

# CPC COOPERATIVE PATENT CLASSIFICATION

## A HUMAN NECESSITIES

### PERSONAL OR DOMESTIC ARTICLES

#### A43 FOOTWEAR

#### A43B CHARACTERISTIC FEATURES OF FOOTWEAR; PARTS OF FOOTWEAR

##### WARNING

The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

A43B 21/10 - A43B 21/16

covered by

[A43B 21/06](#)

A43B 21/34

covered by

[A43B 21/24](#)

##### Characteristic features of footwear

##### 1/00 Footwear characterised by the material (layered products [B32B](#))

- 1/0009 . {Footwear made at least partially of alveolar or honeycomb material}
- 1/0018 . {Footwear made at least partially of flexible, bellow-like shaped material}
- 1/0027 . {Footwear made at least partially from a material having special colours}
- 1/0036 . . {with fluorescent or phosphorescent parts}
- 1/0045 . {Footwear made at least partially of deodorant means}
- 1/0054 . {Footwear provided with magnets, magnetic parts or magnetic substances}
- 1/0063 . {Footwear made at least partially of material that can be recycled}
- 1/0072 . {Footwear made at least partially of transparent or translucent materials}
- 1/0081 . {Footwear made at least partially of hook-and-loop type material (hook and loop-type straps for fastening purpose [A43C 11/1493](#))}
- 1/009 . {Footwear made at least partially of washable material}
- 1/02 . Footwear made of animal or plant fibres or fabrics made therefrom
- 1/04 . . Braided, knotted, knitted, or crocheted footwear
- 1/06 . Footwear made of wood, cork, card-board, paper or like fibrous material (soles [A43B 13/00](#); making of wooden shoes [B27M 3/20](#))
- 1/08 . Footwear made of metal (soles [A43B 13/10](#))
- 1/10 . Footwear made of rubber
- 1/12 . . of rubber waste
- 1/14 . Footwear made of gutta-percha, celluloid, or plastics

##### 3/00 Footwear characterised by the shape or the use

- 3/0005 . {Footwear provided with electrical or electronic systems}
- 3/001 . . {Footwear provided with light source}
- 3/0015 . . {Footwear provided with generator}
- 3/0021 . . {Footwear provided with sound or music source}
- 3/0026 . {Footwear for use in minefields; Footwear protecting from landmine blast; Footwear preventing landmines from being triggered}

- 3/0031 . {Footwear provided with a pocket, e.g. for keys or a card}
- 3/0036 . {Footwear characterised by a special shape or design}
- 3/0042 . . {with circular or circle shaped parts}
- 3/0047 . . {Footwear parts having a male and corresponding female profile to fit together, e.g. form-fit}
- 3/0052 . . {X-shaped or cross-shaped}
- 3/0057 . . {S-shaped}
- 3/0063 . . {U-shaped}
- 3/0068 . . {V-shaped}
- 3/0073 . . {Y-shaped}
- 3/0078 . . {Footwear provided with logos, letters, signatures or the like decoration ([A43B 23/24](#) takes precedence)}
- 3/0084 . . . {Arrangement of flocked decoration on shoes}
- 3/0089 . . . {with means to identify the size of the shoe}
- 3/0094 . . {with means to differentiate between right and left shoe}
- 3/02 . Top-boots; Leg-boots; Shoes with batwing tabs
- 3/04 . . with rubber or elastic insertions or gussets
- 3/06 . Shoes with flaps; Footwear with divided uppers
- 3/08 . . with rubber or elastic insertions or gussets
- 3/10 . Low shoes; Slippers ([sandals \[A43B 3/12\]\(#\)](#))
- 3/101 . . {Slippers}
- 3/102 . . . {Slippers leaving the heel of the foot bare ([A43B 3/106](#) takes precedence; slippers with an anklestrap. sling type shoes [A43B 3/12](#))}
- 3/103 . . . . {characterised by the attachment of the toestraps}
- 3/105 . . . . {characterised by the shape or layout of the toestraps}
- 3/106 . . {Disposable slippers; One piece slippers}
- 3/107 . . {characterised by the material}
- 3/108 . . {characterised by the sole}
- 3/12 . Sandals {provided with an anklestrap}; Strap guides thereon {(footwear having only a toestraps, thong sandals [A43B 3/10](#))}
- 3/122 . . {characterised by the attachment of the straps}
- 3/124 . . {Disposable sandals; One piece sandals}
- 3/126 . . {characterised by the shape or layout of the straps}
- 3/128 . . {characterised by the sole}
- 3/14 . Moccasins, opanken, or like shoes

- 3/16 . Overshoes { ([A43B 23/30](#) takes precedence)}
- 3/163 . . {Overshoes specially adapted for health or hygienic purposes, e.g. comprising electrically conductive material allowing the discharge of electrostatic charges}
- 3/166 . . {Mud-guards}
- 3/18 . . Devices for holding overshoes in position
- 3/20 . . Heel-less overshoes
- 3/22 . . Protecting sheaths worn between shoe and overshoe
- 3/24 . Collapsible or convertible footwear {(multipurpose skate boots [A43B 5/1633](#); exchangeable soles [A43B 13/36](#))}
- 3/242 . . {characterised by the upper}
- 3/244 . . {characterised by the attachment between upper and sole}
- 3/246 . . {characterised by the sole}
- 3/248 . . {Collapsible or foldable footwear, e.g. for travelling}
- 3/26 . Footwear adjustable as to length or size {(adjustable ski boots or similar boots [A43B 5/0427](#); adjustable skating boots [A43B 5/1608](#))}
- 3/28 . Footwear specially adapted for dolls
- 3/30 . Footwear specially adapted for babies or small children
- 5/00 Footwear for sporting purposes (non-skid devices, e.g. ice-spurs, studs for football shoes, [A43C 15/00](#))**
- 5/001 . {Golf shoes}
- 5/002 . {Mountain boots or shoes}
- 5/003 . . {for free climbing}
- 5/004 . {After-ski boots}
- 5/005 . {for grinding, i.e. sliding on the sole or a part thereof}
- 5/006 . {for horse riding ([stirrups B68C 3/00](#))}
- 5/007 . {Footwear for car driving or racing}
- 5/008 . {Bowling Shoes}
- 5/02 . Football boots {or shoes, i.e. footwear for soccer, football or rugby}
- 5/025 . . {characterised by an element which improves the contact between the ball and the footwear}
- 5/04 . Ski boots; Similar boots
- 5/0401 . . {Snowboard boots}
- 5/0403 . . . {Adaptations for soles or accessories with soles for snowboard bindings}
- 5/0405 . . {Linings, paddings, insertions; Inner boots (in general [A43B 19/00](#))}
- 5/0407 . . . {inflatable}
- 5/0409 . . . {with means for attaching inner boots or parts thereof to shells of skiboats}
- 5/0411 . . {for cross-country}
- 5/0413 . . . {Adaptations for soles or accessories associated with soles for cross-country bindings}
- 5/0415 . . {Accessories ([A43B 5/0403](#), [A43B 5/0413](#), [A43B 5/0494](#) take precedence)}
- 5/0417 . . . {for soles or associated with soles of ski boots; for ski bindings ([A43B 5/0411](#) takes precedence)}
- 5/0419 . . . . {for walking aids}
- 5/0421 . . . . {located underneath the sole}
- 5/0423 . . . . {located on the sides of the sole}
- 5/0425 . . . {Devices for carrying ski-boots or similar boots}
- 5/0427 . . {characterised by type or construction details}
- 5/0429 . . . {Adjustment of the boot to calf or shin, i.e. fibula, tibia}
- 5/0431 . . . . {to the length of calf or shin, i.e. fibula, tibia}
- 5/0433 . . . . {to the width of calf or shin, i.e. fibula, tibia}
- 5/0435 . . . {Adjustment of the boot to the foot}
- 5/0437 . . . . {to the arch of the foot ([A43B 5/0441](#) takes precedence)}
- 5/0439 . . . . {to the heel; Heel clamping devices; Heel supports}
- 5/0441 . . . . {by lifting the insole}
- 5/0443 . . . . {to the instep of the foot, e.g. metatarsals; Metatarsal clamping devices}
- 5/0445 . . . . . {directly actuated by non flexible means, e.g. screws, levers}
- 5/0447 . . . . . {actuated by flexible means, e.g. cables, straps}
- 5/0449 . . . . . {with the actuator being disposed at the rear side of the boot}
- 5/045 . . . . {to the width of the foot}
- 5/0452 . . . {Adjustment of the forward inclination of the boot leg}
- 5/0454 . . . . {including flex control; Dampening means}
- 5/0456 . . . . . {with the actuator being disposed at the rear side of the boot ([A43B 5/0464](#) takes precedence)}
- 5/0458 . . . . . {with the actuator being disposed at the front side of the boot ([A43B 5/0464](#) takes precedence)}
- 5/046 . . . . . {with the actuator being disposed at the lateral or medial side of the boot ([A43B 5/0464](#) takes precedence)}
- 5/0462 . . . . . {with the actuator being disposed at the lower side of the boot ([A43B 5/0464](#) takes precedence)}
- 5/0464 . . . . . {with exchangeable parts}
- 5/0466 . . . {Adjustment of the side inclination of the boot leg; Canting}
- 5/0468 . . . {Adjustment of the angle of the boot to the ski}
- 5/047 . . . {provided with means to improve walking with the skiboot}
- 5/0472 . . . . {having a flexible toe portion; provided with a hinge at the ball of the foot}
- 5/0474 . . . . {having a walk/ski position ([A43B 5/0472](#) takes precedence)}
- 5/0476 . . . {Front-entry skiboats}
- 5/0478 . . . {Mid-entry skiboats, hybrid skiboats}
- 5/048 . . . {Rear-entry skiboats}
- 5/0482 . . . {made from materials with different rigidities}
- 5/0484 . . . {permitting easy replacement of parts}
- 5/0486 . . {characterized by the material}
- 5/0488 . . . {with an upper made of flexible material, e.g. leather ([A43B 5/0401](#), [A43B 5/002](#) take precedence)}
- 5/049 . . . {with an upper made of composite material, e.g. fibers or core embedded in a matrix}
- 5/0492 . . {Telemark boots}
- 5/0494 . . . {Adaptations for soles or accessories associated with soles for telemark bindings}
- 5/0496 . . {boots for touring or hiking skis}
- 5/0498 . . {For ski jumping}
- 5/06 . Running boots
- 5/08 . Bathing shoes {; Aquatic sports shoes}

- 5/10 . . . . . Tennis shoes
- 5/12 . . . . . Dancing shoes
- 5/14 . . . . . Shoes for cyclists
- 5/145 . . . . . {Boots for motorcyclists}
- 5/16 . . . . . Skating boots
- 5/1608 . . . . . {size adjustable (skates with special foot-plates for the boot divided into two parts permitting adjustment to the size of the foot [A63C 1/26](#))}
- 5/1616 . . . . . {Inner boots}
- 5/1625 . . . . . {made from materials with different rigidities}
- 5/1633 . . . . . {Multipurpose skate boots (roller skates convertible to ice skates [A63C 17/18](#), with fixable wheels permitting walking [A63C 17/20](#))}
- 5/1641 . . . . . {characterised by the sole (skates with special foot-plates for the boot [A63C 1/22](#)); characterised by the attachment of the skate ([A43B 5/1633](#) takes precedence; skates rigidly mounted to the sole of the boot [A63C 1/02](#))}
- 5/165 . . . . . {with ventilation means in the sole}
- 5/1658 . . . . . {provided with resilient means in the sole or between the chassis and the sole}
- 5/1666 . . . . . {characterised by the upper}
- 5/1675 . . . . . {with ventilation means in the upper}
- 5/1683 . . . . . {characterised by the lower part of the upper or by the shell}
- 5/1691 . . . . . {characterised by the higher part of the upper, e.g. surrounding the ankle, by the quarter or cuff}
- 5/18 . . . . . Attachable overshoes for sporting purposes
- 5/185 . . . . . {with a sole covering spikes or cleats}
- 7/00 Footwear with health or hygienic arrangements**
- 7/005 . . . . . {Footwear with cooling arrangements}
- 7/02 . . . . . Footwear with heating arrangements (footwarmers [A61F 2007/0045](#); electric heating elements [H05B](#))
- 7/025 . . . . . {heated by an electric current from an external source, e.g. car batteries}
- 7/04 . . . . . Footwear with electric batteries, generators, or the like
- 7/06 . . . . . Ventilated footwear {(ventilated skating boots [A43B 5/165](#), [A43B 5/1675](#); ventilated socks or inserts [A43B 17/08](#))}
- 7/08 . . . . . Footwear with air-holes, with or without closures
- 7/081 . . . . . {the air being forced from outside}
- 7/082 . . . . . {the air being expelled to the outside}
- 7/084 . . . . . {characterised by the location of the holes}
- 7/085 . . . . . {in the upper}
- 7/087 . . . . . {in the bottom of the sole}
- 7/088 . . . . . {in the side of the sole}
- 7/10 . . . . . with closable air-slots near the waist
- 7/105 . . . . . {with pumping means or valves}
- 7/12 . . . . . Special watertight footwear (overshoes [A43B 3/16](#))
- 7/125 . . . . . {provided with a vapour permeable member, e.g. a membrane ([A43B 23/022](#) takes precedence)}
- 7/14 . . . . . Footwear with foot-supporting parts
- 7/1405 . . . . . {provided with pads or holes on one or more locations, or having an anatomical or curved form}
- 7/141 . . . . . {having an anatomical or curved form}
- 7/1415 . . . . . {characterised by the location under the foot}
- 7/142 . . . . . {situated under the medial arch, i.e. the navicular or cuneiform bones}
- 7/1425 . . . . . {situated under the ball of the foot, i.e. the joint between the first metatarsal and first phalange}
- 7/143 . . . . . {situated under the lateral arch, i.e. the cuboid bone}
- 7/1435 . . . . . {situated under the joint between the fifth phalange and the fifth metatarsal bone}
- 7/144 . . . . . {situated under the heel, i.e. the calcaneus bone}
- 7/1445 . . . . . {situated under the midfoot, i.e. the metatarsal}
- 7/145 . . . . . {situated under the toes, i.e. the phalange}
- 7/1455 . . . . . {with special properties}
- 7/146 . . . . . {provided with acupressure points or means for footmassage}
- 7/1465 . . . . . {with removable or adjustable pads to allow custom fit}
- 7/147 . . . . . {for sick or disabled persons, e.g. persons having osteoarthritis or diabetes}
- 7/1475 . . . . . {characterised by the type of support}
- 7/148 . . . . . {Recesses or holes filled with a support or pad}
- 7/1485 . . . . . {Recesses or holes, traversing partially or completely the thickness of the pad}
- 7/149 . . . . . {Pad, e.g. protruding on the foot facing surface}
- 7/1495 . . . . . {Footwear with arch-supports of the bracelet type}
- 7/16 . . . . . Footwear with elevated heel parts inside
- 7/18 . . . . . Joint supports, e.g. instep supports
- 7/19 . . . . . engaging the ground directly
- 7/20 . . . . . Ankle-joint supports or holders
- 7/22 . . . . . Footwear with fixed flat-foot insertions, metatarsal supports, ankle flaps, or the like (orthopaedic insertions [A61F 5/14](#))
- 7/223 . . . . . {characterised by the constructive form}
- 7/226 . . . . . {characterised by the material}
- 7/24 . . . . . Insertions or cap supports preventing the foot canting to one side {, preventing supination or pronation}
- 7/26 . . . . . Footwear with toe-spacers or toe-spreaders
- 7/28 . . . . . Adapting the inner sole {or the side of the upper} of the shoe to the sole of the foot
- 7/30 . . . . . Protecting the ball-joint against pressure while standing
- 7/32 . . . . . Footwear with shock-absorbing means {Safety footwear} (resilient soles [A43B 13/18](#))
- 7/34 . . . . . Footwear with protection against heat or cold
- 7/36 . . . . . with earthing or grounding means
- 7/38 . . . . . Elevating, i.e. height increasing, footwear (with elevated heel parts inside {[A43B 7/14](#)}; lengthening pieces for natural legs [A61F 3/00](#); orthopaedic insertions for conventional shoes [A61F 5/14](#))
- 9/00 Footwear characterised by the assembling of the individual parts {(assembling parts of upper together [A43B 23/0245](#); assembling sole parts together [A43B 13/12](#))}**
- 9/02 . . . . . Footwear stitched or nailed through
- 9/04 . . . . . Welted footwear (welts [A43B 15/00](#))
- 9/06 . . . . . stitched or nailed through
- 9/08 . . . . . Turned footwear
- 9/10 . . . . . Footwear with out-turned uppers
- 9/12 . . . . . Stuck or cemented footwear

|                          |  |              |   |
|--------------------------|--|--------------|---|
| 9/125                    | . . {using a temporary protective insole or innersole}   | 13/203       | . . . . {provided with a pump or valve}   |
| 9/14                     | . Platform shoes   | 13/206       | . . . . {provided with tubes or pipes or tubular shaped cushioning members}   |
| 9/16                     | . Footwear with soles moulded on to uppers or welded on to uppers without adhesive   | 13/22        | . . Soles made slip-preventing or wear-resisting, e.g. by impregnation or spreading a wear-resisting layer  |
| 9/18                     | . . moulded {(moulding soles or heels to preformed uppers <a href="#">B29D 35/06</a> )}  | 13/223       | . . . {Profiled soles}  |
| 9/20                     | . . welded   | 13/226       | . . . . {the profile being made in the foot facing surface}   |
| <b>11/00</b>             | <b>Footwear with miscellaneous arrangements to facilitate putting-on or removing, e.g. with straps</b>   | 13/24        | . . . by use of insertions  |
| 11/02                    | . with built-in shoe-horns   | 13/26        | . . . . projecting beyond the sole surface  |
| <b>Parts of footwear</b> |  | 13/28        | . characterised by their attachment, also attachment of combined soles and heels ( <a href="#">attachment of heels A43B 21/36</a> ; <a href="#">attachment of heel parts {A43B 21/42}</a> ) |
| <b>13/00</b>             | <b>Soles ({<a href="#">Skating boots characterised by the sole A43B 5/1641</a>,} <a href="#">socks A43B 17/00</a>); <b>Sole and heel units</b></b>   | 13/30        | . . by screws   |
| 13/02                    | . characterised by the material  | 13/32        | . . by adhesives  |
| 13/023                   | . . { <a href="#">Soles with several layers of the same material (soles with several layers of different materials A43B 13/12)</a> }   | 13/34        | . . Soles also attached to the inner side of the heels  |
| 13/026                   | . . { <a href="#">Composites, e.g. carbon fibre or aramid fibre; the sole, one or more sole layers or sole part being made of a composite</a> }  | 13/36        | . . Easily-exchangeable soles ( <a href="#">of metal A43B 13/10</a> ; <a href="#">protecting-soles A43C 13/12</a> )   |
| 13/04                    | . . plastics, rubber or vulcanised fibre   | 13/37        | . Sole and heel units   |
| 13/08                    | . . wood   | 13/38        | . Built-in insoles joined to uppers during the manufacturing process, e.g. structural insoles; Insoles glued to shoes during the manufacturing process                                      |
| 13/10                    | . . metal  | 13/383       | . . { <a href="#">pieced</a> }  |
| 13/12                    | . . Soles with several layers of different materials   | 13/386       | . . { <a href="#">multilayered</a> }  |
| 13/122                   | . . . {characterised by the outsole or external layer}   | 13/39        | . . with upset sewing ribs  |
| 13/125                   | . . . {characterised by the midsole or middle layer}   | 13/40        | . . with cushions   |
| 13/127                   | . . . . {the midsole being multilayer}   | 13/41        | . . combined with heel stiffener, toe stiffener, or shank stiffener   |
| 13/14                    | . characterised by the constructive form   | 13/42        | . Filling materials located between the insole and outer sole; Stiffening materials   |
| 13/141                   | . . {with a part of the sole being flexible, e.g. permitting articulation or torsion}  | <b>15/00</b> | <b>Welts for footwear</b>   |
| 13/143                   | . . {provided with wedged, concave or convex end portions, e.g. for improving roll-off of the foot}  | <b>17/00</b> | <b>Insoles for insertion, e.g. footbeds or inlays, for attachment to the shoe after the upper has been joined (<a href="#">special medical insertions for shoes A61F 5/14</a>)</b>          |
| 13/145                   | . . . {Convex portions, e.g. with a bump or projection, e.g. 'Masai' type shoes}   | 17/003       | . {characterised by the material ( <a href="#">made of wood A43B 17/12</a> , <a href="#">made of sponge, rubber or plastic materials A43B 17/14</a> )}                                      |
| 13/146                   | . . . {Concave end portions, e.g. with a cavity or cut-out portion}  | 17/006       | . . { <a href="#">multilayered</a> }  |
| 13/148                   | . . . {Wedged end portions}  | 17/02        | . wedge-like or resilient   |
| 13/16                    | . . Pieced soles ( <a href="#">with several layers of different material A43B 13/12</a> )  | 17/023       | . . {wedge-like ( <a href="#">A43B 17/03 takes precedence</a> )}  |
| 13/18                    | . . Resilient soles {(skating boots provided with resilient means <a href="#">A43B 5/1658</a> )}   | 17/026       | . . {filled with a non-compressible fluid, e.g. gel, water}   |
| 13/181                   | . . . {Resiliency achieved by the structure of the sole}   | 17/03        | . . filled with a gas, e.g. air   |
| 13/182                   | . . . . { <a href="#">Helicoidal springs</a> }   | 17/035       | . . . {provided with a pump or valve}   |
| 13/183                   | . . . . { <a href="#">Leaf springs</a> }   | 17/04        | . with metal insertions or coverings  |
| 13/184                   | . . . . {the structure protruding from the outsole}  | 17/06        | . with metal springs  |
| 13/185                   | . . . . {Elasticated plates sandwiched between two interlocking components, e.g. thrustors}  | 17/08        | . ventilated  |
| 13/186                   | . . . . {Differential cushioning region, e.g. cushioning located under the ball of the foot ( <a href="#">resilient heel not included in the sole A43B 21/26</a> ; <a href="#">resilient supports for the heel of the foot A43B 21/32</a> )} | 17/10        | . specially adapted for sweaty feet; waterproof   |
| 13/187                   | . . . {Resiliency achieved by the features of the material, e.g. foam, non liquid materials}   | 17/102       | . . { <a href="#">Moisture absorbing socks</a> ; <a href="#">Moisture dissipating socks</a> }   |
| 13/188                   | . . . . {Differential cushioning regions}  | 17/105       | . . . { <a href="#">Disposable</a> }  |
| 13/189                   | . . . {filled with a non-compressible fluid, e.g. gel, water}  | 17/107       | . . { <a href="#">waterproof</a> }  |
| 13/20                    | . . . Pneumatic soles {filled with a compressible fluid, e.g. air, gas ( <a href="#">inflatable linings for skiboats A43B 5/0407</a> )}  | 17/12        | . made of wood  |
|                          |  | 17/14        | . made of sponge, rubber, or plastic materials  |
|                          |  | 17/16        | . with heel or toe caps   |
|                          |  | 17/18        | . Arrangements for attaching removable insoles to footwear  |



- 19/00 Shoe-shaped inserts; Inserts covering the instep**  
{(for ski boots or similar boots [A43B 5/0405](#), for skating boots [A43B 5/1616](#))}
- 19/005 . {Weighted inserts for shoes, i.e. insert comprising an additional weight}
- 21/00 Heels; Top-pieces {, e.g. high heels, heel distinct from the sole, high heels monolithic with the sole (sole and heel units [A43B 13/37](#))}**
- 21/02 . characterised by the material
- 21/025 . . {Metal}
- 21/03 . . wood
- 21/04 . . leather
- 21/06 . . rubber
- 21/08 . . . combined hard and soft rubber
- 21/18 . . combined rubber and leather
- 21/20 . . plastics
- 21/22 . Heels or heel attachments specially designed to prevent splashing
- 21/24 . characterised by the constructive form
- 21/26 . . Resilient heels
- 21/265 . . . {filled with a non-compressible fluid, e.g. gel, water}
- 21/28 . . . Pneumatic heels {filled with a compressible fluid, e.g. air, gas}
- 21/285 . . . . {provided with a pump or valve}
- 21/30 . . Heels with metal springs
- 21/32 . . Resilient supports for the heel of the foot
- 21/36 . characterised by their attachment; Securing devices for the attaching means (combined with soles [A43B 13/28](#))
- 21/37 . . by hook-shaped or bent attaching means
- 21/38 . . by screws only
- 21/39 . . by rib groove
- 21/40 . . . by dovetail
- 21/42 . . Heels with replaceable or adjustable parts {, e.g. top lift}
- 21/433 . . . rotatably mounted
- 21/437 . . . with axially-adjustable rod-like top-pieces
- 21/44 . . by claw-like means
- 21/45 . . . with special tensioning means
- 21/46 . . by bolts
- 21/47 . . by resilient means
- 21/48 . . . by press-buttons
- 21/50 . . by bayonet catches or the like
- 21/51 . . with keyhole-shaped opening and pin
- 21/52 . . Interchangeable heel parts without special attachments
- 21/54 . . by adhesion or the like
- 23/00 Uppers; Boot legs; Stiffeners; Other single parts of footwear**
- 23/02 . Uppers; Boot legs {(ski boots with an upper made of flexible material [A43B 5/0486](#); skating boots characterised by the uppers [A43B 5/1666](#))}
- 23/0205 . . {characterised by the material (material of the lining [A43B 23/07](#), material of toe stiffeners or heel stiffeners [A43B 23/08](#))}
- 23/021 . . . {Leather}
- 23/0215 . . . {Plastics or artificial leather}
- 23/022 . . . . {with waterproof breathable membranes}
- 23/0225 . . . {Composite materials, e.g. material with a matrix}
- 23/023 . . . {Metal}
- 23/0235 . . . {Different layers of different material}
- 23/024 . . . {Different layers of the same material}
- 23/0245 . . {characterised by the constructive form}
- 23/025 . . . {assembled by stitching}
- 23/0255 . . . {assembled by gluing or thermo bonding}
- 23/026 . . . {Laminated layers}
- 23/0265 . . . {having different properties in different directions}
- 23/027 . . . . {with a part of the upper particularly flexible, e.g. permitting articulation or torsion}
- 23/0275 . . . . {with a part of the upper particularly rigid, e.g. resisting articulation or torsion}
- 23/028 . . . {Resilient uppers, e.g. shock absorbing}
- 23/0285 . . . . {filled with a non-compressible fluid, e.g. gel or water}
- 23/029 . . . . {Pneumatic upper, e.g. gas filled}
- 23/0295 . . . {Pieced uppers}
- 23/04 . . Uppers made of one piece; Uppers with inserted gussets
- 23/042 . . . {Uppers made of one piece (one piece slippers [A43B 3/106](#); one piece sandals [A43B 3/124](#))}
- 23/045 . . . {Uppers with inserted gussets}
- 23/047 . . . . {the gusset being elastic}
- 23/06 . . Waterproof legs
- 23/07 . Linings therefor {(for ski boots or similar boots [A43B 5/0405](#), lining laminated with upper [A43B 23/026](#))}
- 23/08 . Heel stiffeners; Toe stiffeners (footwear with shock-absorbing means [A43B 7/32](#))
- 23/081 . . {Toe stiffeners}
- 23/082 . . . {made of metal}
- 23/083 . . . . {light-alloys}
- 23/085 . . . {made of leather}
- 23/086 . . . {made of impregnated fabrics, plastics or the like}
- 23/087 . . . . {made of plastics}
- 23/088 . . {Heel stiffeners ([A43B 23/10](#), [A43B 23/14](#), [A43B 23/16](#), [A43B 23/17](#) take precedence)}
- 23/10 . . made of metal {([A43B 23/082](#) takes precedence)}
- 23/105 . . . {light-alloys}
- 23/14 . . made of leather {([A43B 23/085](#) takes precedence)}
- 23/16 . . made of impregnated fabrics, plastics or the like {([A43B 23/086](#) takes precedence)}
- 23/17 . . . made of plastics
- 23/20 . Nails, pegs, pins, clamps, or tacks, for footwear
- 23/22 . Supports for the shank or arch of the uppers (for health or hygienic purposes [A43B 7/14](#))
- 23/222 . . {characterised by the attachment to the sole}
- 23/225 . . . {by integrated teeth}
- 23/227 . . {fixed on the outside of the shoe}
- 23/24 . Ornamental buckles; Other ornaments for shoes without fastening function
- 23/25 . . Arrangement of ribbons on footwear
- 23/26 . Tongues for shoes
- 23/28 . Devices to put in shoes in order to prevent slipping at the heel or to prevent abrading the stockings
- 23/30 . Heel-protectors for car-drivers