

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.

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.

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}	11/01	. Machines for applying reinforcement or ornamental straps to the margins of uppers (to soles or insoles A43D 43/06)
8/006	. {for forming shoe stiffeners}	11/02	. . to the margins thereof
8/02	. Cutting-out (cutting in general B26D , B26F ; of leather articles in general C14B 5/00)	11/03	. . Coating with thermoplastic materials to stiffen the toe or heel portion
8/04	. . Stamping-out (A43D 8/10 takes precedence)	11/04	. Machines for seam-pressing or flattening shoe parts, quarters, or the like (on lasted shoes A43D 55/00)
8/06	. . . Dies therefor	11/06	. Machines for temporary buttoning of shoe parts
8/08	. . . Combined stamping-out and bonding, e.g. high frequency electric current being applied between cutting edge and work support	11/08	. Machines for temporary lacing of shoe parts or for cutting-away the lacing strips after lasting
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)	11/085	. . {Lacing machines}
8/12	. . . Patterns or templates therefor	11/10	. Devices for holding the lacing portions in position during lasting
8/14 Applying bindings to pattern edges	11/12	. Machines for forming the toe part or heel part of shoes, with or without use of heat
8/16	. Ornamentation (by creasing A43D 8/44 ; of leather in general C14B 1/56)	11/14	. Devices for treating shoe parts, e.g. stiffeners, with steam or liquid (for soled shoes A43D 95/12)
8/18	. . by punching or perforating (punching for eyelet-setting A43D 100/02)	11/145	. . {with means, e.g. transport chains, for continuously transferring the shoe parts through the machines}
8/20	. . . Dies therefor	13/00	Machines for pulling-over the uppers when loosely laid upon the last and tacking the toe end
8/22	. . by embossing or printing (printing per se, stamping per se B41)	13/02	. Devices for locating caps or stiffeners on pulling-over machines
8/24	. . . Embossing using heat, e.g. high frequency electric current	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)
8/26	. Marking for future work (A43D 8/16 takes precedence; printing per se, stamping per se B41)	17/00	Pulling-over or lasting machines with oscillating shoe supports
8/265	. . {Marking buttonhole locations}	19/00	Hand lasting; Lasting pincers
8/28	. . Patterns for drawing cut-outs (in making clothes A41H 3/00)	19/02	. Tacking or nailing devices for use with lasting pincers
8/30	. . Charting sheet material for subsequent cutting	21/00	Lasting machines
8/32	. Working on edges or margins (of leather in general C14B 1/02 , C14B 11/00)	21/003	. {with lasting strings, stretching straps or the like, for forming the shank portions of shoes}
8/34	. . by skiving (A43D 8/48 takes precedence)	21/006	. {with rotating lasting means}
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)	21/02	. with one single lasting gripper
8/38	. . . by cutting-out, e.g. using templates	21/04	. for lasting the opposite sides of the shoe one after another
8/40	. . by folding, turning in or over, hammering	21/06	. for wooden soles (A43D 21/16 , A43D 21/18 take precedence)
8/42	. . by singeing, contracting, dyeing	21/08	. with last supports and toe- or heel-embracing wipers movable both horizontally and vertically (A43D 21/16 takes precedence)
8/44	. Creasing presses (folding on margins A43D 8/40)	21/10	. Bed-lasting machines
8/46	. Splitting (of leather in general C14B 1/02)	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)}
8/48	. . combined with skiving	21/122	. . {with pincers and clamps}
8/50	. . Combined splitting and trimming of the heel-seat portions of sole blanks (of soles fixed to shoe bottoms A43D 27/04)	21/125	. . {with a plurality of pincers (A43D 21/122 takes precedence)}
8/52	. Flexing (of leather in general C14B)	21/127	. . {with wipers (A43D 21/16 , A43D 21/18 take precedence)}
8/54	. . by milling	21/14	. for toe or heel parts, with nailing devices
8/56	. . of sole blanks by slitting	21/16	. with lasting pincers {and} toe- or heel-embracing wipers
Pulling-over or lasting		21/163	. . {with heel-embracing wipers}
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}		

21/166	. . {with toe-embracing wipers}	31/04	. Machines for inserting shank stiffeners
21/18	. with lasting pincers and straight-acting wipers, also for forming the shank portions of shoes	33/00	Machines for assembling lifts for heels (cutting-out heel lifts A43D 8/02)
23/00	Single parts for pulling-over or lasting machines (nailing devices A43D 75/00)	33/02	. Gauges for heel lifts; Magazines for piling up heel lifts
23/02	. Wipers; Sole-pressers; Last-supports; Pincers	33/04	. Nailing machines for building the heels from lifts
23/022	. . {Sole-pressers}	33/06	. Machines for sorting heel lifts
23/025	. . {Last-supports}	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)
23/027	. . {Pincers}	37/00	Machines for roughening soles or other shoe parts preparatory to glueing
23/04	. Last-carriers; Shoe-guides	37/005	. {characterised by constructional details of the rotative tools used therewith}
23/06	. Devices for cutting-off superfluous material on the uppers or linings	39/00	Machines for making foot-supporting pads or instep-raisers for flat feet
<u>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)</u>		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)
25/00	Devices for glueing shoe parts	43/02	. for making stitch lips by cutting
25/047	. Devices for lasting with adhesives or for glueing together insoles and uppers (A43D 25/18 , A43D 25/20 take precedence)	43/06	. for applying reinforcing materials to insoles; Attachment of ornamental tapes or ribs, e.g. sewing ribs, on soles, or the like
25/053	. . with rotating gripping means	44/00	Machines for attaching welts or rands
25/06	. Devices for glueing soles on shoe bottoms (A43D 25/18 , A43D 25/20 take precedence)	47/00	Machines for trimming or butting welts fixed on uppers
25/063	. . {Multiple pressing devices in a closed circuit, e.g. rotating multiple pressing devices}	49/00	Machines for pounding
25/066	. . {Heel clamps or heel presses for glueing heels to shoe bottoms}	51/00	Machines for lip-setting
25/07	. . using flexible diaphragm pressing devices	53/00	Machines for trimming-off surplus material along the in seam
25/08	. . Welt hold-down devices	55/00	Machines for flattening, pressing, or rubbing the in seams of lasted shoes
25/10	. . Press-pads or other supports of shoe-glueing presses	57/00	Machines for attaching the welt ends
25/12	. Devices for glueing heel-breasts to heels or for glueing coverings on heels (A43D 25/18 , A43D 25/20 take precedence)	59/00	Machines for rasping the lasting-margins of shoes which are sewn through
25/123	. . {Devices for glueing heel-breasts to heels}	61/00	Machines for nail-pulling, nail-cutting, or nail-detecting
25/126	. . {Devices for glueing coverings on heels}	63/00	Machines for carrying-out other finishing operations
25/14	. Devices for filling the shoe bottom	67/00	Machines for fastening soles or heels by means of screws or screwed wire
25/16	. Devices for making glued platform shoes	69/00	Shoe-nailing machines (nailing machines in general B27F)
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)	69/005	. {using nails being made from alternative materials, e.g. leather}
25/181	. . {by rollers}	69/02	. using ready-made nails
25/183	. . {by nozzles}	69/04	. with apparatus for separating the nails from a wire or from a strip of metal or other material
25/185	. . {by imprinter plates}	69/06	. using ready-made staples
25/186	. . {by dipping}	69/08	. with apparatus for making staples
25/188	. . {by grids}	69/10	. using ready-made wooden pegs
25/20	. Arrangements for activating or for accelerating setting of adhesives, e.g. by using heat	69/12	. with apparatus for separating the pegs from a strip of wood
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		

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
85/00	Machines or apparatus for turning, e.g. for making turn-shoes

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	• Punching and eyelet-setting machines or tools (for garments in general A41H 37/02)
100/04	• • inserting invisible eyelets
100/06	• • inserting two eyelets simultaneously
100/08	• Setting buttons on footwear (for garments A41H 37/00)
100/10	• Machines or tools for setting lacing-hooks in shoes
100/12	• Machines for inserting elastic gussets in shoes
100/14	• 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	• Machines for treating or smoothing shoe uppers to remove wrinkles, folds, or the like
95/04	• Machines for laying channel-flaps
95/06	• Machines for colouring or chemical treatment; Ornamenting the sole bottoms (burnishing A43D 95/20)
95/08	• 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	• Drying or heating devices for shoes
95/12	• Devices for conditioning, tempering, or moistening (preparatory to pulling-over or lasting A43D 11/14)
95/125	• • {with means, e.g. transport chains, for continuously transferring shoes through the devices}
95/14	• 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	• Burnishing tools for shoemaking (in general B24D)
95/18	• • Devices for heating the burnishing tools for shoemaking
95/20	• Machines for burnishing soles or heels
95/22	• Machines for burnishing the edges of soles, with or without devices for edge-indenting
95/24	• Machines for buffing soles
95/26	• Devices for applying wax
95/28	• Machines for attaching protectors to soles or heels

Miscellaneous mechanisms for shoemaking

111/00	Shoe machines with conveyors for jacked shoes {or for shoes or shoe parts}
111/003	• {with clamping or gripping mechanism}
111/006	• {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	• Fully automated machines, i.e. machines working without human intervention
2200/20	• Machines including a carousel with different working posts around a turning table
2200/30	• Machines including a magazine, e.g. for feeding blanks, pre-forms or sheets
2200/40	• Multitool machines, e.g. machines with a plurality of tools or working heads
2200/50	• Machines using pneumatic means
2200/60	• Computer aided manufacture of footwear, e.g. CAD or CAM
999/00	Subject matter not provided for in other groups of this subclass