

# 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 <a href="#">A43D 43/06</a> )   |
| 8/006                          | . {for forming shoe stiffeners}  | 11/02  | . . to the margins thereof  |
| 8/02                           | . Cutting-out (cutting in general <a href="#">B26D</a> , <a href="#">B26F</a> ; of leather articles in general <a href="#">C14B 5/00</a> )   | 11/03  | . . Coating with thermoplastic materials to stiffen the toe or heel portion   |
| 8/04                           | . . Stamping-out ( <a href="#">A43D 8/10</a> takes precedence)   | 11/04  | . Machines for seam-pressing or flattening shoe parts, quarters, or the like (on lasted shoes <a href="#">A43D 55/00</a> )  |
| 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 <a href="#">A43D 8/38</a> ; pattern grading in making clothes <a href="#">A41H 3/00</a> ; pattern copying in general <a href="#">B23Q 33/00</a> , <a href="#">B23Q 35/00</a> ) | 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 <a href="#">A43D 8/44</a> ; of leather in general <a href="#">C14B 1/56</a> )   | 11/14  | . Devices for treating shoe parts, e.g. stiffeners, with steam or liquid (for soled shoes <a href="#">A43D 95/12</a> )  |
| 8/18                           | . . by punching or perforating (punching for eyelet-setting <a href="#">A43D 100/02</a> )  | 11/145 | . . {with means, e.g. transport chains, for continuously transferring the shoe parts through the machines}  |
| 8/20                           | . . . Dies therefor  | 13/00  | <b>Machines for pulling-over the uppers when loosely laid upon the last and tacking the toe end</b>   |
| 8/22                           | . . by embossing or printing (printing per se, stamping per se <a href="#">B41</a> )   | 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  | <b>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 <a href="#">D05B</a>)</b> |
| 8/26                           | . Marking for future work ( <a href="#">A43D 8/16</a> takes precedence; printing per se, stamping per se <a href="#">B41</a> )   | 17/00  | <b>Pulling-over or lasting machines with oscillating shoe supports</b>  |
| 8/265                          | . . {Marking buttonhole locations}   | 19/00  | <b>Hand lasting; Lasting pincers</b>  |
| 8/28                           | . . Patterns for drawing cut-outs (in making clothes <a href="#">A41H 3/00</a> )   | 19/02  | . Tacking or nailing devices for use with lasting pincers   |
| 8/30                           | . . Charting sheet material for subsequent cutting   | 21/00  | <b>Lasting machines</b>   |
| 8/32                           | . Working on edges or margins (of leather in general <a href="#">C14B 1/02</a> , <a href="#">C14B 11/00</a> )  | 21/003 | . {with lasting strings, stretching straps or the like, for forming the shank portions of shoes}  |
| 8/34                           | . . by skiving ( <a href="#">A43D 8/48</a> takes precedence)   | 21/006 | . {with rotating lasting means}   |
| 8/36                           | . . by trimming the margins of sole blanks (trimming as an intermediate operation in shoemaking <a href="#">A43D 27/00</a> , as a finishing operation in shoemaking <a href="#">A43D 87/00</a> )                                   | 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 ( <a href="#">A43D 21/16</a> , <a href="#">A43D 21/18</a> take precedence)   |
| 8/42                           | . . by singeing, contracting, dyeing   | 21/08  | . with last supports and toe- or heel-embracing wipers movable both horizontally and vertically ( <a href="#">A43D 21/16</a> takes precedence)  |
| 8/44                           | . Creasing presses (folding on margins <a href="#">A43D 8/40</a> )   | 21/10  | . Bed-lasting machines  |
| 8/46                           | . Splitting (of leather in general <a href="#">C14B 1/02</a> )   | 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 {( <a href="#">A43D 21/16</a> , <a href="#">A43D 21/18</a> 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 <a href="#">A43D 27/04</a> )  | 21/125 | . . {with a plurality of pincers ( <a href="#">A43D 21/122</a> takes precedence)}   |
| 8/52                           | . Flexing (of leather in general <a href="#">C14B</a> )  | 21/127 | . . {with wipers ( <a href="#">A43D 21/16</a> , <a href="#">A43D 21/18</a> 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  |
| <b>Pulling-over or lasting</b> |  | 21/163 | . . {with heel-embracing wipers}  |
| 9/00                           | <b>Devices for binding the uppers upon the lasts (for the toe ends <a href="#">A43D 15/00</a>)</b>   |        |   |
| 11/00                          | <b>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</b>                       |        |   |
| 11/003                         | . {Applying or removing protective coverings}  |        |   |
| 11/006                         | . {Devices for temporarily fixing or aligning insoles on lasts}  |        |   |

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| 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  | <b>33/00</b> | <b>Machines for assembling lifts for heels (cutting-out heel lifts <a href="#">A43D 8/02</a>)</b>   |
| <b>23/00</b>   | <b>Single parts for pulling-over or lasting machines (nailing devices <a href="#">A43D 75/00</a>)</b>  | 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}  | <b>35/00</b> | <b>Presses for shaping pre-existing loose soles, shoe bottoms or soles fixed to shoe bottoms (glueing soles on shoe bottoms <a href="#">A43D 25/06</a>)</b>           |
| 23/027   | . . {Pincers}  | <b>37/00</b> | <b>Machines for roughening soles or other shoe parts preparatory to glueing</b>   |
| 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  | <b>39/00</b> | <b>Machines for making foot-supporting pads or instep-raisers for flat feet</b>   |
| <b><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 <a href="#">D05B</a>)</u></b> |  | <b>43/00</b> | <b>Machines for making stitch lips, or other preparatory treatment of soles or insoles before fixing same (flexing of soles or insoles <a href="#">A43D 8/52</a>)</b> |
| <b>25/00</b>   | <b>Devices for glueing shoe parts</b>  | 43/02        | . for making stitch lips by cutting   |
| 25/047   | . Devices for lasting with adhesives or for glueing together insoles and uppers ( <a href="#">A43D 25/18</a> , <a href="#">A43D 25/20</a> 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   | <b>44/00</b> | <b>Machines for attaching welts or rands</b>  |
| 25/06  | . Devices for glueing soles on shoe bottoms ( <a href="#">A43D 25/18</a> , <a href="#">A43D 25/20</a> take precedence)   | <b>47/00</b> | <b>Machines for trimming or butting welts fixed on uppers</b>   |
| 25/063   | . . {Multiple pressing devices in a closed circuit, e.g. rotating multiple pressing devices}   | <b>49/00</b> | <b>Machines for pounding</b>  |
| 25/066   | . . {Heel clamps or heel presses for glueing heels to shoe bottoms}  | <b>51/00</b> | <b>Machines for lip-setting</b>   |
| 25/07  | . . using flexible diaphragm pressing devices  | <b>53/00</b> | <b>Machines for trimming-off surplus material along the inseam</b>  |
| 25/08  | . . Welt hold-down devices   | <b>55/00</b> | <b>Machines for flattening, pressing, or rubbing the in seams of lasted shoes</b>   |
| 25/10  | . . Press-pads or other supports of shoe-glueing presses   | <b>57/00</b> | <b>Machines for attaching the welt ends</b>   |
| 25/12  | . Devices for glueing heel-breasts to heels or for glueing coverings on heels ( <a href="#">A43D 25/18</a> , <a href="#">A43D 25/20</a> take precedence)   | <b>59/00</b> | <b>Machines for rasping the lasting-margins of shoes which are sewn through</b>   |
| 25/123   | . . {Devices for glueing heel-breasts to heels}  | <b>61/00</b> | <b>Machines for nail-pulling, nail-cutting, or nail-detecting</b>   |
| 25/126   | . . {Devices for glueing coverings on heels}   | <b>63/00</b> | <b>Machines for carrying-out other finishing operations</b>   |
| 25/14  | . Devices for filling the shoe bottom  | <b>67/00</b> | <b>Machines for fastening soles or heels by means of screws or screwed wire</b>   |
| 25/16  | . Devices for making glued platform shoes  | <b>69/00</b> | <b>Shoe-nailing machines (nailing machines in general <a href="#">B27F</a>)</b>   |
| 25/18  | . Devices for applying adhesives to shoe parts ( <a href="#">A43D 25/20</a> takes precedence; applying liquids or other fluent materials to surfaces in general <a href="#">B05</a> )  | 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   |
| <b>27/00</b>   | <b>Machines for trimming as an intermediate operation (working on edges or margins, e.g. by trimming, of shoe part blanks <a href="#">A43D 8/32</a>; trimming as a finishing operation in shoemaking <a href="#">A43D 87/00</a>)</b> |              |   |
| 27/02  | . Soles or heels fixed on shoe bottoms (stamps or dies for soles or heel-lifts <a href="#">C14B</a> )  |              |   |
| 27/04  | . . Heel-end portions of soles fixed on shoe bottoms (on loose soles <a href="#">A43D 8/46</a> )   |              |   |
| 27/06  | . . Heel breast flaps  |              |   |
| <b>29/00</b>   | <b>Machines for making soles from strips of material</b>   |              |   |
| <b>31/00</b>   | <b>Machines for making or inserting shank stiffeners</b>   |              |   |
| 31/02  | . Machines for making shank stiffeners   |              |   |

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|--------------|---|
| 69/14        | • for nailing or stapling the lasted margin onto shoes with wooden soles  |
| <b>71/00</b> | <b>Elements of nailing machines; Nail-feeding devices</b>   |
| 71/02        | • Driving mechanisms for moving the horn; Nail-cutting apparatus connected with the horn                        |
| <b>75/00</b> | <b>Nailing devices on pulling-over or lasting machines</b>  |
| <b>79/00</b> | <b>Combined heel-pressing and nailing machines</b>  |
| <b>81/00</b> | <b>Machines for attaching top-lifts</b>   |
| <b>83/00</b> | <b>Heel-presses without nailing apparatus; Machines for pressing single lifts or punching holes for nailing</b> |
| <b>85/00</b> | <b>Machines or apparatus for turning, e.g. for making turn-shoes</b>  |

|               |   |
|---------------|---|
| <b>97/00</b>  | <b>Machines for making pulling-on pieces</b>  |
| <b>98/00</b>  | <b>Machines for making laces (of leather <a href="#">C14B</a>; braidings in general <a href="#">D04C</a>); Applying fibre or celluloid to ends of laces (making tags from metal sheet <a href="#">B21D</a>; from wire <a href="#">B21F</a>)</b> |
| <b>100/00</b> | <b>Setting or removing eyelets, buttons, lacing-hooks, or elastic gussets in shoes</b>  |
| 100/02        | • Punching and eyelet-setting machines or tools (for garments in general <a href="#">A41H 37/02</a> )   |
| 100/04        | • • inserting invisible eyelets   |
| 100/06        | • • inserting two eyelets simultaneously  |
| 100/08        | • Setting buttons on footwear (for garments <a href="#">A41H 37/00</a> )  |
| 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**

|              |  |
|--------------|--|
| <b>87/00</b> | <b>Edge or heel cutters; Machines for trimming the heel breast (trimming machines for wooden heels <a href="#">B27M</a>; copying machines <a href="#">B44B</a>)</b>  |
| <b>89/00</b> | <b>Sole-levelling machines with rolls</b>  |
| <b>91/00</b> | <b>Stitch-separating or seam-indenting machines</b>  |
| <b>93/00</b> | <b>Edge-indenting machines</b>   |
| <b>95/00</b> | <b>Shoe-finishing machines</b>   |
| 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 <a href="#">A43D 95/20</a> )  |
| 95/08        | • Machines or tools for scouring, abrading, or finishing, with or without dust-separating (suction cleaners for removing dust <a href="#">A47L 5/00</a> ; domestic cleaning of footwear <a href="#">A47L 23/00</a> ) |
| 95/10        | • Drying or heating devices for shoes  |
| 95/12        | • Devices for conditioning, tempering, or moistening (preparatory to pulling-over or lasting <a href="#">A43D 11/14</a> )  |
| 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 <a href="#">A43D 8/16</a> ; printing <i>per se</i> , stamping <i>per se</i> <a href="#">B41</a> )                       |
| 95/16        | • Burnishing tools for shoemaking (in general <a href="#">B24D</a> )   |
| 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**

|               |  |
|---------------|--|
| <b>111/00</b> | <b>Shoe machines with conveyors for jacked shoes {or for shoes or shoe parts}</b>                                    |
| 111/003       | • {with clamping or gripping mechanism}  |
| 111/006       | • {with special means to place the shoe or shoe part in the following machine}                                       |
| <b>113/00</b> | <b>Machines for making shoes with out-turned flanges of the uppers or for making moccasins</b>                       |
| <b>115/00</b> | <b>Machines for skiving or removing heel-lifts, heels, or soles, or for removing stitches, preparatory to repair</b> |
| <b>117/00</b> | <b>Racks for receiving or transporting shoes or shoe parts; Other conveying means</b>                                |
| <b>119/00</b> | <b>Driving or controlling mechanisms of shoe machines; Frames for shoe machines</b>                                  |

|                |   |
|----------------|---|
| <b>2200/00</b> | <b>Machines or methods characterised by special features</b>                        |
| 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                           |
| <b>999/00</b>  | <b>Subject matter not provided for in other groups of this subclass</b>             |