

CPC COOPERATIVE PATENT CLASSIFICATION

A HUMAN NECESSITIES

PERSONAL OR DOMESTIC ARTICLES

A43 FOOTWEAR

A43D MACHINES, TOOLS, EQUIPMENT OR METHODS FOR MANUFACTURING OR REPAIRING FOOTWEAR

NOTE

In this subclass, a method of manufacturing footwear which is dependent on a distinct machine or tool, is classified in the group covering the machine or tool for the manufacture.

Measuring devices; Lasts; Tools

1/00 Foot or last measuring devices; Measuring devices for shoe parts

- 1/02 . Foot-measuring devices (measuring the shape, pattern or size of the body for diagnostic purposes [A61B 5/103](#), e.g. measuring physical dimensions [A61B 5/107](#))
- 1/022 . . {involving making footprints or permanent moulds of the foot}
- 1/025 . . {comprising optical means, e.g. mirrors, photo-electric cells, for measuring or inspecting feet}
- 1/027 . . {Shoe fit indicating devices}
- 1/04 . Last-measuring devices
- 1/06 . Measuring devices for the inside measure of shoes, for the height of heels, or for the arrangement of heels
- 1/08 . Measuring devices for shoe parts

3/00 Lasts

- 3/02 . Lasts for making or repairing shoes (making of wooden lasts [B27M 3/20](#))
- 3/021 . . {for orthopaedic footwear}
- 3/022 . . {comprising means, e.g. hooks, for holding, fixing or centering shoe parts on the last}
- 3/023 . . {Hinge constructions for articulated lasts}
- 3/024 . . {Lasts with a fore part and heel section relatively slideable to one another along an inclined line of cut}
- 3/025 . . {Longitudinally expansible lasts}
- 3/026 . . {Lasts for making rubber footwear or for vulcanizing rubber soles to footwear}
- 3/027 . . {Lasts with exchangeable parts, e.g. for changing the form or for remodelling}
- 3/028 . . {Tack retaining means for lasts}
- 3/029 . . {Constructional features of the heel section}
- 3/04 . Pneumatic lasts; Elastic lasts
- 3/06 . Wedge locks for lasts
- 3/08 . Devices for stretching special parts of shoes
- 3/10 . Devices for removing lasts
- 3/12 . Devices for inserting or reinserting lasts
- 3/14 . Stretching or spreading lasts; Boot-trees; Fillers; Devices for maintaining the shape of the shoe (drying of footwear [A47L 23/20](#))
- 3/1408 . . {Devices for heating or drying shoes}
- 3/1416 . . {Boot-trees}

- 3/1425 . . {Devices for sole stretching}
- 3/1433 . . {Shoe-trees}
- 3/1441 . . . {spreading the width of a shoe, i.e. laterally expandable}
- 3/145 {adjustable}
- 3/1458 {by a screw}
- 3/1466 . . . {stretching the length of a shoe, i.e. longitudinally expandable}
- 3/1475 {adjustable}
- 3/1483 {by a screw}
- 3/1491 . . . {with means for sweaty feet, e.g. with disinfecting or deodorant means (cleaning of a footwear [A47L 23/20](#))}

5/00 Hand appliances or hand tools for making or repairing shoes, other than those covered by groups [A43D 15/00](#), [A43D 19/00](#), [A43D 95/00](#), [A43D 100/00](#), [A43D 117/00](#)

- 5/005 . {for heel removing}
- 5/02 . Stands for making footwear (stands for cleaning shoes [A47L 23/16](#))
- 5/04 . Knives (knives in general [B26B](#))
- 5/06 . Tools for cutting off the ends of nails or pegs in shoes
- 5/08 . Awls (making [B21G](#))
- 5/10 . Shoe-peg rasps (wood rasps [B27G 17/06](#))
- 5/12 . Hand nailing apparatus for shoemaking ([A43D 19/02](#) takes precedence; nailing apparatus in general [B25C](#), [B27F](#))
- 5/14 . . Hand pincers for stapling

8/00 Machines for cutting, ornamenting, marking or otherwise working up shoe part blanks (pulling-over or lasting [A43D 9/00](#) - [A43D 23/00](#); making or fastening soles, heels or welts [A43D 25/00](#) - [A43D 83/00](#))

- 8/003 . {specially adapted for forming upper blanks or leggings by stretching}
- 8/006 . {for forming shoe stiffeners}
- 8/02 . Cutting-out (cutting in general [B26D](#), [B26F](#); of leather articles in general [C14B 5/00](#))
- 8/04 . . Stamping-out ([A43D 8/10](#) takes precedence)
- 8/06 . . . Dies therefor
- 8/08 . . . Combined stamping-out and bonding, e.g. high frequency electric current being applied between cutting edge and work support

- 8/10 . . Cutting-out using pattern grading ([for trimming A43D 8/38](#); [pattern grading in making clothes A41H 3/00](#); [pattern copying in general B23Q 33/00](#), [B23Q 35/00](#))
- 8/12 . . . Patterns or templates therefor
- 8/14 Applying bindings to pattern edges
- 8/16 . Ornamentation ([by creasing A43D 8/44](#); [of leather in general C14B 1/56](#))
- 8/18 . . by punching or perforating ([punching for eyelet-setting A43D 100/02](#))
- 8/20 . . . Dies therefor
- 8/22 . . by embossing or printing ([printing per se](#), [stamping per se B41](#))
- 8/24 . . . Embossing using heat, e.g. high frequency electric current
- 8/26 . Marking for future work ([A43D 8/16 takes precedence](#); [printing per se](#), [stamping per se B41](#))
- 8/265 . . {[Marking buttonhole locations](#)}
- 8/28 . . Patterns for drawing cut-outs ([in making clothes A41H 3/00](#))
- 8/30 . . Charting sheet material for subsequent cutting
- 8/32 . Working on edges or margins ([of leather in general C14B 1/02](#), [C14B 11/00](#))
- 8/34 . . by skiving ([A43D 8/48 takes precedence](#))
- 8/36 . . by trimming the margins of sole blanks ([trimming as an intermediate operation in shoemaking A43D 27/00](#), [as a finishing operation in shoemaking A43D 87/00](#))
- 8/38 . . . by cutting-out, e.g. using templates
- 8/40 . . by folding, turning in or over, hammering
- 8/42 . . by singeing, contracting, dyeing
- 8/44 . Creasing presses ([folding on margins A43D 8/40](#))
- 8/46 . Splitting ([of leather in general C14B 1/02](#))
- 8/48 . . combined with skiving
- 8/50 . . Combined splitting and trimming of the heel-seat portions of sole blanks ([of soles fixed to shoe bottoms A43D 27/04](#))
- 8/52 . Flexing ([of leather in general C14B](#))
- 8/54 . . by milling
- 8/56 . . of sole blanks by slitting
- Pulling-over or lasting**
- 9/00 Devices for binding the uppers upon the lasts ([for the toe ends A43D 15/00](#))**
- 11/00 Machines for preliminary treatment or assembling of upper-parts, counters, or insoles on their lasts preparatory to the pulling-over or lasting operations; Applying or removing protective coverings**
- 11/003 . {[Applying or removing protective coverings](#)}
- 11/006 . {[Devices for temporarily fixing or aligning insoles on lasts](#)}
- 11/01 . Machines for applying reinforcement or ornamental straps to the margins of uppers ([to soles or insoles A43D 43/06](#))
- 11/02 . . to the margins thereof
- 11/03 . . Coating with thermoplastic materials to stiffen the toe or heel portion
- 11/04 . Machines for seam-pressing or flattening shoe parts, quarters, or the like ([on lasted shoes A43D 55/00](#))
- 11/06 . Machines for temporary buttoning of shoe parts
- 11/08 . Machines for temporary lacing of shoe parts or for cutting-away the lacing strips after lasting
- 11/085 . . {[Lacing machines](#)}
- 11/10 . Devices for holding the lacing portions in position during lasting
- 11/12 . Machines for forming the toe part or heel part of shoes, with or without use of heat
- 11/14 . Devices for treating shoe parts, e.g. stiffeners, with steam or liquid ([for soled shoes A43D 95/12](#))
- 11/145 . . {[with means, e.g. transport chains, for continuously transferring the shoe parts through the machines](#)}
- 13/00 Machines for pulling-over the uppers when loosely laid upon the last and tacking the toe end**
- 13/02 . Devices for locating caps or stiffeners on pulling-over machines
- 15/00 Pulling-over or lasting machines for binding the toe end with cord, string, or wire; Machines for lasting with clamps; Lasting machines with sewing devices, also for platform shoes ([special sewing machines for leather or shoes D05B](#))**
- 17/00 Pulling-over or lasting machines with oscillating shoe supports**
- 19/00 Hand lasting; Lasting pincers**
- 19/02 . Tacking or nailing devices for use with lasting pincers
- 21/00 Lasting machines**
- 21/003 . {[with lasting strings, stretching straps or the like, for forming the shank portions of shoes](#)}
- 21/006 . {[with rotating lasting means](#)}
- 21/02 . with one single lasting gripper
- 21/04 . for lasting the opposite sides of the shoe one after another
- 21/06 . for wooden soles ([A43D 21/16](#), [A43D 21/18 take precedence](#))
- 21/08 . with last supports and toe- or heel-embracing wipers movable both horizontally and vertically ([A43D 21/16 takes precedence](#))
- 21/10 . Bed-lasting machines
- 21/12 . with lasting clamps, shoe-shaped clamps, {[pincers](#),} wipers, stretching straps or the like for forming the toe or heel parts of the last {([A43D 21/16](#), [A43D 21/18 take precedence](#))}
- 21/122 . . {[with pincers and clamps](#)}
- 21/125 . . {[with a plurality of pincers \(A43D 21/122 takes precedence\)](#)}
- 21/127 . . {[with wipers \(A43D 21/16, A43D 21/18 take precedence\)](#)}
- 21/14 . for toe or heel parts, with nailing devices
- 21/16 . with lasting pincers {[and](#)} toe- or heel-embracing wipers
- 21/163 . . {[with heel-embracing wipers](#)}
- 21/166 . . {[with toe-embracing wipers](#)}
- 21/18 . with lasting pincers and straight-acting wipers, also for forming the shank portions of shoes
- 23/00 Single parts for pulling-over or lasting machines ([nailing devices A43D 75/00](#))**
- 23/02 . Wipers; Sole-pressers; Last-supports; Pincers
- 23/022 . . {[Sole-pressers](#)}
- 23/025 . . {[Last-supports](#)}
- 23/027 . . {[Pincers](#)}
- 23/04 . Last-carriers; Shoe-guides

- 23/06 . Devices for cutting-off superfluous material on the uppers or linings

Making or fastening soles, heels or welts, or preparing same for fastening to the shoe; Carrying out other operations subsequent to lasting; Turning ([sewing D05B](#))

25/00 Devices for gluing shoe parts

- 25/047 . Devices for lasting with adhesives or for gluing together insoles and uppers ([A43D 25/18](#), [A43D 25/20](#) take precedence)
- 25/053 . . with rotating gripping means
- 25/06 . Devices for gluing soles on shoe bottoms ([A43D 25/18](#), [A43D 25/20](#) take precedence)
- 25/063 . . {Multiple pressing devices in a closed circuit, e.g. rotating multiple pressing devices}
- 25/066 . . {Heel clamps or heel presses for glueing heels to shoe bottoms}
- 25/07 . . using flexible diaphragm pressing devices
- 25/08 . . Welt hold-down devices
- 25/10 . . Press-pads or other supports of shoe-gluing presses
- 25/12 . Devices for gluing heel-breasts to heels or for gluing coverings on heels ([A43D 25/18](#), [A43D 25/20](#) take precedence)
- 25/123 . . {Devices for glueing heel-breasts to heels}
- 25/126 . . {Devices for glueing coverings on heels}
- 25/14 . Devices for filling the shoe bottom
- 25/16 . Devices for making glued platform shoes
- 25/18 . Devices for applying adhesives to shoe parts ([A43D 25/20](#) takes precedence; applying liquids or other fluent materials to surfaces in general [B05](#))
- 25/181 . . {by rollers}
- 25/183 . . {by nozzles}
- 25/185 . . {by imprinter plates}
- 25/186 . . {by dipping}
- 25/188 . . {by grids}
- 25/20 . Arrangements for activating or for accelerating setting of adhesives, e.g. by using heat

27/00 Machines for trimming as an intermediate operation (working on edges or margins, e.g. by trimming, of shoe part blanks [A43D 8/32](#); trimming as a finishing operation in shoemaking [A43D 87/00](#))

- 27/02 . Soles or heels fixed on shoe bottoms (stamps or dies for soles or heel-lifts [C14B](#))
- 27/04 . . Heel-end portions of soles fixed on shoe bottoms (on loose soles [A43D 8/46](#))
- 27/06 . . Heel breast flaps

29/00 Machines for making soles from strips of material

- 31/00 Machines for making or inserting shank stiffeners**
- 31/02 . Machines for making shank stiffeners
- 31/04 . Machines for inserting shank stiffeners

33/00 Machines for assembling lifts for heels ([cutting-out heel lifts A43D 8/02](#))

- 33/02 . Gauges for heel lifts; Magazines for piling up heel lifts
- 33/04 . Nailing machines for building the heels from lifts
- 33/06 . Machines for sorting heel lifts

35/00 Presses for shaping pre-existing loose soles, shoe bottoms or soles fixed to shoe bottoms ([glueing soles on shoe bottoms A43D 25/06](#))

37/00 Machines for roughening soles or other shoe parts preparatory to gluing

- 37/005 . {characterised by constructional details of the rotative tools used therewith}

39/00 Machines for making foot-supporting pads or instep-raisers for flat feet

43/00 Machines for making stitch lips, or other preparatory treatment of soles or insoles before fixing same ([flexing of soles or insoles A43D 8/52](#))

- 43/02 . for making stitch lips by cutting
- 43/06 . for applying reinforcing materials to insoles; Attachment of ornamental tapes or ribs, e.g. sewing ribs, on soles, or the like

44/00 Machines for attaching welts or rands

47/00 Machines for trimming or butting welts fixed on uppers

49/00 Machines for pounding

51/00 Machines for lip-setting

53/00 Machines for trimming-off surplus material along the in seam

55/00 Machines for flattening, pressing, or rubbing the in seams of lasted shoes

57/00 Machines for attaching the welt ends

59/00 Machines for rasping the lasting-margins of shoes which are sewn through

61/00 Machines for nail-pulling, nail-cutting, or nail-detecting

63/00 Machines for carrying-out other finishing operations

67/00 Machines for fastening soles or heels by means of screws or screwed wire

69/00 Shoe-nailing machines ([nailing machines in general B27F](#))

- 69/005 . {using nails being made from alternative materials, e.g. leather}
- 69/02 . using ready-made nails
- 69/04 . with apparatus for separating the nails from a wire or from a strip of metal or other material
- 69/06 . using ready-made staples
- 69/08 . with apparatus for making staples
- 69/10 . using ready-made wooden pegs
- 69/12 . with apparatus for separating the pegs from a strip of wood
- 69/14 . for nailing or stapling the lasted margin onto shoes with wooden soles

71/00 Elements of nailing machines; Nail-feeding devices

- 71/02 . Driving mechanisms for moving the horn; Nail-cutting apparatus connected with the horn

75/00 Nailing devices on pulling-over or lasting machines

79/00 Combined heel-pressing and nailing machines

81/00 Machines for attaching top-lifts

83/00	Heel-presses without nailing apparatus; Machines for pressing single lifts or punching holes for nailing	100/06 100/08	<ul style="list-style-type: none"> inserting two eyelets simultaneously Setting buttons on footwear (for garments A41H 37/00)
85/00	Machines or apparatus for turning, e.g. for making turn-shoes	100/10 100/12 100/14	<ul style="list-style-type: none"> Machines or tools for setting lacing-hooks in shoes Machines for inserting elastic gussets in shoes Devices for removing buttons, lacing-hooks, or the like from shoes
86/00	Machines for assembling soles or heels onto uppers, not provided for in groups A43D 25/00 - A43D 83/00 , e.g. by welding		
Performing finishing operations upon uppers, soles, or heels on soled shoes; Making shoe appurtenances			
87/00	Edge or heel cutters; Machines for trimming the heel breast (trimming machines for wooden heels B27M ; copying machines B44B)		
89/00	Sole-levelling machines with rolls		
91/00	Stitch-separating or seam-indenting machines		
93/00	Edge-indenting machines		
95/00	Shoe-finishing machines		
95/02	<ul style="list-style-type: none"> Machines for treating or smoothing shoe uppers to remove wrinkles, folds, or the like 		
95/04	<ul style="list-style-type: none"> Machines for laying channel-flaps 		
95/06	<ul style="list-style-type: none"> Machines for colouring or chemical treatment; Ornamenting the sole bottoms (burnishing A43D 95/20) 		
95/08	<ul style="list-style-type: none"> Machines or tools for scouring, abrading, or finishing, with or without dust-separating (suction cleaners for removing dust A47L 5/00; domestic cleaning of footwear A47L 23/00) 		
95/10	<ul style="list-style-type: none"> Drying or heating devices for shoes 		
95/12	<ul style="list-style-type: none"> Devices for conditioning, tempering, or moistening (preparatory to pulling-over or lasting A43D 11/14) 		
95/125	<ul style="list-style-type: none"> { with means, e.g. transport chains, for continuously transferring shoes through the devices } 		
95/14	<ul style="list-style-type: none"> incorporating marking, printing, or embossing apparatus (ornamentation of shoe part blanks A43D 8/16; printing <i>per se</i>, stamping <i>per se</i> B41) 		
95/16	<ul style="list-style-type: none"> Burnishing tools for shoemaking (in general B24D) 		
95/18	<ul style="list-style-type: none"> Devices for heating the burnishing tools for shoemaking 		
95/20	<ul style="list-style-type: none"> Machines for burnishing soles or heels 		
95/22	<ul style="list-style-type: none"> Machines for burnishing the edges of soles, with or without devices for edge-indenting 		
95/24	<ul style="list-style-type: none"> Machines for buffing soles 		
95/26	<ul style="list-style-type: none"> Devices for applying wax 		
95/28	<ul style="list-style-type: none"> Machines for attaching protectors to soles or heels 		
97/00	Machines for making pulling-on pieces		
98/00	Machines for making laces (of leather C14B ; braidings in general D04C); Applying fibre or celluloid to ends of laces (making tags from metal sheet B21D ; from wire B21F)		
100/00	Setting or removing eyelets, buttons, lacing-hooks, or elastic gussets in shoes		
100/02	<ul style="list-style-type: none"> Punching and eyelet-setting machines or tools (for garments in general A41H 37/02) 		
100/04	<ul style="list-style-type: none"> inserting invisible eyelets 		
Miscellaneous mechanisms for shoemaking			
111/00	Shoe machines with conveyors for jacked shoes {or for shoes or shoe parts}		
111/003	<ul style="list-style-type: none"> { with clamping or gripping mechanism } 		
111/006	<ul style="list-style-type: none"> { with special means to place the shoe or shoe part in the following machine } 		
113/00	Machines for making shoes with out-turned flanges of the uppers or for making moccasins		
115/00	Machines for skiving or removing heel-lifts, heels, or soles, or for removing stitches, preparatory to repair		
117/00	Racks for receiving or transporting shoes or shoe parts; Other conveying means		
119/00	Driving or controlling mechanisms of shoe machines; Frames for shoe machines		
2200/00	Machines or methods characterised by special features		
2200/10	<ul style="list-style-type: none"> Fully automated machines, i.e. machines working without human intervention 		
2200/20	<ul style="list-style-type: none"> Machines including a carousel with different working posts around a turning table 		
2200/30	<ul style="list-style-type: none"> Machines including a magazine, e.g. for feeding blanks, pre-forms or sheets 		
2200/40	<ul style="list-style-type: none"> Multitool machines, e.g. machines with a plurality of tools or working heads 		
2200/50	<ul style="list-style-type: none"> Machines using pneumatic means 		
2200/60	<ul style="list-style-type: none"> Computer aided manufacture of footwear, e.g. CAD or CAM 		
999/00	Subject matter not provided for in other groups of this subclass		