attaching pockets**

- [D05B 21/002](#) . {consisting of lateral displacement of the workpieces by a feed-dog or a fluted presser foot}
- [D05B 21/005](#) . {to obtain spiral seams (fixed or adjustable pin holding the work for spiral stitching [D05B 35/107](#))}
- [D05B 21/007](#) . {to obtain circular or elliptical seams (fixed or adjustable pin holding the work for circular stitching [D05B 35/107](#))}

**D05B 23/00**

**Sewing apparatus or machines not otherwise provided for** (for making zip closures [A44B 19/00](#))

- [D05B 23/001](#) . {Straw hat sewing machines}
- [D05B 23/002](#) . {Hat hemming sewing machines}
- [D05B 23/003](#) . {Sewing machines for straw cases, wisps of straw or canvas shoes}
- [D05B 23/004](#) . {Sewing machines for ribbing corsets}
- [D05B 23/005](#) . {Sewing machines specially adapted for binding or uniting carpets}

- D05B 23/006 . {Sewing machines for making cylindrical articles}
- D05B 23/007 . {Sewing units for assembling parts of knitted panties or closing the stocking toe part}
- D05B 23/008 . . {Line closers, i.e. sewing units for forming the body portion of the panty hose}
- D05B 23/009 . . {Toe closers}
- D05B 25/00        Sewing units consisting of combinations of several sewing machines**

#### **Sewing-machine elements for feeding, positioning, handling, or treating the work**

- D05B 27/00        Work-feeding means**
- D05B 27/02 . with feed dogs having horizontal and vertical movements
- D05B 27/04 . . arranged above the workpieces
- D05B 27/06 . . arranged above and below the workpieces
- D05B 27/08 . . with differential feed motions
- D05B 27/10 . with rotary circular feed members
- D05B 27/12 . . rotating continuously
- D05B 27/14 . . rotating discontinuously
- D05B 27/16 . . with differential feed motions
- D05B 27/18 . . Feed cups
- D05B 27/185 . . . {Guides or supports for the work presented to the feed cups, e.g. uncurling guides}
- D05B 27/20 . constituted by sewing needles
- D05B 27/22 . with means for setting length of stitch
- D05B 27/24 . Feed-dog lifting and lowering devices
- D05B 27/26 . in machines for sewing leather
- D05B 29/00        Pressers; Presser feet (for feeding [D05B 27/04](#))**
- D05B 29/02 . Presser-control devices
- D05B 29/04 . Pressers in machines for sewing leather
- D05B 29/06 . Presser feet
- D05B 29/08 . . comprising relatively-movable parts
- D05B 29/10 . . with rollers
- D05B 29/12 . Presser-foot attachment
- D05B 31/00        Workpiece holders or hold-downs in machines for sewing leather**
- D05B 31/02 . Welt guides
- D05B 33/00        Devices incorporated in sewing machines for supplying or removing the work**
- D05B 33/003 . {by equal steps of adjustable length, e.g. for automatically positioning successive buttonhole locations}

- D05B 33/006 . {Feeding workpieces separated from piles, e.g. unstacking}
- D05B 33/02 . and connected, for synchronous operation, with the work-feeding devices of the sewing machine
  
- D05B 35/00** **Work-feeding or -handling elements not otherwise provided for**
- D05B 2035/005 . {Sewing machines for uniting carpets with or without presence of a seaming ribbon}
- D05B 35/02 . for facilitating seaming; Hem-turning elements; Hemmers {(D05B 35/062 takes precedence)}
- D05B 35/04 . . with movable tools
- D05B 35/06 . for attaching bands, ribbons, strips, or tapes or for binding
- D05B 35/062 . . {with hem-turning (D05B 35/066 takes precedence)}
- D05B 35/064 . . {for attaching slide fasteners (connection of the interlocking member to the stringer tape A44B 19/40)}
- D05B 35/066 . . {for attaching small textile pieces, e.g. labels, belt loops}
- D05B 35/068 . . . {for attaching belt loops}
- D05B 35/08 . for ruching, gathering, casing, or filling lace, ribbons, or bindings; Pleating devices; Cuttlers; Gathering feet; Crimpers; Curlers; Rufflers
- D05B 35/085 . . {for making folds transversely to the sewing direction}
- D05B 35/10 . Edge guides
- D05B 35/102 . . {Edge guide control systems with edge sensors}
- D05B 35/105 . . {Guiding while stretching the workpiece, e.g. by means of weighted clips}
- D05B 35/107 . . {Fixed or adjustable pin holding the work, e.g. for circular or spiral stitching}
- D05B 35/12 . Indicators for positioning work, e.g. with graduated scales
  
- D05B 37/00** **Devices incorporated in sewing machines for slitting, grooving, or cutting (severing sewing-threads D05B 65/00)**
- D05B 37/02 . Slitting or grooving devices
- D05B 37/04 . Cutting devices
- D05B 37/06 . . with oscillating tools
- D05B 37/063 . . . {in synchronism with the movement of the needle bar or the work-feeding means}
- D05B 37/066 . . . . {Pinking}
- D05B 37/08 . . with rotatable tools
- D05B 37/085 . . . {Pinking}
- D05B 37/10 . . with heated tools
  
- D05B 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)**
- D05B 39/005 . {Quilting frames}
  
- D05B 41/00** **Work-collecting devices**

**Sewing-machine elements for supplying, handling, or treating thread material****D05B 43/00**      **Spool-pin assemblies incorporated in sewing machines****D05B 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](#))**D05B 47/00**      **Needle-thread tensioning devices; Applications of tensometers**

- D05B 47/02      . Manually-controlled tensioning devices
- D05B 47/04      . Automatically-controlled tensioning devices
- D05B 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](#))

**D05B 49/00**      **Take-up devices, e.g. levers, for the needle thread**

- D05B 49/02      . operated by cams or linkages
- D05B 49/04      . rotary
- D05B 49/06      . for machines for sewing leather

**D05B 51/00**      **Applications of needle-thread guards; Thread-break detectors** ([for embroidery machines D05C 11/00](#))**D05B 53/00**      **Thread- or cord-laying mechanisms; Thread fingers****D05B 55/00**      **Needle holders; Needle bars** ([needles D05B 85/00](#))

- D05B 55/02      . Devices for fastening needles to needle bars
- D05B 55/04      . Devices for inserting needles
- D05B 55/06      . Needle guides; Needle protectors ([finger-protecting devices D05B 83/00](#))
- D05B 55/08      . Driving arrangements for curved needles
- D05B 55/10      . Needle bars for multiple-needle sewing machines
- D05B 55/12      . . with provision for varying the distance between the needles
- D05B 55/14      . Needle-bar drives
- D05B 55/16      . . with provision for disengaging individual needle bars

**D05B 57/00**      **Loop takers, e.g. loopers**

- D05B 57/02      . for chain-stitch sewing machines, e.g. oscillating
- D05B 57/04      . . rotary
- D05B 57/06      . for overedge-stitch sewing machines
- D05B 57/08      . for lock-stitch sewing machines
- D05B 57/10      . . Shuttles
- D05B 57/12      . . . oscillating
- D05B 57/14      . . . with rotary hooks

- D05B 57/143 . . . . {Vertical axis type}
- D05B 57/146 . . . . {Inclined axis type}
- D05B 57/16 . . . with bobbin casings guided in tracks
- D05B 57/18 . . . with bobbin casings held by removable caps
- D05B 57/20 . . . with bobbin casings held by magnetic forces
- D05B 57/22 . . with spool-size bobbin for lower thread
- D05B 57/24 . . . with lower-thread packages mounted for controlled sliding movements
- D05B 57/26 . Bobbin holders or casings; Bobbin holder or case guards; Bobbin discharge devices
- D05B 57/265 . . {for looptakers with vertical axis}
- D05B 57/28 . Applications of bobbins for storing the lower thread
- D05B 57/30 . Driving-gear for loop takers
- D05B 57/32 . . in chain-stitch sewing machines
- D05B 57/34 . . in overedge-stitch sewing machines
- D05B 57/36 . . in lock-stitch sewing machines
- D05B 57/38 . . . Shuttle drives
- D05B 59/00 Applications of bobbin-winding or -changing devices; Indicating or control devices associated therewith**
- D05B 59/02 . Devices for determining or indicating the length of thread still on the bobbin
- D05B 59/04 . Devices for changing the bobbin
- D05B 61/00 Loop holders; Loop spreaders; Stitch-forming fingers**
- D05B 63/00 Devices associated with the loop-taker thread, e.g. for tensioning**
- D05B 63/02 . Loop-taker thread take-up levers
- D05B 63/04 . Loop-taker thread guards
- D05B 65/00 Devices for severing the needle or lower thread**
- D05B 65/003 . {the thread being engaged manually against the cutting edge of a fixedly arranged knife}
- D05B 65/006 . {with heated tools}
- D05B 65/02 . controlled by the sewing mechanisms {(D05B 65/006 takes precedence)}
- D05B 65/04 . controlled by the workpieces {(D05B 65/006 takes precedence)}
- D05B 65/06 . and for disposing of the severed thread end; {Catching or wiping devices for the severed thread}
- D05B 67/00 Devices incorporated in sewing machines for lubricating, waxing, or colouring the threads**

**Driving-gear, control, lubricating, or cooling devices for sewing machines**

- D05B 69/00 Driving-gear; Control devices**
- D05B 69/02 . Mechanical drives

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

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

- D05B 73/00**
  - Casings**
- D05B 73/005
  - . {Doors or covers for accessing inner parts of the machine; Security devices therefor}
- D05B 73/02
  - . Upper casings
- D05B 73/04
  - . Lower casings
- D05B 73/06
  - . . for free-arm sewing machines
- D05B 73/08
  - . . for column-type sewing machines
- D05B 73/10
  - . . Devices for converting free-arm sewing machines into flat-bed machines
- D05B 73/12
  - . . Slides; Needle plates
- D05B 75/00**
  - Frames, stands, tables, or other furniture adapted to carry sewing machines (furniture aspects [A47B](#), [A47C](#))**
- D05B 75/02
  - . for drop-head sewing machines
- D05B 75/04
  - . with noise-suppressing devices



- D05B 75/06
  - Arrangements, e.g. hinges, for mounting sewing-machine casings to frames, stands, or tables
- D05B 77/00 **Covers, or portable enclosures, for sewing machines**
- D05B 79/00 **Incorporations or adaptations of lighting equipment**
- D05B 81/00 **Sewing machines incorporating devices serving purposes other than sewing, e.g. for blowing air, for grinding**
- D05B 83/00 **Guards or like devices for preventing injury to operator** ([machine safety devices in general F16P](#))

#### **Needles; Needle threaders; Seam-ripping devices**

- D05B 85/00 **Needles** ([surgical needles A61B 17/06](#); [manufacture of needles B21G 1/00](#))
  - D05B 85/003
    - {with two tips and an eye in the middle}
  - D05B 85/006
    - {Hooked needles}
  - D05B 85/02
    - with slotted eyes, {i.e. with a slit leading to the eye for thread insertion}
  - D05B 85/04
    - Spring or bearded needles
  - D05B 85/06
    - Curved needles
  - D05B 85/08
    - Flexible needles
  - D05B 85/10
    - Hollow needles
  - D05B 85/12
    - Coated needles
  - D05B 85/14
    - Latch needles
- D05B 87/00 **Needle- {or looper-} threading devices**
  - D05B 87/02
    - with mechanical means for moving thread through needle {or looper} eye
  - D05B 87/04
    - with optical devices to assist threading
- D05B 89/00 **Seam-ripping devices**

#### **Hand sewing**

- D05B 91/00 **Tools, implements, or accessories for hand sewing** ([needles, needle threaders D05B 85/00, D05B 87/00](#); [appliances for the tailoring trade A41H](#))
  - D05B 91/02
    - Bodkins
  - D05B 91/04
    - Thimbles; Finger shields; Palm protectors
  - D05B 91/06
    - Work holders or supports
  - D05B 91/08
    - . Mushrooms; Darning eggs
  - D05B 91/10
    - . Hoops or frames ([for embroidery D05C](#))
  - D05B 91/12
    - Tool receptacles
  - D05B 91/14
    - Thread-spool pins
  - D05B 91/16
    - Thread-spool receptables

**D05B 93/00****Stitches; Stitch seams**

## D05B 93/02

- strengthened by auxiliary elements, e.g. rivets, staples

**D05B 95/00****Preparatory or finishing operations in connection with hand sewing**

## D05B 95/04

- Softening material prior to sewing

## D05B 95/06

- Flattening, pounding, or pressing stitched seams ([in shoemaking A43D 8/44](#))

**D05B 97/00****Hand sewing processes or apparatus for special work or not otherwise provided for**

## D05B 97/02

- Hand-guided apparatus

## D05B 97/04

- for darning

## D05B 97/06

- . using apparatus with latch or bearded needles

## D05B 97/08

- using special threads or wires

## D05B 97/10

- for attaching buttons or fasteners

## D05B 97/12

- for attaching patches or like small pieces of fabric