

**CPC****COOPERATIVE PATENT CLASSIFICATION****A43B****CHARACTERISTIC FEATURES OF FOOTWEAR; PARTS OF FOOTWEAR****WARNING**

[C2012.04]

The following IPC groups are not used in the CPC scheme. Subject matter covered by these 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****A43B 1/00****Footwear characterised by the material** ([layered products B32B](#))[A43B 1/0009](#)

- . { Footwear made at least partially of alveolar or honeycomb material}

[A43B 1/0018](#)

- . { Footwear made at least partially of flexible, bellow-like shaped material}

[A43B 1/0027](#)

- . { Footwear made at least partially from a material having special colours}

[A43B 1/0036](#)

- .. { with fluorescent or phosphorescent parts}

[A43B 1/0045](#)

- . { Footwear made at least partially of deodorant means}

[A43B 1/0054](#)

- . { Footwear provided with magnets, magnetic parts or magnetic substances}

[A43B 1/0063](#)

- . { Footwear made at least partially of material that can be recycled}

[A43B 1/0072](#)

- . { Footwear made at least partially of transparent or translucent materials}

[A43B 1/0081](#)

- . { Footwear made at least partially of hook-and-loop type material (**hook and loop-type straps for fastening purpose [A43C 11/1493](#)**)}

[A43B 1/009](#)

- . { Footwear made at least partially of washable material}

[A43B 1/02](#)

- . Footwear made of animal or plant fibres or fabrics made therefrom

[A43B 1/04](#)

- .. Braided, knotted, knitted, or crocheted footwear

[A43B 1/06](#)

- . Footwear made of wood, cork, card-board, paper or like fibrous material ([soles \[A43B 13/00\]\(#\); making of wooden shoes \[B27M 3/20\]\(#\)](#))

[A43B 1/08](#)

- . Footwear made of metal ([soles \[A43B 13/10\]\(#\)](#))

[A43B 1/10](#)

- . Footwear made of rubber

[A43B 1/12](#)

- .. of rubber waste

A43B 1/14 . Footwear made of gutta-percha, celluloid, or plastics

### **A43B 3/00 Footwear characterised by the shape or the use**

- A43B 3/0005 . { Footwear provided with electrical or electronic systems}
- A43B 3/001 .. { Footwear provided with light source}
- A43B 3/0015 .. { Footwear provided with generator}
- A43B 3/0021 .. { Footwear provided with sound or music source}
- A43B 3/0026 . {Footwear for use in minefields; Footwear protecting from landmine blast; Footwear preventing landmines from being triggered}
- A43B 3/0031 . { Footwear provided with a pocket, e.g. for keys or a card}
- A43B 3/0036 . { Footwear characterised by a special shape or design}
- A43B 3/0042 .. { with circular or circle shaped parts}
- A43B 3/0047 .. { Footwear parts having a male and corresponding female profile to fit together, e.g. form-fit}
- A43B 3/0052 .. { X-shaped or cross-shaped}
- A43B 3/0057 .. { S-shaped}
- A43B 3/0063 .. { U-shaped}
- A43B 3/0068 .. { V-shaped}
- A43B 3/0073 .. { Y-shaped}
- A43B 3/0078 .. { Footwear provided with logos, letters, signatures or the like decoration ([A43B 23/24](#) takes precedence)}
- A43B 3/0084 ... { Arrangement of flocked decoration on shoes}
- A43B 3/0089 ... { with means to identify the size of the shoe}
- A43B 3/0094 .. { with means to differentiate between right and left shoe}
- A43B 3/02 . Top-boots; Leg-boots; Shoes with batwing tabs
- A43B 3/04 .. with rubber or elastic insertions or gussets
- A43B 3/06 . Shoes with flaps; Footwear with divided uppers
- A43B 3/08 .. with rubber or elastic insertions or gussets
- A43B 3/10 . Low shoes; Slippers ([sandals A43B 3/12](#))
- A43B 3/101 .. {Slippers}
- A43B 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](#))}
- A43B 3/103 .... {characterised by the attachment of the toestrap}
- A43B 3/105 .... {characterised by the shape or layout of the toestrap}
- A43B 3/106 .. {Disposable slippers; One piece slippers}
- A43B 3/107 .. {characterised by the material}
- A43B 3/108 .. {characterised by the sole}

- A43B 3/12 . Sandals {provided with an anklestrap}; Strap guides thereon {(footwear having only a toestrapped, thong sandals [A43B 3/10](#))}
- A43B 3/122 . . {characterised by the attachment of the straps}
- A43B 3/124 . . {Disposable sandals; One piece sandals}
- A43B 3/126 . . {characterised by the shape or layout of the straps}
- A43B 3/128 . . {characterised by the sole}
- A43B 3/14 . Moccasins, opanken, or like shoes
- A43B 3/16 . Overshoes {(A43B 23/30 takes precedence)}
- A43B 3/163 . . {Overshoes specially adapted for health or hygienic purposes, e.g. comprising electrically conductive material allowing the discharge of electrostatic charges}
- A43B 3/166 . . {Mud-guards}
- A43B 3/18 . . Devices for holding overshoes in position
- A43B 3/20 . . Heel-less overshoes
- A43B 3/22 . . Protecting sheaths worn between shoe and overshoe
- A43B 3/24 . Collapsible or convertible footwear {(multipurpose skate boots [A43B 5/1633](#); exchangeable soles [A43B 13/36](#))}
- A43B 3/242 . . { characterised by the upper}
- A43B 3/244 . . { characterised by the attachment between upper and sole}
- A43B 3/246 . . { characterised by the sole}
- A43B 3/248 . . { Collapsible or foldable footwear, e.g. for travelling}
- A43B 3/26 . Footwear adjustable as to length or size {(adjustable ski boots or similar boots [A43B 5/0427](#); adjustable skating boots [A43B 5/1608](#))}
- A43B 3/28 . Footwear specially adapted for dolls
- A43B 3/30 . Footwear specially adapted for babies or small children
- A43B 5/00** **Footwear for sporting purposes** (non-skid devices, e.g. ice-spurs, studs for football shoes, [A43C 15/00](#))
- A43B 5/001 . {Golf shoes}
- A43B 5/002 . {Mountain boots or shoes}
- A43B 5/003 . . {for free climbing}
- A43B 5/004 . {After-ski boots}
- A43B 5/005 . {for grinding, i.e. sliding on the sole or a part thereof}
- A43B 5/006 . { for horse riding (stirrups [B68C 3/00](#))}
- A43B 5/007 . { Footwear for car driving or racing}

- A43B 5/008 . { Bowling Shoes}
- A43B 5/02 . Football boots {or shoes, i.e. footwear for soccer, football or rugby}
- A43B 5/025 .. { characterised by an element which improves the contact between the ball and the footwear}
- A43B 5/04 . Ski boots; Similar boots
- A43B 5/0401 .. {Snowboard boots}
- A43B 5/0403 ... {Adaptations for soles or accessories with soles for snowboard bindings}
- A43B 5/0405 .. {Linings, paddings, insertions; Inner boots (in general [A43B 19/00](#))}
- A43B 5/0407 ... {inflatable}
- A43B 5/0409 ... { with means for attaching inner boots or parts thereof to shells of skiboats}
- A43B 5/0411 .. {for cross-country}
- A43B 5/0413 ... {Adaptations for soles or accessories associated with soles for cross-country bindings}
- A43B 5/0415 .. {Accessories ([A43B 5/0403](#), [A43B 5/0413](#), [A43B 5/0494](#) take precedence)}
- A43B 5/0417 ... {for soles or associated with soles of ski boots; for ski bindings ([A43B 5/0411](#) takes precedence)}
- A43B 5/0419 .... {for walking aids}
- A43B 5/0421 .... { located underneath the sole}
- A43B 5/0423 .... { located on the sides of the sole}
- A43B 5/0425 ... {Devices for carrying ski-boots or similar boots}
- A43B 5/0427 .. { characterised by type or construction details}
- A43B 5/0429 ... {Adjustment of the boot to calf or shin, i.e. fibula, tibia}
- A43B 5/0431 .... {to the length of calf or shin, i.e. fibula, tibia}
- A43B 5/0433 .... {to the width of calf or shin, i.e. fibula, tibia}
- A43B 5/0435 ... {Adjustment of the boot to the foot}
- A43B 5/0437 .... {to the arch of the foot ([A43B 5/0441](#) takes precedence)}
- A43B 5/0439 .... {to the heel; Heel clamping devices; Heel supports}
- A43B 5/0441 .... {by lifting the insole}
- A43B 5/0443 .... {to the instep of the foot, e.g. metatarsals; Metatarsal clamping devices}
- A43B 5/0445 ..... {directly actuated by non flexible means, e.g. screws, levers}
- A43B 5/0447 ..... {actuated by flexible means, e.g. cables, straps}
- A43B 5/0449 ..... {with the actuator being disposed at the rear side of the boot}
- A43B 5/045 .... {to the width of the foot}
- A43B 5/0452 ... {Adjustment of the forward inclination of the boot leg}
- A43B 5/0454 .... {including flex control; Dampening means}
- A43B 5/0456 ..... {with the actuator being disposed at the rear side of the boot ([A43B 5/0464](#) takes precedence)}
- A43B 5/0458 ..... {with the actuator being disposed at the front side of the boot ([A43B 5/0464](#) takes precedence)}
- A43B 5/046 ..... {with the actuator being disposed at the lateral or medial side of the boot ([A43B 5/0464](#) takes precedence)}

- A43B 5/0462 . . . . . {with the actuator being disposed at the lower side of the boot  
([A43B 5/0464](#) takes precedence)}
- A43B 5/0464 . . . . . {with exchangeable parts}
- A43B 5/0466 . . . {Adjustment of the side inclination of the boot leg; Canting}
- A43B 5/0468 . . . {Adjustment of the angle of the boot to the ski}
- A43B 5/047 . . . {provided with means to improve walking with the skiboot}
- A43B 5/0472 . . . . . {having a flexible toe portion; provided with a hinge at the ball of the foot}
- A43B 5/0474 . . . . . {having a walk/ski position ([A43B 5/0472](#) takes precedence)}
- A43B 5/0476 . . . { Front-entry skiboots}
- A43B 5/0478 . . . { Mid-entry skiboots, hybrid skiboots}
- A43B 5/048 . . . { Rear-entry skiboots}
- A43B 5/0482 . . . { made from materials with different rigidities}
- A43B 5/0484 . . . { permitting easy replacement of parts}
- A43B 5/0486 . . { characterized by the material}
- A43B 5/0488 . . . { with an upper made of flexible material, e.g. leather ([A43B 5/0401](#),  
[A43B 5/002](#) take precedence)}
- A43B 5/049 . . . { with an upper made of composite material, e.g. fibers or core embedded in a  
matrix}
- A43B 5/0492 . . {Telemark boots}
- A43B 5/0494 . . . {Adaptations for soles or accessories associated with soles for telemark  
bindings}
- A43B 5/0496 . . { boots for touring or hiking skis}
- A43B 5/0498 . . { For ski jumping}
  
- A43B 5/06 . . Running boots
  
- A43B 5/08 . . Bathing shoes; {Aquatic sports shoes}
  
- A43B 5/10 . . Tennis shoes
  
- A43B 5/12 . . Dancing shoes
  
- A43B 5/14 . . Shoes for cyclists
- A43B 5/145 . . {Boots for motorcyclists}
  
- A43B 5/16 . . Skating boots
- A43B 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](#))}
- A43B 5/1616 . . {Inner boots}
- A43B 5/1625 . . { made from materials with different rigidities}
- A43B 5/1633 . . {Multipurpose skate boots (roller skates convertible to ice skates [A63C 17/18](#), with  
fixable wheels permitting walking [A63C 17/20](#))}
- A43B 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](#))}
- A43B 5/165 . . . {with ventilation means in the sole}

- A43B 5/1658 . . . {provided with resilient means in the sole or between the chassis and the sole}
- A43B 5/1666 . . {characterised by the upper}
- A43B 5/1675 . . . {with ventilation means in the upper}
- A43B 5/1683 . . . {characterised by the lower part of the upper or by the shell}
- A43B 5/1691 . . . {characterised by the higher part of the upper, e.g. surrounding the ankle, by the quarter or cuff}
  
- A43B 5/18 . Attachable overshoes for sporting purposes
- A43B 5/185 . . {with a sole covering spikes or cleats}

## **A43B 7/00 Footwear with health or hygienic arrangements**

- A43B 7/005 . { Footwear with cooling arrangements}
  
- A43B 7/02 . Footwear with heating arrangements (footwarmers **A61F 7/06**; electric heating elements **H05B**)
- A43B 7/025 . . {heated by an electric current from an external source, e.g. car batteries}
- A43B 7/04 . . Footwear with electric batteries, generators, or the like
  
- A43B 7/06 . Ventilated footwear {(ventilated skating boots **A43B 5/165**, **A43B 5/1675**; ventilated socks or inserts **A43B 17/08**)}
- A43B 7/08 . . Footwear with air-holes, with or without closures
- A43B 7/081 . . . { the air being forced from outside}
- A43B 7/082 . . . { the air being expelled to the outside}
- A43B 7/084 . . . { characterised by the location of the holes}
- A43B 7/085 . . . . { in the upper}
- A43B 7/087 . . . . { in the bottom of the sole}
- A43B 7/088 . . . . { in the side of the sole}
- A43B 7/10 . . . with closable air-slots near the waist
- A43B 7/105 . . . . {with pumping means or valves}
  
- A43B 7/12 . Special watertight footwear (overshoes **A43B 3/16**)
- A43B 7/125 . . { provided with a vapour permeable member, e.g. a membrane (**A43B 23/022** takes precedence)}
  
- A43B 7/14 . Footwear with foot-supporting parts
- A43B 7/1405 . . { provided with pads or holes on one or more locations, or having an anatomical or curved form}
- A43B 7/141 . . . { having an anatomical or curved form}
- A43B 7/1415 . . . { characterised by the location under the foot}
- A43B 7/142 . . . . { situated under the medial arch, i.e. the navicular or cuneiform bones}
- A43B 7/1425 . . . . { situated under the ball of the foot, i.e. the joint between the first metatarsal and first phalange}
- A43B 7/143 . . . . { situated under the lateral arch, i.e. the cuboid bone}
- A43B 7/1435 . . . . { situated under the joint between the fifth phalange and the fifth metatarsal bone}

- A43B 7/144 . . . . { situated under the heel, i.e. the calcaneus bone}
- A43B 7/1445 . . . . { situated under the midfoot, i.e. the metatarsal}
- A43B 7/145 . . . . { situated under the toes, i.e. the phalange}
- A43B 7/1455 . . . { with special properties}
- A43B 7/146 . . . . { provided with acupressure points or means for footmassage}
- A43B 7/1465 . . . . { with removable or adjustable pads to allow custom fit}
- A43B 7/147 . . . . { for sick or disabled persons, e.g. persons having osteoarthritis or diabetes}
- A43B 7/1475 . . . { characterised by the type of support}
- A43B 7/148 . . . . { Recesses or holes filled with a support or pad}
- A43B 7/1485 . . . . { Recesses or holes, traversing partially or completely the thickness of the pad}
- A43B 7/149 . . . . { Pad, e.g. protruding on the foot facing surface}
- A43B 7/1495 . . {Footwear with arch-supports of the bracelet type}
- A43B 7/16 . . Footwear with elevated heel parts inside
- A43B 7/18 . . Joint supports, e.g. instep supports
- A43B 7/19 . . . engaging the ground directly
- A43B 7/20 . . . Ankle-joint supports or holders
- A43B 7/22 . . Footwear with fixed flat-foot insertions, metatarsal supports, ankle flaps, or the like (orthopaedic insertions [A61F 5/14](#))
- A43B 7/223 . . . {characterised by the constructive form}
- A43B 7/226 . . . {characterised by the material}
- A43B 7/24 . . Insertions or cap supports preventing the foot canting to one side, {preventing supination or pronation}
- A43B 7/26 . . Footwear with toe-spacers or toe-spreaders
- A43B 7/28 . . Adapting the inner sole { or the side of the upper} of the shoe to the sole of the foot
- A43B 7/30 . . Protecting the ball-joint against pressure while standing
- A43B 7/32 . Footwear with shock-absorbing means {Safety footwear}(resilient soles [A43B 13/18](#))
- A43B 7/34 . Footwear with protection against heat or cold
- A43B 7/36 . with earthing or grounding means
- A43B 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](#))
- A43B 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](#))}**
- A43B 9/02 . Footwear stitched or nailed through
- A43B 9/04 . Welted footwear (welts [A43B 15/00](#))
- A43B 9/06 . . stitched or nailed through
- A43B 9/08 . Turned footwear

- A43B 9/10 . Footwear with out-turned uppers
- A43B 9/12 . Stuck or cemented footwear
- A43B 9/125 . . {using a temporary protective insole or innersole}
- A43B 9/14 . Platform shoes
- A43B 9/16 . Footwear with soles moulded on to uppers or welded on to uppers without adhesive
- A43B 9/18 . . moulded {(moulding soles or heels to preformed uppers [B29D 35/06](#))}
- A43B 9/20 . . welded

**A43B 11/00 Footwear with miscellaneous arrangements to facilitate putting-on or removing, e.g. with straps**

- A43B 11/02 . with built-in shoe-horns

**Parts of footwear**

**A43B 13/00 Soles ({Skating boots characterised by the sole [A43B 5/1641](#),}socks [A43B 17/00](#)); Sole and heel units**

- A43B 13/02 . characterised by the material
- A43B 13/023 . . { Soles with several layers of the same material (soles with several layers of different materials [A43B 13/12](#))}
- A43B 13/026 . . { Composites, e.g. carbon fibre or aramid fibre; the sole, one or more sole layers or sole part being made of a composite}
- A43B 13/04 . . plastics, rubber or vulcanised fibre
- A43B 13/08 . . wood
- A43B 13/10 . . metal
- A43B 13/12 . . Soles with several layers of different materials
  - A43B 13/122 . . . { characterised by the outsole or external layer}
  - A43B 13/125 . . . { characterised by the midsole or middle layer}
  - A43B 13/127 . . . . { the midsole being multilayer}
- A43B 13/14 . characterised by the constructive form
  - A43B 13/141 . . {with a part of the sole being flexible, e.g. permitting articulation or torsion}
  - A43B 13/143 . . {provided with wedged, concave or convex end portions, e.g. for improving roll-off of the foot}
    - A43B 13/145 . . . { Convex portions, e.g. with a bump or projection, e.g. 'Masai' type shoes}
    - A43B 13/146 . . . {Concave end portions, e.g. with a cavity or cut-out portion}
    - A43B 13/148 . . . {Wedged end portions}
  - A43B 13/16 . . Pieced soles (with several layers of different material [A43B 13/12](#))
  - A43B 13/18 . . Resilient soles {(skating boots provided with resilient means [A43B 5/1658](#))}
  - A43B 13/181 . . . {Resiliency achieved by the structure of the sole}



A43B 13/182	....	{Helicoidal springs}
A43B 13/183	....	{Leaf springs}
A43B 13/184	....	{the structure protruding from the outsole}
A43B 13/185	....	{ Elasticated plates sandwiched between two interlocking components, e.g. thrustors}
A43B 13/186	....	{ Differential cushioning region, e.g. cushioning located under the ball of the foot (resilient heel not included in the sole <a href="#">A43B 21/26</a> ; resilient supports for the heel of the foot <a href="#">A43B 21/32</a> )}
A43B 13/187	...	{Resiliency achieved by the features of the material, e.g. foam, non liquid materials}
A43B 13/188	....	{Differential cushioning regions}
A43B 13/189	...	{filled with a non-compressible fluid, e.g. gel, water}
A43B 13/20	...	Pneumatic soles {filled with a compressible fluid, e.g. air, gas (inflatable linings for skiboats <a href="#">A43B 5/0407</a> )}
A43B 13/203	....	{provided with a pump or valve}
A43B 13/206	....	{ provided with tubes or pipes or tubular shaped cushioning members}
A43B 13/22	..	Soles made slip-preventing or wear-resisting, e.g. by impregnation or spreading a wear-resisting layer
A43B 13/223	...	{Profiled soles}
A43B 13/226	....	{the profile being made in the foot facing surface}
A43B 13/24	...	by use of insertions
A43B 13/26	....	projecting beyond the sole surface
A43B 13/28	.	characterised by their attachment, also attachment of combined soles and heels (attachment of heels <a href="#">A43B 21/36</a> ; attachment of heel parts { <a href="#">A43B 21/42</a> })
A43B 13/30	..	by screws
A43B 13/32	..	by adhesives
A43B 13/34	..	Soles also attached to the inner side of the heels
A43B 13/36	..	Easily-exchangeable soles (of metal <a href="#">A43B 13/10</a> ; protecting-soles <a href="#">A43C 13/12</a> )
A43B 13/37	.	Sole and heel units
A43B 13/38	.	Insoles
A43B 13/383	..	{Pieced insoles}
A43B 13/386	..	{ Multilayer insoles}
A43B 13/39	..	with upset sewing ribs
A43B 13/40	..	with cushions
A43B 13/41	..	combined with heel stiffener, toe stiffener, or shank stiffener
A43B 13/42	.	Filling materials located between the insole and outer sole; Stiffening materials
<b>A43B 15/00</b>		<b>Welts for footwear</b>
<b>A43B 17/00</b>		<b>Socks</b> (hosiery <a href="#">A41B 11/00</a> ; special medical insertions for shoes <a href="#">A61F 5/14</a> )

- A43B 17/003 . {characterised by the material (wooden socks [A43B 17/12](#), made of sponge, rubber or plastic materials [A43B 17/14](#))}
- A43B 17/006 . . { Multilayerd}
- A43B 17/02 . Wedge-like or resilient socks or sock parts
- A43B 17/023 . . {wedge-like ([A43B 17/03](#) takes precedence)}
- A43B 17/026 . . {filled with a non-compressible fluid, e.g. gel, water}
- A43B 17/03 . . pneumatic {, filled with a compressible fluid, e.g. air, gas (inflatable linings for skiboats [A43B 5/0407](#))}
- A43B 17/035 . . . {provided with a pump or valve}
- A43B 17/04 . with metal insertions or coverings
- A43B 17/06 . with metal springs
- A43B 17/08 . Ventilated socks
- A43B 17/10 . for sweaty feet; Waterproof socks
- A43B 17/102 . . {Moisture absorbing socks; Moisture dissipating socks}
- A43B 17/105 . . . {Disposable}
- A43B 17/107 . . {Waterproof socks}
- A43B 17/12 . Wooden socks
- A43B 17/14 . made of sponge, rubber, or plastic materials
- A43B 17/16 . with heel or toe caps
- A43B 17/18 . Arrangements for attaching socks to the footwear
- A43B 19/00** **Shoe-shaped inserts; Inserts covering the instep** {(for ski boots or similar boots [A43B 5/0405](#), for skating boots [A43B 5/1616](#))}
- A43B 19/005 . { Weighted inserts for shoes, i.e. insert comprising an additional weight}
- A43B 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](#))}
- A43B 21/02 . characterised by the material
- A43B 21/025 . . {Metal}
- A43B 21/03 . . wood
- A43B 21/04 . . leather
- A43B 21/06 . . rubber
- A43B 21/08 . . . combined hard and soft rubber
- A43B 21/18 . . combined rubber and leather
- A43B 21/20 . . plastics

- A43B 21/22 . Heels or heel attachments specially designed to prevent splashing
- A43B 21/24 . characterised by the constructive form
- A43B 21/26 .. Resilient heels
- A43B 21/265 ... {filled with a non-compressible fluid, e.g. gel, water}
- A43B 21/28 ... Pneumatic heels {filled with a compressible fluid, e.g. air, gas}
- A43B 21/285 .... {provided with a pump or valve}
- A43B 21/30 .. Heels with metal springs
- A43B 21/32 .. Resilient supports for the heel of the foot
- A43B 21/36 . characterised by their attachment; Securing devices for the attaching means  
(combined with soles [A43B 13/28](#))
- A43B 21/37 .. by hook-shaped or bent attaching means
- A43B 21/38 .. by screws only
- A43B 21/39 .. by rib groove
- A43B 21/40 ... by dovetail
- A43B 21/42 .. Heels with replaceable or adjustable parts, { e.g. top lift}
- A43B 21/433 ... rotatably mounted
- A43B 21/437 ... with axially-adjustable rod-like top-pieces
- A43B 21/44 .. by claw-like means
- A43B 21/45 ... with special tensioning means
- A43B 21/46 .. by bolts
- A43B 21/47 .. by resilient means
- A43B 21/48 ... by press-buttons
- A43B 21/50 .. by bayonet catches or the like
- A43B 21/51 .. with keyhole-shaped opening and pin
- A43B 21/52 .. Interchangeable heel parts without special attachments
- A43B 21/54 .. by adhesion or the like

#### **A43B 23/00 Uppers; Boot legs; Stiffeners; Other single parts of footwear**

- A43B 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](#))}
- A43B 23/0205 .. { characterised by the material (material of the lining [A43B 23/07](#), material of toe  
stiffeners or heel stiffeners [A43B 23/08](#))}
- A43B 23/021 ... { Leather}
- A43B 23/0215 ... { Plastics or artificial leather}
- A43B 23/022 .... { with waterproof breathable membranes}
- A43B 23/0225 ... { Composite materials, e.g. material with a matrix}
- A43B 23/023 ... { Metal}
- A43B 23/0235 ... { Different layers of different material}
- A43B 23/024 ... { Different layers of the same material}
- A43B 23/0245 .. { characterised by the constructive form}

- A43B 23/025 ... { assembled by stitching}
- A43B 23/0255 ... { assembled by gluing or thermo bonding}
- A43B 23/026 ... { Laminated layers}
- A43B 23/0265 ... { having different properties in different directions}
- A43B 23/027 .... { with a part of the upper particularly flexible, e.g. permitting articulation or torsion}
- A43B 23/0275 .... { with a part of the upper particularly rigid, e.g. resisting articulation or torsion}
- A43B 23/028 ... { Resilient uppers e.g. shock absorbing}
- A43B 23/0285 .... { filled with a non-compressible fluid, e.g. gel or water}
- A43B 23/029 .... { Pneumatic upper, e.g. gas filled}
- A43B 23/0295 ... { Pieced uppers}
- A43B 23/04 .. Uppers made of one piece; Uppers with inserted gussets
- A43B 23/042 ... {Uppers made of one piece (one piece slippers [A43B 3/106](#); one piece sandals [A43B 3/124](#))}
- A43B 23/045 ... {Uppers with inserted gussets}
- A43B 23/047 .... {the gusset being elastic}
- A43B 23/06 .. Waterproof legs
  
- A43B 23/07 . Linings therefor {(for ski boots or similar boots [A43B 5/0405](#), lining laminated with upper [A43B 23/026](#))}
  
- A43B 23/08 . Heel stiffeners; Toe stiffeners (footwear with shock-absorbing means [A43B 7/32](#))
- A43B 23/081 .. {Toe stiffeners }
- A43B 23/082 ... {made of metal}
- A43B 23/083 .... {light-alloys}
- A43B 23/085 ... {made of leather}
- A43B 23/086 ... {made of impregnated fabrics, plastics or the like}
- A43B 23/087 .... {made of plastics}
- A43B 23/088 .. {Heel stiffeners ([A43B 23/10](#), [A43B 23/14](#), [A43B 23/16](#), [A43B 23/17](#) take precedence)}
- A43B 23/10 .. made of metal {([A43B 23/082](#) takes precedence)}
- A43B 23/105 ... {light-alloys}
- A43B 23/14 .. made of leather {([A43B 23/085](#) takes precedence)}
- A43B 23/16 .. made of impregnated fabrics, plastics or the like {([A43B 23/086](#) takes precedence)}
- A43B 23/17 ... made of plastics
  
- A43B 23/20 . Nails, pegs, pins, clamps, or tacks, for footwear
  
- A43B 23/22 . Supports for the shank or arch of the uppers (for health or hygienic purposes [A43B 7/14](#))
- A43B 23/222 .. {characterised by the attachment to the sole}
- A43B 23/225 ... {by integrated teeth}
- A43B 23/227 .. {fixed on the outside of the shoe}

- A43B 23/24 . Ornamental buckles; Other ornaments for shoes without fastening function
- A43B 23/25 . . Arrangement of ribbons on footwear
- A43B 23/26 . Tongues for shoes
- A43B 23/28 . Devices to put in shoes in order to prevent slipping at the heel or to prevent abrading the stockings
- A43B 23/30 . Heel-protectors for car-drivers