

# CPC COOPERATIVE PATENT CLASSIFICATION

## A HUMAN NECESSITIES

### HEALTH; AMUSEMENT

#### A63 SPORTS; GAMES; AMUSEMENTS

#### A63B APPARATUS FOR PHYSICAL TRAINING, GYMNASTICS, SWIMMING, CLIMBING, OR FENCING; BALL GAMES; TRAINING EQUIPMENT ([apparatus for passive exercising](#), [massage A61H](#))

##### WARNINGS

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

<a href="#">A63B 7/06</a>	covered by	<a href="#">A63G 1/00</a>
<a href="#">A63B 22/08</a>	covered by	<a href="#">A63B 22/0605</a>
<a href="#">A63B 22/10</a>	covered by	<a href="#">A63B 22/0605</a> , <a href="#">A63B 22/0002</a>
<a href="#">A63B 22/12</a>	covered by	<a href="#">A63B 22/0605</a> , <a href="#">A63B 22/001</a>
<a href="#">A63B 29/04</a>	covered by	<a href="#">A63B 29/00</a>
<a href="#">A63B 31/16</a>	covered by	<a href="#">A63B 31/14</a> - <a href="#">A63B 31/18</a>
<a href="#">A63B 63/02</a>	covered by	<a href="#">A63B 63/00</a>
<a href="#">A63B 63/04</a>	covered by	<a href="#">A63B 63/00</a>
<a href="#">A63B 69/22</a>	covered by	<a href="#">A63B 69/20</a>
<a href="#">A63B 69/28</a>	covered by	<a href="#">A63B 69/20</a>
<a href="#">A63B 69/30</a>	covered by	<a href="#">A63B 69/20</a>
<a href="#">A63B 71/16</a>	covered by	<a href="#">A63B 71/14</a> - <a href="#">A63B 71/148</a>
- 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.

**Gymnastic exercising apparatus** ([training apparatus for special sports A63B 69/00](#); [apparatus for passive exercising, massage A61H](#))

<b>1/00</b>	<b>Horizontal bars</b>		
1/005	• { <a href="#">Safety devices for securing the rods</a> }		
1/04	• Cleaning the rods		
<b>3/00</b>	<b>Parallel bars or similar apparatus</b>		
<b>4/00</b>	<b>Balance beams</b>		
<b>5/00</b>	<b>Apparatus for jumping</b> ( <a href="#">mats for jumping A63B 6/00</a> ; <a href="#">for racing or riding sports, e.g. hurdles A63K</a> )		
5/02	• High-jumping posts		
5/04	• • Ropes { <a href="#">or similar devices</a> } therefor		
5/06	• Vaulting poles {; <a href="#">Take-off boxes therefor</a> }		
5/08	• Spring-boards ( <a href="#">of trampoline type A63B 5/11</a> {; <a href="#">in the form of spring mats A63B 6/00</a> })		
2005/085	• • { <a href="#">for launching, e.g. catapulting</a> }		
5/10	• • for aquatic sports		
5/11	• Trampolines		
5/12	• Bolster vaulting apparatus, e.g. horses, bucks, tables		
5/16	• Training devices for jumping; Devices for balloon-jumping; Jumping aids {( <a href="#">A63B 25/02</a> , <a href="#">A63B 25/10</a> <a href="#">take precedence</a> )}		
2005/163	• • { <a href="#">Free-fall jumping on elastic cords, e.g. Bungee jumping</a> }		
5/166	• • { <a href="#">Devices for balloon-jumping</a> }		
5/20	• Skipping-ropes { <a href="#">or similar devices rotating in a vertical plane</a> }		
5/205	• • { <a href="#">Powered skipping rope devices</a> }		
		5/22	• Foot obstacles for skipping {, e.g. <a href="#">horizontally-rotating obstacles</a> }
		<b>6/00</b>	<b>Mats or the like for absorbing shocks for jumping, gymnastics or the like</b>
		6/02	• for landing, e.g. for pole vaulting
		6/025	• • { <a href="#">Sand landing pits, e.g. for long jumping</a> }
		<b>7/00</b>	<b>Freely-suspended gymnastic apparatus</b>
		7/02	• Swinging rings; Trapezes
		7/04	• Climbing-ropes
		7/045	• • { <a href="#">Using endless ropes</a> }
		7/08	• Apparatus for rope-dancing
		7/085	• • { <a href="#">Balancing on a band tensioned between two anchor points, e.g. Slackline type</a> }
		<b>9/00</b>	<b>Climbing poles, frames, or stages</b> {( <a href="#">climbing walls for mountaineering training A63B 69/0048</a> ; <a href="#">endless loop ladders A63B 22/04</a> )}
		2009/002	• { <a href="#">Flat climbing nets</a> }
		2009/004	• { <a href="#">Three-dimensional rope or cable networks</a> }
		2009/006	• { <a href="#">Playground structures</a> }
		2009/008	• • { <a href="#">with water spraying means</a> }
		<b>15/00</b>	<b>Clubs for gymnastics or the like</b> {, e.g. <a href="#">for swinging exercises</a> }
		15/005	• { <a href="#">with a weight movable along the longitudinal axis of the club due to centrifugal forces</a> }
		15/02	• with illuminating devices
		<b>17/00</b>	<b>Exercising apparatus combining several parts such as ladders, rods, beams, slides</b>

- 17/02 . rigidly combined
- 17/04 . separable
- 19/00 Hoop exercising apparatus** {(A63B 21/0608 takes precedence)}
- 19/02 . Freely-movable rolling hoops, e.g. gyrowheels {or spheres or cylinders, carrying the user inside (resisting devices overcoming gyroscopic forces of rotating bodies A63B 21/22; standing on it for equilibrium exercises A63B 26/003)}
- 19/04 . movably supported on a framework {or spheres or cylinders carrying the user inside (standing on it for equilibrium exercises A63B 26/003)}
- 21/00 Exercising apparatus for developing or strengthening the muscles or joints of the body by working against a counterforce, with or without measuring devices** (electric or electronic controls therefor A63B 24/00)
- NOTE**  
In this subclass, the following terms or expressions are used with the meaning indicated:
  - "resistance" and "resistance force" are often used in the art as synonyms for "counterforce";
  - "interface with the user" covers the part of the apparatus, on which the user directly applies his force
- 21/0004 . {Exercising devices moving as a whole during exercise (bar bells or dumb bells A63B 21/072; on wheels A63B 22/20)}
- 21/00043 . . {Exercising devices consisting of a pair of user interfaces connected by flexible elements, e.g. two handles connected by elastic bands (skipping ropes A63B 5/20; resilient elements A63B 21/02)}
- 21/00047 . {Exercising devices not moving during use (benches A63B 21/4029; isometric exercising devices A63B 21/0023; step exercisers A63B 23/0458; walk exercisers A63B 23/0464)}
- 21/0005 . . {specially adapted for head stands}
- 21/00054 . . {specially adapted for shoulder stands}
- 21/00058 . {Mechanical means for varying the resistance (A63B 21/06 takes precedence)}
- 21/00061 . . {Replaceable resistance units of different strengths, e.g. for swapping}
- 21/00065 . . {by increasing or reducing the number of resistance units}
- 21/00069 . . {Setting or adjusting the resistance level; Compensating for a preload prior to use, e.g. changing length of resistance or adjusting a valve}
- 21/00072 . . . {by changing the length of a lever}
- 21/00076 . . {on the fly, i.e. varying the resistance during exercise}
- 21/00178 . {for active exercising, the apparatus being also usable for passive exercising}
- 21/00181 . {comprising additional means assisting the user to overcome part of the resisting force, i.e. assisted-active exercising}
- 21/00185 . {using resistance provided by the user, e.g. exercising one body part against a resistance provided by another body part (A63B 21/068 takes precedence; isometric exercise A63B 21/0023)}
- 21/00189 . {using resistance provided by plastic deformable materials, e.g. lead bars or kneadable masses (resilient force-resistors made of material having high internal friction A63B 21/028)}
- 21/00192 . {using resistance provided by magnetic means (A63B 21/005 takes precedence)}
- 21/00196 . {using pulsed counterforce, e.g. vibrating resistance means (A61H 1/005 takes precedence)}
- 21/002 . . isometric or isokinetic, i.e. substantial force variation without substantial muscle motion {or wherein the speed of the motion is independent of the force applied by the user}
- 21/0023 . . {for isometric exercising, i.e. substantial force variation without substantial muscle motion}
- 21/005 . using electromagnetic or electric force-resistors
- 21/0051 . . {using eddy currents induced in moved elements, e.g. by permanent magnets}
- 21/0052 . . . {induced by electromagnets (A63B 21/0056 takes precedence)}
- 21/0053 . . {using alternators or dynamos}
- 21/0054 . . . {for charging a battery}
- 21/0055 . . . {the produced electric power used as a source for other equipment, e.g. for TVs}
- 21/0056 . . {using electromagnetically-controlled friction, e.g. magnetic particle brakes}
- 21/0057 . . {using electromagnetic clutches}
- 21/0058 . . {using motors}
- 21/0059 . . . {using a frequency controlled AC motor}
- 21/008 . using hydraulic or pneumatic force-resistors
- 21/0083 . . {of the piston-cylinder type (using pneumatic piston-cylinder type force resistors A63B 21/0087)}
- 21/0084 . . {by moving the surrounding water (A63B 31/00, A63B 35/00 take precedence)}
- 21/00845 . . . {using electrorheological or magnetorheological fluids}
- 21/0085 . . {using pneumatic force-resistors}
- 21/0087 . . . {of the piston-cylinder type (using hydraulic piston-cylinder type force resistors A63B 21/0083)}
- 21/0088 . . . {by moving the surrounding air}
- 21/0089 . . . {Suction cups}
- 21/012 . using frictional force-resistors {(electromagnetically-controlled brakes A63B 21/0056)}
- 21/0125 . . {with surfaces rolling against each other without substantial slip}
- 21/015 . . including rotating or oscillating elements {rubbing against fixed elements}
- 21/018 . . including a rope {or other flexible element} moving relative to the surface of elements
- 21/02 . using resilient force-resistors
- 21/021 . . {whereby the resistance changes abruptly during the exercising movement, e.g. by using toggles}
- 21/022 . . {with springs acting at different parts of the stroke}
- 21/023 . . {Wound springs}
- 21/025 . . . {Spiral springs with turns lying substantially in plane surfaces}
- 21/026 . . {Bars; Tubes; Leaf springs (A63B 21/023 takes precedence)}
- 21/027 . . . {Apparatus forced to oscillate at its resonant frequency}

- 21/028 . . {made of material having high internal friction, e.g. rubber, steel wool, intended to be compressed (resistance provided by plastic deformable materials [A63B 21/00189](#))}
- 21/04 . . attached to static foundation {, e.g. a user}
- 21/0407 . . . {Anchored at two end points, e.g. installed within an apparatus}
- 21/0414 . . . . {with both ends stationary during the actual exercise, i.e. moving only at intermediate locations}
- 21/0421 . . . . {the ends moving relatively by a pivoting arrangement}
- 21/0428 . . . . {the ends moving relatively by linear reciprocation}
- 21/0435 . . . . {One or both ends being anchored to a rotating element}
- 21/0442 . . . {Anchored at one end only, the other end being manipulated by the user}
- 21/045 . . having torsion {or bending or flexion} element
- 21/0455 . . . {having torsion element around its longitudinal axis}
- 21/05 . . Linearly-compressed elements {([A63B 21/028 takes precedence](#))}
- 21/055 . . extension element type
- 21/0552 . . . {Elastic ropes or bands}
- 21/0555 . . . . {Details of the rope or band, e.g. shape or colour coding}
- 21/0557 . . . . {Details of attachments, e.g. clips or clamps}
- 21/06 . . User-manipulated weights
- 21/0601 . . {Special physical structures of used masses}
- 21/0602 . . . {Fluids, e.g. water}
- 21/0603 . . . {Fluid-like particles, e.g. gun shot or sand}
- 21/0604 . . . {Solid masses, e.g. concrete ([A63B 21/0603 takes precedence](#))}
- 21/0605 . . . {with boxes, baskets or the like for stacking loose weights therein}
- 21/0606 . . . {Buoyant volumes to be submerged}
- 21/0607 . . . {Plastic masses, e.g. elastomers; Masses provided with plastic coverings}
- 21/0608 . . {Eccentric weights put into orbital motion by nutating movement of the user}
- 21/0609 . . {consisting of loosely interconnected elements for progressively changing weight, e.g. heavy chains}
- 21/0615 . . {pivoting about a fixed horizontal fulcrum}
- 21/0616 . . . {with an adjustable moment ([A63B 21/0617 takes precedence](#))}
- 21/0617 . . . {with a changing moment as a function of the pivot angle}
- 21/0618 . . {moving in a horizontal plane without substantial friction, i.e. using inertial forces}
- 21/062 . . including guide for vertical {or non-vertical weights or} array of weights {to move against gravity forces}
- 21/0622 . . . {with adjustable inclination angle of the guiding means}
- 21/0624 . . . {by moving the guiding means}
- 21/0626 . . . {with substantially vertical guiding means}
- 21/0628 . . . . {for vertical array of weights}
- 21/063 . . . . . {Weight selecting means}
- 21/0632 . . . . . {the weights being lifted by rigid means}
- 21/065 . . worn on user's body
- 21/068 . . using user's body weight
- 21/072 . . Dumb-bells, bar-bells or the like {, e.g. weight discs having an integral peripheral handle}
- 21/0722 . . . {transformable, e.g. from dumb-bell to bar-bell}
- 21/0724 . . . {Bar-bells; Hand bars}
- 21/0726 . . . {Dumb bells, i.e. with a central bar to be held by a single hand, and with weights at the ends}
- 21/0728 . . . {with means for fixing weights on bars, i.e. fixing olympic discs or bumper plates on bar-bells or dumb-bells}
- 21/075 . . . with variable weights {, e.g. weight systems with weight selecting means for bar-bells or dumb-bells}
- 21/078 . . Devices for bench press exercises {, e.g. supports, guiding means}
- 21/0783 . . . {Safety features for bar-bells, e.g. drop limiting means}
- 21/08 . . anchored at one end
- 21/15 . . {Arrangements for force transmissions}
- 21/151 . . {Using flexible elements for reciprocating movements, e.g. ropes or chains}
- 21/152 . . . {Bowden-type cables}
- 21/153 . . . {wound-up and unwound during exercise, e.g. from a reel}
- 21/154 . . . {using special pulley-assemblies}
- 21/155 . . . . {Cam-shaped pulleys or other non-uniform pulleys, e.g. conical}
- 21/156 . . . . {the position of the pulleys being variable, e.g. for different exercises}
- 21/157 . . {Ratchet-wheel links; Overrunning clutches; One-way clutches}
- 21/158 . . {Hydraulic transmissions ([hydraulic force resistors \[A63B 21/008\]\(#\)](#))}
- 21/159 . . {Using levers for transmitting forces}
- 21/16 . . Supports for anchoring force-resisters
- 21/1609 . . {for anchoring on a chair ([chairs with exercising means \[A47C 9/002\]\(#\)](#))}
- 21/1618 . . {on a door or a door frame}
- 21/1627 . . . {for anchoring on or between the vertical posts of a door frame}
- 21/1636 . . . {for anchoring on the horizontal part of a door frame}
- 21/1645 . . . {for anchoring on a door}
- 21/1654 . . . {for anchoring between a door and the floor}
- 21/1663 . . . {for anchoring between a door and the door frame}
- 21/1672 . . {for anchoring on beds or mattresses}
- 21/1681 . . {for anchoring between horizontal surfaces, e.g. the floor and the ceiling}
- 21/169 . . {for anchoring on or against a wall}
- 21/22 . . Resisting devices with rotary bodies {([A63B 21/0608 takes precedence](#))}
- 21/222 . . {by overcoming gyroscopic forces, e.g. by turning the spin axis}
- 21/225 . . {with flywheels}
- 21/227 . . . {changing the rotational direction alternately}
- 21/28 . . Devices for two persons operating in opposition {or in cooperation}
- 21/285 . . {in cooperation}
- 21/40 . . {Interfaces with the user related to strength training; Details thereof}

- 21/4001 . . {Arrangements for attaching the exercising apparatus to the user's body, e.g. belts, shoes or gloves specially adapted therefor ([weights worn on the user's body A63B 21/065](#); [exoskeletons in general B25J 9/0006](#), for aiding patients or disabled persons to walk about [A61H 3/00](#))}
- 21/4003 . . . {to the head; to the neck}
- 21/4005 . . . {to the shoulder}
- 21/4007 . . . {to the chest region, e.g. to the back chest}
- 21/4009 . . . {to the waist}
- 21/4011 . . . {to the lower limbs ([means for physically limiting movements of body parts A63B 69/0057](#))}
- 21/4013 . . . . {to the ankle}
- 21/4015 . . . . {to the foot}
- 21/4017 . . . {to the upper limbs}
- 21/4019 . . . . {to the hand}
- 21/4021 . . . . {to the wrist}
- 21/4023 . . {the user operating the resistance directly, without additional interface ([A63B 21/072 takes precedence](#))}
- 21/4025 . . . {Resistance devices worn on the user's body ([A63B 21/065 takes precedence](#))}
- 21/4027 . . {Specific exercise interfaces (chairs or stools with exercising means [A47C 9/002](#))}
- 21/4029 . . . {Benches specifically adapted for exercising ([for bench press exercises A63B 21/078](#))}
- 21/4031 . . . . {with parts of the bench moving against a resistance during exercise}
- 21/4033 . . . {Handles, pedals, bars or platforms}
- 21/4034 . . . . {for operation by feet}
- 21/4035 . . . . {for operation by hand}
- 21/4037 . . . {Exercise mats for personal use, with or without hand-grips or foot-grips, e.g. for Yoga or supine floor exercises ([mats for absorbing shocks A63B 6/00](#))}
- 21/4039 . . . {contoured to fit to specific body parts, e.g. back, knee or neck support ([arrangements for attaching exercising apparatus to the user's body A63B 21/4001](#); handles, pedals, bars or platforms [A63B 21/4033](#))}
- 21/4041 . . {characterised by the movements of the interface}
- 21/4043 . . . {Free movement, i.e. the only restriction coming from the resistance ([A63B 21/00043](#), [A63B 21/072 take precedence](#))}
- 21/4045 . . . {Reciprocating movement along, in or on a guide ([weights moving along or in guiding means A63B 21/06](#); for cardio-training [A63B 22/201](#))}
- 21/4047 . . . {Pivoting movement ([weight pivoting A63B 21/0615](#))}
- 21/4049 . . . {Rotational movement}
- 22/00** **Exercising apparatus specially adapted for conditioning the cardio-vascular system, for training agility or co-ordination of movements** ([force-resisting aspects A63B 21/00](#); {for particular parts of the body, e.g. to strengthen particular limbs or muscles [A63B 23/00](#); } electric or electronic controls therefor [A63B 24/00](#))
- 22/0002 . {involving an exercising of arms ([for strengthening the upper limbs A63B 23/12](#))}
- 22/0005 . . {with particular movement of the arms provided by handles moving otherwise than pivoting about a horizontal axis parallel to the body-symmetrical-plane}
- 22/0007 . . {by alternatively exercising arms or legs, e.g. with a single set of support elements driven either by the upper or the lower limbs}
- 22/001 . . {by simultaneously exercising arms and legs, e.g. diagonally in anti-phase ([A63B 22/0076 takes precedence](#))}
- 22/0012 . . . {the exercises for arms and legs being functionally independent}
- 22/0015 . {with an adjustable movement path of the support elements}
- 22/0017 . . {the adjustment being controlled by movement of the user}
- 2222/002 . . . {electronically, e.g. by using a program}
- 22/0023 . . {the inclination of the main axis of the movement path being adjustable, e.g. the inclination of an endless band}
- 22/0025 . {Particular aspects relating to the orientation of movement paths of the limbs relative to the body; Relative relationship between the movements of the limbs}
- 2222/0028 . . {the movement path being non-parallel to the body-symmetrical-plane, e.g. support elements moving at an angle to the body-symmetrical-plane}
- 2222/003 . . . {the movement path being perpendicular to the body-symmetrical-plane}
- 2222/0033 . . {Lower limbs performing together the same movement, e.g. on a single support element}
- 2222/0035 . . {Upper limbs performing together the same movement, e.g. on a single support element}
- 2222/0038 . . {One foot moving independently from the other, i.e. there is no link between the movements of the feet}
- 2222/0041 . . {one hand moving independently from the other hand, i.e. there is no link between the movements of the hands}
- 2222/0043 . . {the movements of the limbs of one body half being synchronised, e.g. the left arm moving in the same direction as the left leg}
- 22/0046 . {Details of the support elements or their connection to the exercising apparatus, e.g. adjustment of size or orientation ([attachments of resisters or weights to the body of the user A63B 21/4001](#); using rollers, wheels, castors or gliding means to be moved over the floor or guide tracks [A63B 22/20](#))}
- 22/0048 . {with cantilevered support elements pivoting about an axis ([A63B 22/0076 takes precedence](#))}
- 2222/0051 . . {the support elements being supported at a substantial distance below their axis, e.g. the axis for the foot support elements are arranged at hip height}
- 2222/0053 . . {each support element being cantilevered by a parallelogram system}
- 22/0056 . . {the pivoting movement being in a vertical plane, e.g. steppers with a horizontal axis ([platforms for rocking motion about a horizontal axis A63B 22/16](#))}
- 22/0058 . . . {the vertical plane being the frontal body-plane}



- 22/0061 . . {the pivoting movement being in a horizontal plane, e.g. skating movement ([platforms for reciprocating rotating motion about a vertical axis A63B 22/14](#))}
- 22/0064 . . {the pivoting movement being in a plane inclined with respect to the horizontal plane, e.g. a step and twist movement}
- 22/0066 . . . {the support elements movement being downward-inward, i.e. towards the body-symmetrical-plane}
- 22/0069 . . . {about an axis inclined with respect to the horizontal plane, e.g. steppers with an inclined axis}
- 2022/0071 . . . . {the axis being located behind the user, e.g. for skate training}
- 2022/0074 . . . . {the axis being located in front of the user, e.g. for steppers with twist movement}
- 22/0076 . {Rowing machines for conditioning the cardiovascular system ([seats moving during exercise A63B 22/0087](#); [training appliances for rowing or sculling on boats A63B 69/06](#))}
- 2022/0079 . . {with a pulling cable}
- 2022/0082 . . {with pivoting handlebars}
- 2022/0084 . . . {pivoting about a horizontal axis}
- 22/0087 . {with a seat or torso support moving during the exercise, e.g. reformers ([A63B 22/0076 takes precedence](#))}
- 22/0089 . . {a counterforce being provided to the support ([force-resisting aspects A63B 21/00](#))}
- 2022/0092 . {for training agility or co-ordination of movements}
- 2022/0094 . {for active rehabilitation, e.g. slow motion devices}
- 2022/0097 . {for avoiding blood stagnations, e.g. Deep Vein Thrombosis [DVT]}
- 22/02 . with movable endless bands {, e.g. treadmills ([other training appliances for running on the spot A63B 69/0028](#))}
- 22/0207 . . {having shock absorbing means}
- 22/0214 . . . {between the belt supporting deck and the frame}
- 22/0221 . . . {on the frame supporting the rollers}
- 22/0228 . . . {with variable resilience}
- 22/0235 . . {driven by a motor}
- 22/0242 . . . {with speed variation}
- 22/025 . . . . {electrically, e.g. D.C. motors with variable speed control}
- 22/0257 . . . . {Mechanical systems therefor}
- 22/0264 . . . . {hydraulically}
- 2022/0271 . . {omnidirectional}
- 2022/0278 . . {with reversible direction of the running surface}
- 22/0285 . . {Physical characteristics of the belt, e.g. material, surface, indicia}
- 22/0292 . . {separate for each leg, e.g. dual deck}
- 22/04 . with movable {multiple} steps {, i.e. more than one step per limb, e.g. steps mounted on endless loops, endless ladders ([steppers with cantilevered support elements pivoting about an axis A63B 22/0048](#))}
- 22/06 . with {support elements performing a} rotating cycling movement, {i.e. a closed path movement} ([support stands for bicycles A63B 69/16](#); [unicycles B62K 1/00](#))}
- 22/0605 . . {performing a circular movement, e.g. ergometers}
- 2022/0611 . . . {Particular details or arrangement of cranks}
- 2022/0617 . . . . {with separate crank axis for each limb, e.g. being separately adjustable or non parallel}
- 2022/0623 . . . . {Crank of adjustable length}
- 2022/0629 . . . . {each pedal being supported by two or more cranks}
- 2022/0635 . . . {specially adapted for a particular use}
- 2022/0641 . . . . {enabling a lateral movement of the exercising apparatus, e.g. for simulating movement on a bicycle}
- 2022/0647 . . . . {for cycling in a standing position, i.e. without a seat or support for the trunk}
- 2022/0652 . . . . {for cycling in a recumbent position}
- 2022/0658 . . . . {for cycling with a group of people, e.g. spinning classes}
- 22/0664 . . {performing an elliptic movement}
- 2022/067 . . . {with crank and handles being on opposite sides of the exercising apparatus with respect to the frontal body-plane of the user, e.g. the crank is behind and handles are in front of the user}
- 2022/0676 . . . {with crank and handles being on the same side of the exercising apparatus with respect to the frontal body-plane of the user, e.g. crank and handles are in front of the user}
- 2022/0682 . . . . {with support elements being cantilevered, i.e. the elements being supported only on one side without bearing on tracks on the floor below the user}
- 2022/0688 . . . {with cranks being substantially within the horizontal moving range of the support elements, e.g. by using planetary gearings}
- 22/0694 . . {without integral seat, e.g. portable mini ergometers being placed in front of a chair, on a table or on a bed}
- 22/14 . Platforms for reciprocating rotating motion about a vertical axis {, e.g. axis through the middle of the platform}
- 22/16 . Platforms for rocking motion about a horizontal axis {, e.g. axis through the middle of the platform}; Balancing drums; Balancing boards or the like {([exercising apparatus with cantilevered support elements pivoting about an axis A63B 22/0056](#); [other exercising apparatus for improving balance A63B 26/003](#))}
- 22/18 . with elements, {i.e. platforms,} having a circulating, {nutating} or rotating movement, generated by oscillating movement of the user, {e.g. platforms wobbling on a centrally arranged spherical support} ([hoop exercising apparatus A63B 19/00](#); [eccentric weights put into orbital motion by nutating movement of the user A63B 21/0608](#); [pots rotating or rocking by moving the whole body A63G 23/00](#))}
- 2022/185 . . {specially adapted for using with a single foot or hand}
- 22/20 . using rollers, wheels, castors or the like, {e.g. gliding means,} to be moved over the floor or other surface, {e.g. guide tracks,} during exercising
- 22/201 . . {for moving a support element in reciprocating translation, i.e. for sliding back and forth on a guide track}
- 22/203 . . . {in a horizontal plane}

22/205	. . . {in a substantially vertical plane, e.g. for exercising against gravity (exercising for developing or strengthening the muscles or joints of the body by working against a user's body weight <a href="#">A63B 21/068</a> ; with adjustable inclination <a href="#">A63B 22/0023</a> )}	23/04	. . for lower limbs {(training appliances for special sports <a href="#">A63B 69/00</a> ; for the purpose of producing mechanical power <a href="#">F03G 5/00</a> )}
2022/206	. . . {on a curved path}	23/0405	. . . {involving a bending of the knee and hip joints simultaneously ( <a href="#">A63B 23/0476</a> takes precedence)}
22/208	. . . {On a track which is itself moving during exercise}	2023/0411	. . . . {Squatting exercises}
<b>23/00</b>	<b>Exercising apparatus specially adapted for particular parts of the body (<a href="#">A63B 22/00</a> takes precedence; force-resisting aspects <a href="#">A63B 21/00</a>; electric or electronic controls therefor <a href="#">A63B 24/00</a>; devices for exercising or strengthening of fingers, or arms in teaching operation of keyboards <a href="#">G09B 15/06</a>)</b>	23/0417	. . . . {with guided foot supports moving parallel to the body-symmetrical-plane by translation}
2023/003	. {by torsion of the body part around its longitudinal axis}	23/0423	. . . . {with guided foot supports moving parallel to the body-symmetrical-plane, one end executing a complete circular movement, the other end translating almost linearly, e.g. giving an elliptical movement to the foot}
2023/006	. {for stretching exercises}	23/0429	. . . . {with guided foot supports moving parallel to the body-symmetrical-plane by being cantilevered about a horizontal axis}
23/02	. for the abdomen, the spinal column or the torso {muscles related to shoulders (e.g. chest muscles)}	2023/0441	. . . . . {cantilevered about two horizontal axes, e.g. parallelogram systems}
23/0205	. . {Abdomen}	2023/0447	. . . . . {the axis being in the body-symmetrical-plane}
23/0211	. . . {moving torso with immobilized lower limbs}	2023/0452	. . . . . {the foot support being substantially below said axes}
23/0216	. . . {moving lower limbs with immobilized torso}	23/0458	. . . . . {Step exercisers without moving parts (with movable steps <a href="#">A63B 22/04</a> )}
23/0222	. . . {moving torso and lower limbs}	23/0464	. . . . . {Walk exercisers without moving parts (with movable endless bands <a href="#">A63B 22/02</a> )}
23/0227	. . . {moving torso or lower limbs laterally, i.e. substantially in the frontal plane}	23/047	. . . . . {Walking and pulling or pushing a load (for exercising the player ability for rugby or American football <a href="#">A63B 69/345</a> )}
23/0233	. . {Muscles of the back, e.g. by an extension of the body against a resistance, reverse crunch}	23/0476	. . . {by rotating cycling movement (arrangements on or for real bicycles <a href="#">A63B 69/16</a> )}
23/0238	. . . {Spinal column (for the neck <a href="#">A63B 23/025</a> )}	<b>WARNING</b>	
23/0244	. . {with signalling or indicating means, e.g. of incorrect posture, for deep-breathing exercises}	Group <a href="#">A63B 23/0476</a> is no longer used for classification. Documents are in the process of being reorganised to group <a href="#">A63B 22/06</a>	
23/025	. for the head or the neck	23/0482	. . . {primarily by articulating the hip joints ( <a href="#">A63B 23/0211</a> , <a href="#">A63B 23/0405</a> , <a href="#">A63B 23/0476</a> take precedence)}
23/03	. . for face muscles	23/0488	. . . . {by spreading the legs}
23/032	. . . {for insertion in the mouth}	23/0494	. . . . {primarily by articulating the knee joints ( <a href="#">A63B 23/0405</a> , <a href="#">A63B 23/0476</a> take precedence)}
23/035	. for limbs, i.e. upper or lower limbs, e.g. simultaneously	23/08	. . . for ankle joints
23/03508	. . {For a single arm or leg, ( <a href="#">A63B 21/0726</a> takes precedence)}	23/085	. . . . {by rotational movement of the joint in a plane substantially parallel to the body-symmetrical-plane}
23/03516	. . {For both arms together or both legs together; Aspects related to the co-ordination between right and left side limbs of a user}	23/10	. . . for feet or toes
23/03525	. . . {Supports for both feet or both hands performing simultaneously the same movement, e.g. single pedal or single handle ( <a href="#">A63B 21/0724</a> takes precedence)}	23/12	. . for upper limbs {or related muscles, e.g. chest, upper back or shoulder muscles ( <a href="#">bench press exercises A63B 21/078</a> ; for teaching music <a href="#">G09B 15/06</a> )}
23/03533	. . . {With separate means driven by each limb, i.e. performing different movements}	23/1209	. . . {Involving a bending of elbow and shoulder joints simultaneously}
23/03541	. . . . {Moving independently from each other ( <a href="#">A63B 22/00</a> takes precedence)}	23/1218	. . . . {Chinning, pull-up, i.e. concentric movement}
23/0355	. . {A single apparatus used for either upper or lower limbs, i.e. with a set of support elements driven either by the upper or the lower limb or limbs}	23/1227	. . . . {Dips, i.e. push-ups in a vertical position, i.e. eccentric movement, e.g. between parallel bars}
23/03558	. . . {Compound apparatus having multiple stations allowing an user to exercise different limbs}	23/1236	. . . . {Push-ups in horizontal position, i.e. eccentric movement}
23/03566	. . . . {the multiple stations having a common resistance device}		
23/03575	. . {Apparatus used for exercising upper and lower limbs simultaneously}		
23/03583	. . . {Upper and lower limbs acting simultaneously on the same operating rigid member}		
23/03591	. . . {Upper and lower limb moving in phase, i.e. right foot moving in the same direction as the right hand}		

23/1245	. . . {Primarily by articulating the shoulder joint ( <a href="#">A63B 23/129</a> takes precedence)}	24/0062	. {Monitoring athletic performances, e.g. for determining the work of a user on an exercise apparatus, the completed jogging or cycling distance}
23/1254	. . . . {Rotation about an axis parallel to the longitudinal axis of the body, e.g. butterfly-type exercises}	2024/0065	. . {Evaluating the fitness, e.g. fitness level or fitness index}
23/1263	. . . . {Rotation about an axis passing through both shoulders, e.g. cross-country skiing-type arm movements}	2024/0068	. . {Comparison to target or threshold, previous performance or not real time comparison to other individuals}
23/1272	. . . . {Rotation around an axis perpendicular to the frontal body-plane of the user, i.e. moving the arms in the plane of the body, to and from the sides of the body}	2024/0071	. . {Distinction between different activities, movements, or kind of sports performed}
23/1281	. . . {primarily by articulating the elbow joint}	24/0075	. {Means for generating exercise programs or schemes, e.g. computerized virtual trainer, e.g. using expert databases}
23/129	. . . {for arm wrestling}	2024/0078	. . {Exercise efforts programmed as a function of time}
23/14	. . . for wrist joints	2024/0081	. . {Coaching or training aspects related to a group of users}
23/16	. . . for hands or fingers {(for teaching typing <a href="#">G09B 13/00</a> )}	24/0084	. {Exercising apparatus with means for competitions, e.g. virtual races}
23/18	. for improving respiratory function	24/0087	. {Electric or electronic controls for exercising apparatus of groups <a href="#">A63B 21/00</a> - <a href="#">A63B 23/00</a> , e.g. controlling load}
23/185	. . {Rhythm indicators}	2024/009	. . {the load of the exercise apparatus being controlled in synchronism with visualising systems, e.g. hill slope}
23/20	. for vaginal muscles {or other sphincter-type muscles}	2024/0093	. . {the load of the exercise apparatus being controlled by performance parameters, e.g. distance or speed}
<b>24/00</b>	<b>Electric or electronic controls for exercising apparatus of preceding groups; {Controlling or monitoring of exercises, sportive games, training or athletic performances}</b>	2024/0096	. . {using performance related parameters for controlling electronic or video games or avatars}
24/0003	. {Analysing the course of a movement or motion sequences during an exercise or trainings sequence, e.g. swing for golf or tennis}	<b>25/00</b>	<b>Stilts or the like</b>
24/0006	. . {Computerised comparison for qualitative assessment of motion sequences or the course of a movement}	25/02	. Elastic stilts {(devices for balloon jumping <a href="#">A63B 5/166</a> )}
2024/0009	. . . {Computerised real time comparison with previous movements or motion sequences of the user}	25/04	. with wheels
2024/0012	. . . {Comparing movements or motion sequences with a registered reference}	25/06	. Shoes formed with stilts to elongate the step
2024/0015	. . . . {Comparing movements or motion sequences with computerised simulations of movements or motion sequences, e.g. for generating an ideal template as reference to be achieved by the user}	25/08	. Hopping-sticks, e.g. pogo sticks {; Hopping apparatus with a single resilient support (devices for balloon jumping <a href="#">A63B 5/166</a> )}
2024/0018	. . . {using non electronic means}	25/10	. Elastic bouncing shoes fastened to the foot
24/0021	. {Tracking a path or terminating locations}	<b>26/00</b>	<b>Exercising apparatus not covered by groups <a href="#">A63B 1/00</a> - <a href="#">A63B 25/00</a></b>
2024/0025	. . {Tracking the path or location of one or more users, e.g. players of a game}	26/003	. {for improving balance or equilibrium (balance beams <a href="#">A63B 4/00</a> ; apparatus for rope dancing <a href="#">A63B 7/08</a> ; balancing drums, balancing boards or the like <a href="#">A63B 22/16</a> )}
2024/0028	. . {Tracking the path of an object, e.g. a ball inside a soccer pitch}	2026/006	. . {with feet supports below their pivotal point}
2024/0031	. . . {at the starting point}	<b>Climbing; Mountaineering</b>	
2024/0034	. . . {during flight}	<b>27/00</b>	<b>Apparatus for climbing poles, trees, or the like ({ropes <a href="#">A63B 29/02</a>; } safety belts for climbers <a href="#">A62B 35/00</a>)</b>
2024/0037	. . {on a target surface or at impact on the ground}	27/02	. Climbing devices for round poles {or trees} attachable to the feet
2024/004	. . . {Multiple detectors or sensors each defining a different zone}	27/04	. Climbing devices for profile poles attachable to the feet
2024/0043	. . . {Systems for locating the point of impact on a specific surface}	<b>29/00</b>	<b>Apparatus for mountaineering (helmets <a href="#">A42B 3/00</a>; non-skid devices or attachments for footwear, e.g. crampons, <a href="#">A43C 15/00</a>; breathing masks or helmets for use at high altitudes <a href="#">A62B 18/00</a>; picks <a href="#">B25D 7/00</a>)</b>
2024/0046	. . . {Mechanical means for locating the point of impact or entry}		
2024/005	. . . . {Keeping track of the point of impact or entry}		
2024/0053	. . {for locating an object, e.g. a lost ball}		
2024/0056	. . {for statistical or strategic analysis}		
24/0059	. {Exercising apparatus with reward systems}		

- 29/02 . Mountain guy-ropes or accessories, e.g. avalanche ropes; Means for indicating the location of accidentally buried, e.g. snow-buried, persons

**NOTE**

Contrary to the wording of group [A63B 29/02](#), devices for lowering persons are classified in [A62B 1/06](#)

- 29/021 . . {Means for indicating the location of accidentally buried, e.g. snow-buried, persons}
- 2029/022 . . . {with means for automatically activating signal means in case of an avalanche}
- 29/024 . . {Climbing chocks}
- 29/025 . . {Ice screws}
- 29/027 . . {Pitons}
- 29/028 . . {Ropes specially adapted for mountaineering}
- 29/08 . Hand equipment for climbers

**Swimming**

- 31/00** **Swimming aids (teaching swimming [A63B 69/10](#) - [A63B 69/14](#); life-saving in water {, e.g. life-buoys, life-belts,} [B63C 9/00](#))**
- 31/02 . Swimming gloves
- 31/04 . . with arrangements for enlarging the propulsive surface
- 31/08 . Swim fins, flippers or other swimming aids held by, or attachable to, the hands, arms, feet or legs ([A63B 31/18](#) takes precedence; worn as gloves [A63B 31/02](#))
- 31/10 . . held by, or attachable to, the hands or feet
- 31/11 . . . attachable only to the feet
- 2031/112 . . . . {with means facilitating walking, e.g. retractable, detachable or pivotable blades}
- 2031/115 . . . . {with blade at an angle to the plane of the foot when in use, e.g. to reduce plantar flexion}
- 2031/117 . . . . . {with blade lying substantially in the body-symmetrical plane, e.g. for breast stroke}
- 31/12 . . held by, or attachable to, the arms or legs
- 31/14 . . with valve-flaps
- 31/18 . Swimming appliances with propulsive effect for hands and feet simultaneously
- 33/00** **Swimming equipment attachable to the head, e.g. swim caps or goggles (diving masks [B63C 11/12](#); breathing aids, e.g. snorkels, [B63C 11/18](#))**
- 33/002 . {Swimming goggles}

**WARNING**

Group [A63B 33/002](#) is impacted by reclassification into groups [A63B 33/004](#), [A63B 33/006](#), and [A63B 33/008](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 33/004 . . {comprising two separate lenses joined by a flexible bridge}

**WARNING**

Group [A63B 33/004](#) is incomplete pending reclassification of documents from group [A63B 33/002](#).

Groups [A63B 33/002](#) and [A63B 33/004](#) should be considered in order to perform a complete search.

- 33/006 . . {with means allowing adjustment of the bridge}

**WARNING**

Group [A63B 33/006](#) is incomplete pending reclassification of documents from group [A63B 33/002](#).

Groups [A63B 33/002](#) and [A63B 33/006](#) should be considered in order to perform a complete search.

- 33/008 . . . {with stepless adjustment}

**WARNING**

Group [A63B 33/008](#) is incomplete pending reclassification of documents from group [A63B 33/002](#).

Groups [A63B 33/002](#) and [A63B 33/008](#) should be considered in order to perform a complete search.

- 35/00** **Swimming framework with driving mechanisms operated by the swimmer or by a motor (other vessels or like floating structures for pleasure or sport [B63B 32/00](#), [B63B 34/00](#); divers' sleds or like craft [B63C 11/46](#))**

**NOTE**

References listed below indicate CPC places which could also be of interest when carrying out a search in respect of the subject matter covered by the preceding group:

Effecting propulsion of vessels by muscle power [B63H 16/00](#)

- 35/02 . shaped like a fish tail
- 35/04 . with paddle wheels
- 35/06 . with twin-bladed paddles or buoyant members
- 35/08 . with propeller propulsion
- 35/10 . . operated by the swimmer
- 35/12 . . operated by a motor
- 35/125 . . . {the motor being driven by compressed air carried by the swimmer}

**Balls**

- 37/00** **Solid balls; {Rigid hollow balls; } Marbles (heavy throwing balls [A63B 65/06](#))**
- 37/0001 . {Balls with finger holes, e.g. for bowling}
- 37/0002 . . {Arrangements for adjusting, improving or measuring the grip, i.e. location, size, orientation or the like of finger holes}
- 37/0003 . {Golf balls}



37/0004 . . . {Surface depressions or protrusions}

#### **WARNING**

Group [A63B 37/0004](#) is impacted by reclassification into group [A63B 37/00215](#).

Groups [A63B 37/0004](#) and [A63B 37/00215](#) should be considered in order to perform a complete search.

37/0005 . . . {Protrusions}

37/0006 . . . {Arrangement or layout of dimples}

#### **WARNING**

Group [A63B 37/0006](#) is impacted by reclassification into group [A63B 37/00065](#).

Groups [A63B 37/0006](#) and [A63B 37/00065](#) should be considered in order to perform a complete search.

37/00065 . . . . {located around the pole or the equator}

#### **WARNING**

Group [A63B 37/00065](#) is incomplete pending reclassification of documents from group [A63B 37/0006](#).

Groups [A63B 37/0006](#) and [A63B 37/00065](#) should be considered in order to perform a complete search.

37/0007 . . . . {Non-circular dimples}

37/0008 . . . . {Elliptical}

37/0009 . . . . {Polygonal}

37/001 . . . . {Annular}

37/0011 . . . . {Grooves or lines}

37/0012 . . . {Dimple profile, i.e. cross-sectional view}

37/0013 . . . . {The dimple being formed in both the cover and the underlying layer}

37/0015 . . . . {with sub-dimples formed within main dimples}

37/0016 . . . {Specified individual dimple volume}

37/0017 . . . {Specified total dimple volume}

37/0018 . . . {Specified number of dimples}

37/0019 . . . {Specified dimple depth}

37/002 . . . {Specified dimple diameter}

37/0021 . . . {Occupation ratio, i.e. percentage surface occupied by dimples}

#### **WARNING**

Group [A63B 37/0021](#) is impacted by reclassification into group [A63B 37/00215](#).

Groups [A63B 37/0021](#) and [A63B 37/00215](#) should be considered in order to perform a complete search.

37/00215 . . . {Volume ratio}

#### **WARNING**

Group [A63B 37/00215](#) is incomplete pending reclassification of documents from groups [A63B 37/0004](#) and [A63B 37/0021](#).

Groups [A63B 37/0004](#), [A63B 37/0021](#), and [A63B 37/00215](#) should be considered in order to perform a complete search.

37/0022 . . . {Coatings, e.g. paint films; Markings}

#### **WARNING**

Group [A63B 37/0022](#) is impacted by reclassification into groups [A63B 37/00221](#), [A63B 37/00222](#), and [A63B 37/00223](#).

All groups listed in this Warning should be considered in order to perform a complete search.

37/00221 . . . {characterised by the material}

#### **WARNING**

Group [A63B 37/00221](#) is incomplete pending reclassification of documents from group [A63B 37/0022](#).

Groups [A63B 37/0022](#) and [A63B 37/00221](#) should be considered in order to perform a complete search.

37/00222 . . . {Physical properties, e.g. hardness}

#### **WARNING**

Group [A63B 37/00222](#) is incomplete pending reclassification of documents from group [A63B 37/0022](#).

Groups [A63B 37/0022](#) and [A63B 37/00222](#) should be considered in order to perform a complete search.

37/00223 . . . {Colour tone}

#### **WARNING**

Group [A63B 37/00223](#) is incomplete pending reclassification of documents from group [A63B 37/0022](#).

Groups [A63B 37/0022](#) and [A63B 37/00223](#) should be considered in order to perform a complete search.

37/0023 . . . {Covers}

#### **WARNING**

Group [A63B 37/0023](#) is impacted by reclassification into groups [A63B 37/00373](#) and [A63B 37/00376](#).

Groups [A63B 37/0023](#), [A63B 37/00373](#), and [A63B 37/00376](#) should be considered in order to perform a complete search.

37/0024 . . . {Materials other than ionomers or polyurethane}

37/0025 . . . . {Gutta-percha}

37/0026 . . . . {Balata}

37/0027 . . . . {Polyurea}

37/0029 . . . {Physical properties}

37/003 . . . . {Coefficient of restitution}

37/0031 . . . . {Hardness}

37/0032 . . . . . {Hardness gradient}

37/0033 . . . . {Thickness}

37/0034 . . . . {Deflection or compression}

37/0035 . . . . {Density; Specific gravity}

37/0036 . . . . {Melt flow rate [MFR]}

37/0037 . . . . {Flexural modulus; Bending stiffness}

37/00373 . . . {Colour tone}

**WARNING**

Group [A63B 37/00373](#) is incomplete pending reclassification of documents from group [A63B 37/0023](#).

Groups [A63B 37/0023](#) and [A63B 37/00373](#) should be considered in order to perform a complete search.

37/00376 . . . . {Transparency or semitransparency}

**WARNING**

Group [A63B 37/00376](#) is incomplete pending reclassification of documents from group [A63B 37/0023](#).

Groups [A63B 37/0023](#) and [A63B 37/00376](#) should be considered in order to perform a complete search.

37/0038 . . {Intermediate layers, e.g. inner cover, outer core, mantle}

**WARNING**

Group [A63B 37/0038](#) is impacted by reclassification into group [A63B 37/00495](#).

Groups [A63B 37/0038](#) and [A63B 37/00495](#) should be considered in order to perform a complete search.

37/0039 . . . {characterised by the material}

37/004 . . . {Physical properties}

37/0041 . . . . {Coefficient of restitution}

37/0043 . . . . {Hardness}

37/0044 . . . . . {Hardness gradient}

37/0045 . . . . {Thickness}

37/0046 . . . . {Deflection or compression}

37/0047 . . . . {Density; Specific gravity}

37/0048 . . . . {Melt flow rate [MFR]}

37/0049 . . . . {Flexural modulus; Bending stiffness}

37/00495 . . . {Colour tone}

**WARNING**

Group [A63B 37/00495](#) is incomplete pending reclassification of documents from group [A63B 37/0038](#).

Groups [A63B 37/0038](#) and [A63B 37/00495](#) should be considered in order to perform a complete search.

37/005 . . {Cores}

**WARNING**

Group [A63B 37/005](#) is impacted by reclassification into group [A63B 37/00691](#).

Groups [A63B 37/005](#) and [A63B 37/00691](#) should be considered in order to perform a complete search.

37/0051 . . . {Materials other than polybutadienes; Constructional details}

37/0052 . . . . {Liquid cores}

37/0053 . . . . {Thread wound}

37/0054 . . . . {Substantially rigid, e.g. metal}

37/0055 . . . . {with non-spherical insert(s)}

37/0056 . . . . {Hollow; Gas-filled}

37/0058 . . . . {Polyurethane}

37/0059 . . . . {Ionomer}

37/006 . . . {Physical properties}

37/0061 . . . . {Coefficient of restitution}

37/0062 . . . . {Hardness}

**WARNING**

Group [A63B 37/0062](#) is impacted by reclassification into groups [A63B 37/00621](#) and [A63B 37/00622](#).

Groups [A63B 37/0062](#), [A63B 37/00621](#), and [A63B 37/00622](#) should be considered in order to perform a complete search.

37/00621 . . . . . {Centre hardness}

**WARNING**

Group [A63B 37/00621](#) is incomplete pending reclassification of documents from group [A63B 37/0062](#).

Groups [A63B 37/0062](#) and [A63B 37/00621](#) should be considered in order to perform a complete search.

37/00622 . . . . . {Surface hardness}

**WARNING**

Group [A63B 37/00622](#) is incomplete pending reclassification of documents from group [A63B 37/0062](#).

Groups [A63B 37/0062](#) and [A63B 37/00622](#) should be considered in order to perform a complete search.

37/0063 . . . . . {Hardness gradient}

37/0064 . . . . {Diameter}

37/0065 . . . . {Deflection or compression}

37/0066 . . . . {Density; Specific gravity}

37/0067 . . . . {Weight; Mass}

37/0068 . . . . {Initial velocity}

37/0069 . . . . {Flexural modulus; Bending stiffness}

37/00691 . . . {Colour tone}

**WARNING**

Group [A63B 37/00691](#) is incomplete pending reclassification of documents from group [A63B 37/005](#).

Groups [A63B 37/005](#) and [A63B 37/00691](#) should be considered in order to perform a complete search.

37/007 . . {Characteristics of the ball as a whole}

37/0072 . . . {with a specified number of layers}

37/0073 . . . . {Solid, i.e. formed of a single piece}

37/0074 . . . . {Two piece balls, i.e. cover and core}

37/0075 . . . . {Three piece balls, i.e. cover, intermediate layer and core}

37/0076 . . . . {Multi-piece balls, i.e. having two or more intermediate layers}

37/0077 . . . {Physical properties}

#### **WARNING**

Group [A63B 37/0077](#) is impacted by reclassification into groups [A63B 37/00773](#) and [A63B 37/00776](#).

Groups [A63B 37/0077](#), [A63B 37/00773](#), and [A63B 37/00776](#) should be considered in order to perform a complete search.

37/00773 . . . . {Moment of inertia}

#### **WARNING**

Group [A63B 37/00773](#) is incomplete pending reclassification of documents from group [A63B 37/0077](#).

Groups [A63B 37/0077](#) and [A63B 37/00773](#) should be considered in order to perform a complete search.

37/00776 . . . . {Slab hardness}

#### **WARNING**

Group [A63B 37/00776](#) is incomplete pending reclassification of documents from group [A63B 37/0077](#).

Groups [A63B 37/0077](#) and [A63B 37/00776](#) should be considered in order to perform a complete search.

37/0078 . . . . {Coefficient of restitution}

37/008 . . . . {Diameter}

37/0082 . . . . {Density; Specific gravity}

37/0083 . . . . {Weight; Mass}

37/0084 . . . . {Initial velocity}

37/0086 . . . . {Flexural modulus; Bending stiffness}

37/0087 . . . . {Deflection or compression}

37/0088 . . . . {Frequency}

37/0089 . . . . {Coefficient of drag}

37/009 . . . . {Coefficient of lift}

37/0091 . . . . {Density distribution amongst the different ball layers}

37/0092 . . . . {Hardness distribution amongst different ball layers}

#### **WARNING**

Group [A63B 37/0092](#) is impacted by reclassification into groups [A63B 37/00921](#) and [A63B 37/00922](#).

Groups [A63B 37/0092](#), [A63B 37/00921](#), and [A63B 37/00922](#) should be considered in order to perform a complete search.

37/00921 . . . . . {whereby hardness of the cover is higher than hardness of the intermediate layers}

#### **WARNING**

Group [A63B 37/00921](#) is incomplete pending reclassification of documents from group [A63B 37/0092](#).

Groups [A63B 37/0092](#) and [A63B 37/00921](#) should be considered in order to perform a complete search.

37/00922 . . . . . {whereby hardness of the cover is lower than hardness of the intermediate layers}

#### **WARNING**

Group [A63B 37/00922](#) is incomplete pending reclassification of documents from group [A63B 37/0092](#).

Groups [A63B 37/0092](#) and [A63B 37/00922](#) should be considered in order to perform a complete search.

37/0093 . . . . {Moisture vapour transmission rate [MVTR]}

37/0094 . . . . {Rebound resilience}

37/0095 . . . . {Scuff resistance}

37/0096 . . . . {Spin rate}

37/0097 . . . . {Layers interlocking by means of protrusions or inserts, lattices or the like}

37/0098 . {Rigid hollow balls, e.g. for pétanque}

37/02 . Special cores {(balls with finger holes [A63B 37/0001](#), golf ball cores [A63B 37/005](#))}

37/04 . . Rigid cores

37/06 . . Elastic cores

2037/065 . . . {Foam}

37/08 . . Liquid cores; Plastic cores

2037/082 . . . {Granular, e.g. comprising beads}

2037/085 . . . {liquid, jellylike}

2037/087 . . . {Wound cores or layers}

37/10 . . with eccentric centre of gravity

37/12 . Special coverings {, i.e. outer layer material (balls with finger holes [A63B 37/0001](#), golf ball covers [A63B 37/0023](#))}

2037/125 . . {stitchings}

37/14 . Special surfaces {([A63B 37/0004](#) takes precedence)}

**39/00 Hollow non-inflatable balls {, i.e. having no valves (rigid balls [A63B 37/00](#))}**

2039/003 . {substantially hollow and pressureless}

2039/006 . {pressurised}

39/02 . Arrangements for maintaining the pressure

2039/022 . . {using special gas-impermeable layers}

39/025 . . {using containers with pressurising means for balls not in use}

39/027 . . {using special inflation gases}

39/04 . . Pricking-balls; {Tools for blowing them up}

39/06 . Special coverings

39/08 . . made of two halves

**41/00 Hollow inflatable balls**

#### **WARNING**

Group [A63B 41/00](#) is impacted by reclassification into group [A63B 41/125](#).

Groups [A63B 41/00](#) and [A63B 41/125](#) should be considered in order to perform a complete search.

2041/005 . {with counterweight for adjusting the centre of gravity}

41/02 . Bladders

41/04 . . Closures therefor

41/08 . Ball covers; Closures therefor

41/085 . . {Closures}

41/10 . Bladder and cover united

- 41/12 . Tools or devices for blowing up or closing balls {for pricking-balls [A63B 39/04](#)}
- 41/125 . {Large inflatable balls primarily used as body supports for exercising, e.g. balancing}

**WARNING**

Group [A63B 41/125](#) is incomplete pending reclassification of documents from group [A63B 41/00](#).

Groups [A63B 41/00](#) and [A63B 41/125](#) should be considered in order to perform a complete search.

**43/00 Balls with special arrangements**

- 2043/001 . {Short-distance or low-velocity balls for training, or for playing on a reduced area}
- 43/002 . {with special configuration, e.g. non-spherical (discs for throwing [A63B 65/10](#))}
- 43/004 . {electrically conductive, e.g. for automatic arbitration}
- 43/005 . {with adhesive type surfaces, e.g. hook-and-loop type fastener}
- 43/007 . {Arrangements on balls for connecting lines or cords}
- 43/008 . {with means for improving visibility, e.g. special markings or colours (illuminating or reflecting means [A63B 43/06](#))}
- 43/02 . with a handle
- 43/04 . with an eccentric centre of gravity; with mechanism for changing the centre of gravity (solid balls [A63B 37/10](#))
- 43/06 . with illuminating devices ; with reflective surfaces}

**45/00 Apparatus or methods for manufacturing balls (working of plastics or substances in a plastic state B29)**

- 45/02 . Marking of balls

**47/00 Devices for handling or treating balls {, e.g. for holding or carrying balls}**

- 47/001 . {Ball holders attached to the player's body (golfing accessories, e.g. holders [A63B 57/20](#))}
- 47/002 . {Devices for dispensing balls, e.g. from a reservoir (automatic teeing devices [A63B 57/0006](#); devices for projecting balls [A63B 69/40](#))}
- 2047/004 . . {having means preventing bridge formation during dispensing}
- 47/005 . {Ball heating devices}
- 47/007 . {Devices for carrying, stacking or transporting bowling balls}
- 47/008 . {Devices for measuring or verifying ball characteristics}
- 47/02 . for picking-up {or collecting}
- 47/021 . . {for picking-up automatically, e.g. by apparatus moving over the playing surface}
- 2047/022 . . . {Autonomous machines which find their own way around the playing surface}
- 47/024 . . {for collecting by using a sweeping means moving across the playing surface}
- 47/025 . . {Installations continuously collecting balls from the playing areas, e.g. by gravity, with conveyor belts}
- 2047/027 . . . {Hydraulic ball transport}
- 2047/028 . . . {pneumatic ball transport}

- 47/04 . for cleaning balls (apparatus for cleaning balls, as accessories for bowling- or table alleys [A63D 5/10](#))
- 2047/043 . . {with drying means}
- 2047/046 . . {Motorised}

**Rackets, bats, or other accessories for ball games****49/00 Stringed rackets, e.g. for tennis (strings therefor [A63B 51/00](#))****NOTES**

1. When classifying in groups [A63B 49/00](#) - [A63B 60/00](#), it is desirable to add the indexing codes of group [A63B 2102/00](#).
2. When classifying in groups [A63B 49/00](#), [A63B 53/00](#) or [A63B 59/00](#), subject matter related to details or accessories of golf clubs, bats, rackets or the like are further classified in group [A63B 60/00](#).

- 49/02 . Frames
- 2049/0201 . . {with defined head dimensions}
- 2049/0202 . . . {surface area}
- 2049/0203 . . . {height}
- 2049/0204 . . . {width}
- 2049/0205 . . {comprising at least two similar parts assembled with the interface plane parallel to the string plane}
- 2049/0207 . . {with defined overall length}
- 2049/0211 . . {with variable thickness of the head in a direction perpendicular to the string plane}
- 2049/0212 . . {with defined weight}
- 2049/0213 . . . {without strings}
- 2049/0214 . . . . {head only}
- 2049/0217 . . {with variable thickness of the head in the string plane}
- 49/022 . . String guides on frames, e.g. grommets
- 49/025 . . Means on frames for clamping string ends
- 49/028 . . Means for achieving greater mobility of the string bed
- 49/03 . . characterised by throat sections, i.e. sections or elements between the head and the shaft
- 49/032 . . . T-shaped connection elements
- 2049/0325 . . . {with two legs having mutually different constructions}
- 49/035 . . with easily dismountable parts, e.g. heads, shafts or grips
- 49/038 . . with head subframes for replacing strings
- 49/08 . . with special construction of the handle
- 49/10 . . made of non-metallic materials, other than wood
- 2049/103 . . . {string holes produced during moulding process}
- 49/11 . . . with inflatable tubes, e.g. inflatable during fabrication
- 49/12 . . made of metal
- 49/14 . . Protection devices on the frame
- 51/00 Stringing tennis, badminton or like rackets; Strings therefor; Maintenance of racket strings**
- 51/001 . {using strings made of different materials on the same frame, e.g. gut and nylon}
- 51/002 . {using strings with different cross-sections on the same frame, e.g. with different thickness}
- 51/004 . {using strings with different tension on the same frame}



51/005	• Devices for measuring the tension of strings (for controlling the tension during stringing <a href="#">A63B 51/14</a> )	53/0416	• • {Heads having an impact surface provided by a face insert}
51/01	• Pre-woven string-sets ready for insertion into a frame	53/042	• • • {the face insert consisting of a material different from that of the head}
51/015	• String-aligning tools	53/0425	• • • • {the face insert comprising two or more different materials}
51/02	• Strings; String substitutes; Products applied on strings, e.g. for protection against humidity or wear	53/0429	• • • {the face insert comprising two or more layers of material}
51/023	• • {Strings having characteristics varying along the length of the string, e.g. diameter or elasticity}	53/0433	• • {with special sole configurations}
51/026	• • {Strings having non-circular cross-section}	53/0437	• • {with special crown configurations}
51/04	• • Sheet-like structures used as substitutes	53/0441	• • {with visual indicators for aligning the golf club}
51/045	• • • {Wooden blades with perforations}	53/0445	• • {Details of grooves or the like on the impact surface}
51/06	• Double-sided stringing	53/045	• • {Strengthening ribs}
51/08	• Diagonal stringing	53/0454	• • • {Strengthening ribs on the rear surface of the impact face plate}
51/10	• Reinforcements for stringing	53/0458	• • {with non-uniform thickness of the impact face plate}
51/11	• • Intermediate members for the cross-points of the strings	53/0462	• • • {characterised by tapering thickness of the impact face plate}
51/12	• Devices arranged in or on the racket for adjusting the tension of the strings	53/0466	• • {wood-type}
51/14	• Arrangements for stringing, e.g. for controlling the tension of the strings during stringing	53/047	• • {iron-type}
51/143	• • {Hand-held string-tensioning devices}	53/0475	• • • {with one or more enclosed cavities}
51/146	• • {Devices simultaneously raising and lowering alternate longitudinal strings previously mounted in a frame, to facilitate the threading of the cross strings}	2053/0479	• • • {Wedge-type clubs, details thereof}
51/16	• • Apparatus for stringing while manufacturing	2053/0483	• • • {Chipping clubs, details thereof}
<b>53/00</b>	<b>Golf clubs</b>	53/0487	• • {for putters ( <a href="#">A63B 53/065</a> takes precedence)}
	<b>NOTE</b>	2053/0491	• • {with added weights, e.g. changeable, replaceable}
	When classifying in group <a href="#">A63B 53/00</a> and subgroups, subject matter related to details or accessories of golf clubs, bats, rackets or the like are further classified in group <a href="#">A63B 60/00</a> .	2053/0495	• • • {moving on impact, slidable, spring or otherwise elastically biased}
53/002	• {Clubs made of composite, plastics or rubber materials, with integral head and shaft}	53/06	• • adjustable
53/005	• {Club sets}	53/065	• • • {for putters}
53/007	• {Putters}	53/08	• with special arrangements for obtaining a variable impact
53/02	• Joint structures between the head and the shaft	53/10	• Non-metallic shafts
53/021	• • {the shaft axis being forwardly offset relative to the striking face of the head}	53/12	• Metallic shafts
53/022	• • {allowing adjustable positioning of the head with respect to the shaft}	53/14	• Handles
53/023	• • • {adjustable angular orientation}	<b>55/00</b>	<b>Bags for golf clubs; Stands for golf clubs for use on the course; Wheeled carriers specially adapted for golf bags</b>
53/025	• • • • {lie angle only, i.e. relative angular adjustment between the shaft and the club head about an axis parallel to the intended line of play when the club is in its normal address position}	55/10	• Stands for golf clubs {, e.g.} for use on the course {; Golf club holders, racks or presses}
53/026	• • • • {loft angle only, i.e. relative angular adjustment between the shaft and the club head about a horizontal axis perpendicular to the intended line of play when the club is in its normal address position}	55/20	• with special receptacles for the balls
53/027	• • • • {about the longitudinal axis of the shaft only}	55/30	• Bags with wheels
53/028	• • • {with a range of alternative attachment points for the shaft}	55/40	• Bags with partitions or club holders
53/04	• Heads	2055/402	• {Warning devices for indicating missing golf clubs}
53/0408	• • {characterised by specific dimensions, e.g. thickness}	2055/403	• {Security means for locking golf clubs in the bag}
53/0412	• • • {Volume}	55/404	• {Covers or hoods for golf bags}
		55/406	• • {releasably attached}
		55/408	• {Releasably mounted accessories fitted outside the bag, e.g. straps or holders ( <a href="#">A63B 55/20</a> and <a href="#">A63B 55/50</a> take precedence)}
		55/50	• Supports, e.g. with devices for anchoring to the ground
		55/53	• • with legs opening automatically upon putting the bag on the ground
		55/57	• • Bags with tripod or like set-up stands
		55/60	• Wheeled carriers specially adapted for golf bags
		2055/601	• • {Caddies fitted with means for sitting}
		2055/602	• • {Means for mounting weather shields, e.g. umbrellas, on caddies}

2055/603	. . {with means for trailing the caddy other than by hand}	59/48	. . with perforated surfaces
2055/604	. . . {by mechanical links attached to the golf players}	59/50	. Substantially rod-shaped bats for hitting a ball in the air, e.g. for baseball
2055/605	. . . {by remote control}	59/51	. . made of metal
55/61	. . {motorised}	59/52	. . made of wood or bamboo
2055/615	. . . {Units for converting manually-driven golf carts into motorised ones}	59/54	. . made of plastic
		59/55	. . with non-circular cross-section
		59/56	. . characterised by the head
		59/58	. . characterised by the shape ( <a href="#">A63B 59/55</a> , <a href="#">A63B 59/56</a> take precedence)
<b>57/00</b>	<b>Golfing accessories</b>	2059/581	. . . {with a continuously tapered barrel}
57/0006	. {Automatic teeing devices (devices for automatically dispensing balls in general <a href="#">A63B 47/002</a> )}	59/59	. . with sound generators, e.g. with internal movable members therefor
57/0012	. {Devices for forming the tees}	59/60	. of mallet type, e.g. for croquet {or polo}
57/0032	. {Tee-gauges; Tee-repairing devices}	59/70	. with bent or angled lower parts for hitting a ball on the ground, on an ice-covered surface, or in the air, e.g. for hockey or hurling
57/0037	. {Devices for inserting or extracting tees}		. Circular bats or paddles not provided for in groups <a href="#">A63B 59/20</a> - <a href="#">A63B 59/70</a>
57/10	. Golf tees		
57/12	. . attached to straps		
57/13	. . foldable or separable		
57/15	. . height-adjustable		
57/16	. . Brush-type tees		
57/18	. . with writing means		
57/19	. . with direction indicators		
57/20	. Holders, e.g. of tees or of balls		
57/203	. . {Tee holders (to be fitted on golf bags or caddies <a href="#">A63B 55/408</a> )}		
57/207	. . {Golf ball position marker holders}		
57/30	. Markers		
57/35	. . with magnets		
57/353	. . {Golf ball position markers}		
57/357	. . {for golf cups or holes, e.g. flags}		
57/40	. Golf cups or holes		
57/405	. . {Cups with automatic ball ejector means}		
57/50	. specially adapted for course maintenance		
57/505	. {Hole information stands, e.g. tee-boxes}		
57/60	. Cleaning or maintenance of golf clubs, putters, shoes or other golf accessories ({cleaning balls <a href="#">A63B 47/04</a> ; } devices for cleaning handles or grips of golf clubs or putters <a href="#">A63B 60/36</a> )		
2057/605	. . {Means for heating or drying golf clubs}		
<b>59/00</b>	<b>Bats, rackets, or the like, not covered by groups <a href="#">A63B 49/00</a> - <a href="#">A63B 57/00</a></b>		
	<b>NOTES</b>		
	1. In this group, the following term is used with the meaning indicated:		
	• "ball" covers also pucks or other objects to be hit during the game.		
	2. When classifying in group <a href="#">A63B 59/00</a> and subgroups, subject matter related to details or accessories of golf clubs, bats, rackets or the like are further classified in group <a href="#">A63B 60/00</a> .		
59/20	. having means, e.g. pockets, netting or adhesive type surfaces, for catching or holding a ball, e.g. for lacrosse or pelota		
59/30	. forming hand-held throwing or catching aids for use with rings, discs, wheels or cylindrical throwing-bodies, or for use with balls having a central bore		
59/40	. Rackets or the like with flat striking surfaces for hitting a ball in the air, e.g. for table tennis		
59/42	. . with solid surfaces		
59/45	. . . Rubber parts thereof; characterised by bonding between a rubber part and the racket body		
		60/00	<b>Details or accessories of golf clubs, bats, rackets or the like</b>
		60/002	. {Resonance frequency related characteristics}
		60/004	. {Striking surfaces coated with high-friction abrasive materials}
		60/006	. {Surfaces specially adapted for reducing air resistance}
		60/0081	. {Substantially flexible shafts; Hinged shafts}
		60/0085	. {Telescopic shafts}
		60/02	. Ballast means for adjusting the centre of mass ( <a href="#">A63B 60/24</a> , <a href="#">A63B 60/54</a> take precedence)
		60/04	. . Movable ballast means ({ <a href="#">A63B 15/005</a> takes precedence})
		60/06	. Handles
		60/08	. . characterised by the material
		60/10	. . with means for indicating correct holding positions ( <a href="#">A63B 60/12</a> takes precedence)
		60/12	. . contoured according to the anatomy of the user's hand
		60/14	. . Coverings specially adapted for handles, e.g. sleeves or ribbons
		60/16	. . Caps; Ferrules
		60/18	. . with means for cooling, ventilating or sweat-reduction, e.g. holes or powder dispensers
		60/20	. . with two handgrips
		60/22	. . Adjustable handles
		60/24	. . . Weighted handles
		60/26	. . . with adjustable stiffness
		60/28	. . . with adjustable length
		60/30	. . . with adjustable circumference
		60/32	. . with means for changing the angular position of the handle about its longitudinal axis
		60/34	. . with the handle axis different from the main axis of the implement
		60/36	. Devices for cleaning handles or grips
		60/38	. Structurally associated means for storing and dispensing balls
		60/40	. having holding means provided inside, on the edge or on the rear face of the striking surface
		60/42	. Devices for measuring, verifying, correcting or customising the inherent characteristics of golf clubs, bats, rackets or the like, e.g. measuring the maximum torque a batting shaft can withstand
		60/44	. . Presses for stringed rackets

60/46	• Measurement devices associated with golf clubs, bats, rackets or the like for measuring physical parameters relating to sporting activity, e.g. baseball bats with impact indicators or bracelets for measuring the golf swing	65/00	<b>Implements for throwing</b> ( <a href="#">throwing toys A63H 33/18</a> ); <b>Mechanical projectors, e.g. using spring force</b>
2060/462	• . {Devices measuring hand characteristics to determine correct grip size}	65/02	• Spears or the like {; Javelins}
2060/464	• . {Means for indicating or measuring the pressure on the grip}	65/04	• Throwing-hammers
60/48	• with corrugated cross-section	65/06	• Heavy throwing-balls {, i.e. "medicine balls", shots, weights or stones for putting}
60/50	• with through-holes ( <a href="#">A63B 60/18 takes precedence; for stringing purposes A63B 49/00</a> )	65/08	• Boomerangs {; Throwing apparatus therefor}
60/52	• with slits	65/10	• Discus discs; Quoits
60/54	• with means for damping vibrations	65/12	• Ball-throwing apparatus with or without catchers {( <a href="#">hand-held throwing or catching aids A63B 59/20</a> ); Mechanical projectors, e.g. using spring force}
60/56	• Devices for protection, storage or transport, e.g. stands or cases	65/122	• . {Hand-held mechanical projectors, e.g. for balls}
60/58	• . specially adapted for rackets	65/125	• . . {with handles or grips on both sides of the catching-throwing means, for two-handed use}
60/60	• . specially adapted for bats	65/127	• . {Means for throwing or catching balls, attached to the foot}
60/62	• . specially adapted for clubs, e.g. head covers {, connector means therefor}	67/00	<b>Sporting games or accessories therefor, not provided for in groups <a href="#">A63B 1/00</a> - <a href="#">A63B 65/00</a></b>
60/64	• . . . Sheaths for golf clubs	67/002	• {Games using balls, not otherwise provided for}
61/00	<b>Tennis nets or accessories for tennis or like games {, e.g. volley-ball (devices for holding or carrying balls <a href="#">A63B 47/00</a>; for table tennis <a href="#">A63B 67/04</a>)}</b>	2067/005	• . {Games similar to volleyball or basketball and played on trampolines or the like, e.g. "Spaceball" or "Aeroball"}
61/003	• {Nets for tennis or like games or accessories therefor (straining or adjusting devices on the posts <a href="#">A63B 61/02</a> )}	67/007	• {played in water}
61/006	• . {Accessories for training purposes mounted on the net}	67/02	• Special golf games, e.g. miniature golf {or golf putting games played on putting tracks; putting practice apparatus having an elongated platform as a putting track}
61/02	• Posts; Revolvably-mounted posts {; Straining or adjusting devices on the posts, e.g. coin- or time operated}	2067/025	• . {with incorporated means acting on the track surface for varying its topography, e.g. slope}
2061/025	• . {electrically driven}	67/04	• Table games physically beneficial for the human body, modelled on outdoor sports, e.g. table tennis ( <a href="#">other table games A63F</a> )
61/04	• Straining or adjusting devices for nets {, e.g. centre strainers, single-double adjusters, net height meters ( <a href="#">straining or adjusting devices on the posts A63B 61/02</a> )}	67/045	• . {Supports for table tennis nets}
63/00	<b>Targets or goals for ball games (golf cups <a href="#">A63B 57/40</a>)</b>	67/06	• Ring or disc tossing games {, e.g. quoits; Throwing or tossing games, e.g. using balls; Games for manually rolling balls, e.g. marbles}
2063/001	• {Targets or goals with ball-returning means}	2067/061	• . {Means to mark out tossing area}
2063/002	• {variable in size}	2067/063	• . {tossing, e.g. rings or horseshoes around or on, e.g. posts, hooks}
63/003	• {non-electronic means for locating the point of impact on a target or the point of entry in the goal}	2067/065	• . {used tossed devices of different sizes giving different degrees of difficulty for fitting in or over a target}
63/004	• {Goals of the type used for football, handball, hockey or the like}	67/066	• . {using balls on a horizontal playing ground, e.g. petanque}
2063/005	• . {having means not protruding from the profile of the post for attachment of a net}	67/068	• . . {Devices used therewith for measuring distance or difference in distance}
2063/006	• {Forming a target or goal by fixing net or target area to garage doorway or garage parts}	67/08	• Juggling or spinning ball games played as games of skill ( <a href="#">A63B 67/16 takes precedence</a> )
63/007	• {Target zones without opening defined on a substantially horizontal surface}	67/083	• . {Juggling games with integral catching or bouncing arrangements}
63/008	• {Goals for rugby or American football}	67/086	• . {Juggling games using sticks or discs}
63/06	• Revolving targets {; Moving targets, e.g. moving or revolving on impact}	67/10	• Games with thread-suspended or swingably-mounted bodies, e.g. balls, pointed bodies shaped as birds, animals, or the like, for aiming at and hitting targets ( <a href="#">games using a bat with a ball tethered thereto A63B 67/20</a> , <a href="#">pin games with tethered balls A63D 7/00</a> ); Games using tethered bodies, e.g. balls, not otherwise provided for}
2063/065	• . {movable or switchable between discrete positions, e.g. after a successful shot}	67/12	• Flip games {, i.e. games using playing bodies being flipped or twirled up in the air, e.g. for hitting them with a bat; Games of tip-cat}
63/08	• with {substantially} horizontal opening for ball, e.g. for basketball {( <a href="#">A63B 57/40</a> , <a href="#">A63B 63/06 take precedence</a> )}	67/14	• Curling stone; Shuffleboard; Similar sliding games
63/083	• . {for basketball}		
2063/086	• . . {deflectable under excessive loads}		

- 2067/142 . . {with braking means}
- 2067/144 . . . {variable}
- 2067/146 . . {Stones with rolling elements}
- 67/148 . . {Curling brooms or brushes}
- 67/16 . . Diabolos or similar thrown and caught spinning tops; Throwing and catching devices therefor
- 67/165 . . {the diablo being able to rotate freely in one direction only, e.g. fitted with an over-running clutch}
- 67/18 . . Badminton or similar games with feathered missiles
- 67/183 . . Feathered missiles
- 67/187 . . . Shuttlecocks
- 67/19 . . . . with several feathers connected to each other
- 67/193 . . . . with all feathers made in one piece
- 67/197 . . . with special functions, e.g. light emission or sound generation
- 67/20 . . Games using a bat {or racket} with a ball {or other body} tethered thereto
- 67/205 . . {the bat having one or more spigots for catching bodies having a bore, e.g. rings}
- 67/22 . . the bat {or racket} having one or more holes {or pockets} therein {, e.g. for catching or collecting the ball; the bat comprising a ring or cup having a handle}
- 69/00 Training appliances or apparatus for special sports (training of parachutists [B64D 23/00](#))**
  - 69/0002 . . {for baseball}
  - 2069/0004 . . {specially adapted for particular training aspects}
  - 2069/0006 . . . {for pitching}
  - 2069/0008 . . . {for batting}
  - 2069/0011 . . . {Catching}
  - 69/0013 . . {Baseball bases}
  - 69/0015 . . {for cricket}
  - 69/0017 . . {for badminton}
  - 69/002 . . {for football ([American-football dummies A63B 69/345](#))}
  - 69/0022 . . {for skating}
  - 69/0024 . . {for hockey}
  - 69/0026 . . {for ice-hockey}
  - 69/0028 . . {for running, jogging or speed-walking ([movable endless bands A63B 22/02](#))}
  - 2069/0031 . . {Speed-walking}
  - 2069/0033 . . . {Nordic walking, i.e. using poles for walking}
  - 69/0035 . . {on the spot}
  - 2069/0037 . . {safety devices, e.g. warning bells, rear-view mirrors}
  - 69/004 . . {for the martial arts, e.g. karate, judo ([A63B 69/20, A63B 69/34 take precedence](#))}
  - 2069/0042 . . {Breaking boards or holders therefore, i.e. devices for destroying exercises}
  - 2069/0044 . . {Fake or disarmed practise weapons, i.e. for mimicking combat situations}
  - 69/0046 . . {for bowling}
  - 69/0048 . . {for mountaineering, e.g. climbing-walls, grip elements for climbing-walls}

- 69/0053 . . {Apparatus generating random stimulus signals for reaction-time training involving a substantial physical effort}

**WARNING**

Group [A63B 69/0053](#) is impacted by reclassification into group [A63B 69/0055](#).

Groups [A63B 69/0053](#) and [A63B 69/0055](#) should be considered in order to perform a complete search.

- 69/0055 . . {with means for distracting the user, e.g. visual or audio means}

**WARNING**

Group [A63B 69/0055](#) is incomplete pending reclassification of documents from group [A63B 69/0053](#).

Groups [A63B 69/0053](#) and [A63B 69/0055](#) should be considered in order to perform a complete search.

- 69/0057 . . {Means for physically limiting movements of body parts ([A63B 23/0211 takes precedence](#))}

**WARNING**

Group [A63B 69/0057](#) is impacted by reclassification into group [A63B 69/0062](#).

Groups [A63B 69/0057](#) and [A63B 69/0062](#) should be considered in order to perform a complete search.

- 69/0059 . . {worn by the user}
- 69/0062 . . {Leg restraining devices}

**WARNING**

Group [A63B 69/0062](#) is incomplete pending reclassification of documents from group [A63B 69/0057](#).

Groups [A63B 69/0057](#) and [A63B 69/0062](#) should be considered in order to perform a complete search.

- 69/0064 . . {Attachments on the trainee preventing falling}
- 69/0066 . . {for wind-surfing}
- 69/0068 . . {for bull-fighting, or animal-roping}
- 69/0071 . . {for basketball}
- 69/0073 . . {Means for releasably holding a ball in position; Balls constrained to move around a fixed point, e.g. by tethering}
- 69/0075 . . {Means for releasably holding a ball in position prior to kicking, striking or the like ([golf tees A63B 57/10](#))}
- 2069/0077 . . {Suspending a ball on an upright stream of air or water}
- 69/0079 . . {Balls tethered to a line or cord ([A63B 43/007 takes precedence](#); other games using tethered balls [A63B 67/10](#); games using a bat or racket with a ball tethered thereto [A63B 67/20](#))}
- 2069/0082 . . . {with movement of the cord-attachment along its rotational axis as a function of the number of revolutions, e.g. following a helical member}
- 69/0084 . . . {the line or cord being fixed to at least two points}



- 69/0086 . . . {the line or cord being attached to the user  
([A63B 21/0608](#) takes precedence; punching balls attached to the user [A63B 69/26](#))}
  - 69/0088 . . . {the line or cord having a handle}
  - 69/0091 . . {Balls fixed to a movable, tiltable or flexible arm}
  - 69/0093 . {for surfing, i.e. without a sail; for skate or snow boarding}
- WARNING**
- Group [A63B 69/0093](#) is incomplete pending reclassification of documents from groups [B63B 32/00](#), [B63B 32/20](#), [B63B 34/70](#) and [B63B 35/00](#).
- All groups listed in this Warning should be considered in order to perform a complete search.
- 69/0095 . {for volley-ball}
  - 69/0097 . {Ball rebound walls (with holes or in combination with nets [A63B 63/00](#))}
  - 69/02 . for fencing {, e.g. means for indicating hits}
  - 2069/025 . . {with conductive floor used as part of the detection circuit}
  - 69/04 . simulating the movement of horses (toy animals for riding [A63G 19/00](#))
  - 69/06 . for rowing or sculling
  - 2069/062 . . {by pulling on a cable}
  - 2069/064 . . {with pivoting handlebars}
  - 2069/066 . . {with handlebars rotating about a horizontal axis}
  - 2069/068 . . {kayaking, canoeing}
  - 69/08 . . with water-filled pools
  - 69/10 . Swimming instruction apparatus for use without water
  - 69/12 . Arrangements in swimming pools for teaching swimming {or for training}
  - 69/125 . . {Devices for generating a current of water in swimming pools}
  - 69/14 . . Teaching frames for swimming {; Swimming boards}
  - 69/16 . for cycling {, i.e. arrangements on or for real bicycles}
  - 2069/161 . . {supports for the front of the bicycle}
  - 2069/162 . . . {for front fork or handlebar}
  - 2069/163 . . . {for the front wheel}
  - 2069/164 . . {supports for the rear of the bicycle, e.g. for the rear forks}
  - 2069/165 . . . {rear wheel hub supports}
  - 2069/166 . . {supports for the central frame of the bicycle, e.g. for the crank axle housing, seat tube or horizontal tube}
  - 2069/167 . . {on rollers without further support}
  - 2069/168 . . {Force transfer through the rim of the wheel}
  - 69/18 . for skiing
  - 69/182 . . {for cross-country-skiing ([A63B 23/0417](#), [A63B 69/0022](#) take precedence)}
  - 2069/185 . . {for ski-jumping}
  - 69/187 . . {for water-skiing}
  - 69/20 . Punching balls {, e.g. for boxing; Other boxing training devices, e.g. bags ([A63B 69/34](#) takes precedence)}
  - 69/201 . . {Hanging heavy punching bags}
  - 69/203 . . {Punching balls, i.e. mainly designed to be hit at resonant frequency}
  - 69/205 . . . {hanging downwards}
  - 69/206 . . . {mounted by using attachments at opposite points}
  - 69/208 . . . {mounted on a resilient foot}
  - 69/24 . . mounted on, or suspended from, a movable support
  - 69/26 . . . attached to the human body
  - 69/32 . . with indicating devices
  - 69/325 . . . {for vertical blows on a horizontal surface}
  - 69/34 . {Dummies, e.g.} boxing or {American-} football dummies
  - 69/345 . . {(American-) football, rugby, wrestling dummies, e.g. for tackling, blocking}
  - 69/36 . for golf
- WARNING**
- Group [A63B 69/36](#) is impacted by reclassification into group [A63B 69/3605](#).
- Groups [A63B 69/36](#) and [A63B 69/3605](#) should be considered in order to perform a complete search.
- 69/3605 . . {Golf club selection aids informing player of his average or expected shot distance for each club}
- WARNING**
- Group [A63B 69/3605](#) is incomplete pending reclassification of documents from group [A63B 69/36](#).
- Groups [A63B 69/36](#) and [A63B 69/3605](#) should be considered in order to perform a complete search.
- 69/3608 . . {Attachments on the body, e.g. for measuring, aligning, restraining ([A63B 69/0059](#), [A63B 69/3673](#) take precedence)}
  - 69/3614 . . {using electro-magnetic, magnetic or ultrasonic radiation emitted, reflected or interrupted by the golf club}
  - 69/3617 . . {Striking surfaces with impact indicating means, e.g. markers}
- WARNING**
- Group [A63B 69/3617](#) is impacted by reclassification into group [A63B 69/362](#).
- Groups [A63B 69/3617](#) and [A63B 69/362](#) should be considered in order to perform a complete search.
- 69/362 . . . {electrical or electronic}
- WARNING**
- Group [A63B 69/362](#) is incomplete pending reclassification of documents from group [A63B 69/3617](#).
- Groups [A63B 69/3617](#) and [A63B 69/362](#) should be considered in order to perform a complete search.
- 69/3621 . . {Contacting or non-contacting mechanical means for guiding the swing}
  - 69/36211 . . . {Mechanical guides guiding the club head end during the complete swing, e.g. rails}

- 69/36212 . . . . {with a flexible member fixed on the club and rotating around a fixed supporting point (clubs only for gymnastics or muscular training [A63B 15/00](#))}
- 69/36213 . . . . {with arm or rod fixed on the club and rotating around a fixed supporting point}
- 69/3623 . . {for driving ([A63B 69/3608](#), [A63B 69/3658](#), [A63B 69/3661](#), [A63B 69/3667](#) and [A63B 69/3691](#) take precedence)}

**WARNING**

Group [A63B 69/3623](#) is impacted by reclassification into groups [A63B 69/3629](#), [A63B 2214/00](#), and [A63B 2225/11](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 69/3629 . . . {Visual means not attached to the body for aligning, positioning the trainee's head or for detecting head movement, e.g. by parallax}

**WARNING**

Group [A63B 69/3629](#) is incomplete pending reclassification of documents from group [A63B 69/3623](#).

Groups [A63B 69/3623](#) and [A63B 69/3629](#) should be considered in order to perform a complete search.

- 69/3632 . . . {Clubs or attachments on clubs, e.g. for measuring, aligning ([A63B 69/3614](#) takes precedence; clubs for swinging exercises in general [A63B 15/00](#))}
- 69/3635 . . . . {with sound-emitting source}
- 69/3638 . . . . {Normal golf clubs with directly attached weights}
- 69/3652 . . . {Inclined platforms for practising drives from slopes}
- 69/3655 . . . {Balls, ball substitutes, or attachments on balls therefor}
- 69/3658 . . {Means associated with the ball for indicating or measuring, e.g. speed, direction}
- 69/3661 . . {Mats for golf practice, e.g. mats having a simulated turf, a practice tee or a green area}
- 2069/3664 . . . {with bristles, the length of which can be adjusted}
- 69/3667 . . {Golf stance aids, e.g. means for positioning a golfer's feet}
- 2069/367 . . . {Detection of balance between both feet, i.e. weight distribution}
- 69/3673 . . . {Foot inclining aids; Foot wobbling devices}
- 69/3676 . . {for putting ([A63B 69/3608](#), [A63B 69/3661](#), [A63B 69/3667](#) and [A63B 69/3697](#) take precedence)}

**WARNING**

Group [A63B 69/3676](#) is impacted by reclassification into group [A63B 69/3682](#).

Groups [A63B 69/3676](#) and [A63B 69/3682](#) should be considered in order to perform a complete search.

- 69/3682 . . . {Visual means not attached to the body for aligning, positioning the trainee's head or for detecting head movement, e.g. by parallax}

**WARNING**

Group [A63B 69/3682](#) is incomplete pending reclassification of documents from group [A63B 69/3676](#).

Groups [A63B 69/3676](#) and [A63B 69/3682](#) should be considered in order to perform a complete search.

- 69/3685 . . . {Putters or attachments on putters, e.g. for measuring, aligning ([A63B 69/3614](#) takes precedence)}
- 69/3688 . . . {Balls, ball substitutes, or attachments on balls therefor}
- 69/3691 . . {Golf courses; Golf practising terrains having a plurality of driving areas, fairways, greens (special golf games, e.g. miniature golf, [A63B 67/02](#); mats for simulating golf greens [A63B 69/3661](#))}
- 69/3694 . . . {for driving only}
- 69/3697 . . . {with putting taking place on a green other than the target green}
- 69/38 . . for tennis {([A63B 61/006](#), [A63B 69/0073](#) and [A63B 69/0097](#) take precedence)}
- 69/385 . . {for practising the serve}
- 69/40 . . Stationarily-arranged devices for projecting balls {or other bodies} (([golf cups with ball ejector means A63B 57/405](#); traps for clay-pigeon targets [F41J 9/18](#))
- 2069/401 . . {substantially vertically, e.g. for baseball}
- 2069/402 . . {giving spin}
- 2069/403 . . . {back or reverse spin}
- 2069/404 . . . {side spin}
- 2069/405 . . . {top spin}
- 69/406 . . {with rotating discs, wheels or pulleys gripping and propelling the balls or bodies by friction}
- 69/407 . . {with spring-loaded propelling means}
- 69/408 . . . {with rotating propelling arm}
- 69/409 . . {with pneumatic ball- or body-propelling means}

**71/00 Games or sports accessories not covered in groups [A63B 1/00](#) - [A63B 69/00](#) (starting appliances [A63K 3/02](#))**

- 71/0009 . . {for handicapped persons}
- 2071/0018 . . {for wheelchair users}
- 2071/0027 . . {visually handicapped}
- 71/0036 . . {Accessories for stowing, putting away or transporting exercise apparatus or sports equipment ([A63B 47/00](#), [A63B 55/00](#), [A63B 60/56](#) take precedence)}
- 71/0045 . . {specially adapted for games played with rackets or bats ([A63B 60/56](#) takes precedence)}
- 71/0054 . . {Features for injury prevention on an apparatus, e.g. shock absorbers (mats or the like for absorbing shocks for jumping [A63B 6/00](#))}
- 2071/0063 . . {Shock absorbers}
- 2071/0072 . . {Limiting the applied force, torque, movement or speed}
- 2071/0081 . . {Stopping the operation of the apparatus}
- 2071/009 . . {Protective housings covering the working parts of the apparatus}

71/02	. for large-room or outdoor sporting games	2071/0655	. . . {Tactile feedback}
<b>WARNING</b>		2071/0658	. . . {Position or arrangement of display}
Group <a href="#">A63B 71/02</a> is impacted by reclassification into group <a href="#">A63B 71/03</a> .		2071/0661	. . . . {arranged on the user}
Groups <a href="#">A63B 71/02</a> and <a href="#">A63B 71/03</a> should be considered in order to perform a complete search.		2071/0663	. . . . . {worn on the wrist, e.g. wrist bands}
		2071/0666	. . . . . {worn on the head or face, e.g. combined with goggles or glasses}
71/021	. . {Stays or guy-ropes}	71/0669	. . . {Score-keepers or score display devices}
71/022	. . {Backstops, cages, enclosures or the like, e.g. for spectator protection, for arresting balls}	71/0672	. . . . {using non-electronic means}
71/023	. . {Supports, e.g. poles}	2071/0675	. . {Input for modifying training controls during workout}
2071/024	. . . {with screws or pins in the earth}	2071/0677	. . . {Input by image recognition, e.g. video signals}
2071/025	. . . {on rollers or wheels}	2071/068	. . . {Input by voice recognition}
2071/026	. . . {stabilised by weight}	2071/0683	. . . {Input by handheld remote control}
2071/027	. . . . {using player's own weight, e.g. on a platform}	71/0686	. . {Timers, rhythm indicators or pacing apparatus using electric or electronic means}
71/028	. . . {Floor sockets for removable poles}	2071/0688	. . . {using non-electronic means, e.g. mechanical, visual, acoustic or tactile means}
71/03	. . {Athletic drills or obstacles for sport training, other than foot obstacles for skipping}	2071/0691	. . {Maps, e.g. yardage maps or electronic maps}
<b>WARNING</b>		2071/0694	. . {Visual indication, e.g. Indicia}
Group <a href="#">A63B 71/03</a> is incomplete pending reclassification of documents from group <a href="#">A63B 71/02</a> .		71/0697	. . {Reservation devices}
Groups <a href="#">A63B 71/02</a> and <a href="#">A63B 71/03</a> should be considered in order to perform a complete search.		71/08	. Body-protectors for players or sportsmen {, i.e. body-protecting accessories affording protection of body parts against blows or collisions} ( <a href="#">protective clothing or garments for sporting purposes A41D 13/00</a> )
71/04	. for small-room or indoor sporting games	71/081	. . {fluid-filled, e.g. air-filled}
71/06	. Indicating or scoring devices for games or players {, or for other sports activities}	2071/083	. . . {using bubble wrap}
2071/0602	. . {Non-electronic means therefor}	71/085	. . {Mouth or teeth protectors ( <a href="#">A63B 71/081</a> takes precedence)}
71/0605	. . {Decision makers and devices using detection means facilitating arbitration}	2071/086	. . . {Mouth inserted protectors with breathing holes}
71/0608	. . . {using mechanical, i.e. non-electrical means}	2071/088	. . . {Mouth inserted protectors with tether or strap}
2071/0611	. . . {Automatic tennis linesmen, i.e. in-out detectors}	71/10	. . for the head ({ <a href="#">A63B 71/081</a> takes precedence} ; in the form of caps or hats <a href="#">A42B 1/08</a> ; helmets <a href="#">A42B 3/00</a> )
2071/0613	. . . {Automatic net-fault detectors}	2071/105	. . . {Fencing mask}
71/0616	. . {Means for conducting or scheduling competition, league, tournaments or rankings}	71/12	. . for the body or the legs {, e.g. for the shoulders ( <a href="#">A63B 71/081</a> takes precedence)}
71/0619	. . {Displays, user interfaces and indicating devices, specially adapted for sport equipment, e.g. display mounted on treadmills}	2071/1208	. . . {for the breast and the abdomen, e.g. breast plates}
71/0622	. . . {Visual, audio or audio-visual systems for entertaining, instructing or motivating the user}	71/1216	. . . {for the genital area}
2071/0625	. . . . {Emitting sound, noise or music}	71/1225	. . . {for the legs, e.g. thighs, knees, ankles, feet}
2071/0627	. . . . . {when used improperly, e.g. by giving a warning}	2071/1233	. . . . {for the hip}
2071/063	. . . . . {Spoken or verbal instructions}	2071/1241	. . . . {for the thigh}
2071/0633	. . . . . {without electronic means}	2071/125	. . . . {for the knee}
2071/0636	. . . . . {3D visualisation}	2071/1258	. . . . {for the shin, e.g. shin guards}
2071/0638	. . . . . {Displaying moving images of recorded environment, e.g. virtual environment}	2071/1266	. . . . {for the calf}
2071/0641	. . . . . {with a marker advancing in function of the exercise}	2071/1275	. . . . {for the ankle}
2071/0644	. . . . . {with display speed of moving landscape controlled by the user's performance}	2071/1283	. . . . {for the foot}
2071/0647	. . . {Visualisation of executed movements}	71/1291	. . . {for the neck}
2071/065	. . . {Visualisation of specific exercise parameters}	71/14	. . for the hands, e.g. baseball, boxing or golfing gloves ( <a href="#">archer's finger tabs F41B 5/1473</a> )
2071/0652	. . . . {Visualisation or indication relating to symmetrical exercise, e.g. right-left performance related to spinal column}	71/141	. . . {in the form of gloves}
		71/143	. . . . {Baseball or hockey gloves}
		71/145	. . . . {Boxing gloves}
		71/146	. . . . {Golf gloves}
		71/148	. . . . {Gloves for bowling and other ball games}

**2102/00** Application of clubs, bats, rackets or the like to the sporting activity {; particular sports involving the use of balls and clubs, bats, rackets, or the like}

**NOTE**

[A63B 2102/00](#) corresponds to IPC [A63B 102/00](#).  
[A63B 2102/00](#) is an indexing scheme for all applicable areas of [A63B](#).

- 2102/02 . Tennis
- 2102/04 . Badminton
- 2102/06 . Squash
- 2102/065 . . {Racketball}
- 2102/08 . Paddle tennis, padel tennis or platform tennis
- 2102/10 . Battledore
- 2102/12 . Hanetsuki
- 2102/14 . Lacrosse
- 2102/16 . Table tennis
- 2102/18 . Baseball, rounders or similar games
- 2102/182 . . {Softball}
- 2102/184 . . {Rounders}
- 2102/20 . Cricket
- 2102/22 . {Field} hockey
- 2102/24 . Ice hockey
- 2102/26 . Hurling
- 2102/28 . Bandy
- 2102/30 . Floorball
- 2102/32 . Golf
- 2102/34 . Polo
- 2102/36 . Croquet
- 2102/38 . Gateball

**2208/00** Characteristics or parameters related to the user or player (measuring physical characteristics of the user [A63B 2230/00](#))

- 2208/02 . posture
- 2208/0204 . . Standing on the feet
- 2208/0209 . . . on a single foot
- 2208/0214 . . Kneeling
- 2208/0219 . . . on hands and knees
- 2208/0223 . . Squatting
- 2208/0228 . . Sitting on the buttocks
- 2208/0233 . . . in 90/90 position, like on a chair
- 2208/0238 . . . with stretched legs, like on a bed
- 2208/0242 . . Lying down
- 2208/0247 . . . with legs in a kneeled 90/90 position
- 2208/0252 . . . supine
- 2208/0257 . . . prone
- 2208/0261 . . . . using trunk supports resisting forward motion of user
- 2208/0266 . . . on the side
- 2208/0271 . . Standing on the shoulders or the neck
- 2208/0276 . . Standing on the head
- 2208/028 . . Standing on the hands
- 2208/0285 . . Hanging
- 2208/029 . . . upright
- 2208/0295 . . on hands and feet (for push-ups [A63B 23/1236](#))
- 2208/03 . the user being in water
- 2208/05 . the user being at least partly surrounded by a pressure different from the atmospheric pressure
- 2208/053 . . higher pressure
- 2208/056 . . lower pressure
- 2208/12 . specially adapted for children

- 2208/14 . specially adapted for animals

**2209/00** Characteristics of used materials

**WARNING**

Group [A63B 2209/00](#) is impacted by reclassification into group [A63B 2209/18](#).

Groups [A63B 2209/00](#) and [A63B 2209/18](#) should be considered in order to perform a complete search.

- 2209/02 . with reinforcing fibres, e.g. carbon, polyamide fibres
- 2209/023 . . Long, oriented fibres, e.g. wound filaments, woven fabrics, mats
- 2209/026 . . Ratio fibres-total material
- 2209/08 . magnetic
- 2209/10 . with adhesive type surfaces, i.e. hook and loop-type fastener
- 2209/14 . with form or shape memory materials
- 2209/18 . biodegradable

**WARNING**

Group [A63B 2209/18](#) is incomplete pending reclassification of documents from group [A63B 2209/00](#).

Groups [A63B 2209/00](#) and [A63B 2209/18](#) should be considered in order to perform a complete search.

**2210/00** Space saving

- 2210/02 . incorporated in chairs
- 2210/04 . incorporated in beds, sofas
- 2210/06 . incorporated in cabinets
- 2210/10 . specially constructed to fit in the corner of a room
- 2210/50 . Size reducing arrangements for stowing or transport
- 2210/52 . . Frame members linked by elastic means when disassembled
- 2210/54 . . Foldable elastic frame members automatically resuming their expanded state when released
- 2210/56 . . electrically folded and erected
- 2210/58 . . slideably retracted in a housing when not in use

**2213/00** Exercising combined with therapy

- 2213/001 . with radiation therapy
- 2213/002 . . Infra-red
- 2213/003 . . Ultra-violet
- 2213/004 . with electrotherapy
- 2213/005 . with respiratory gas delivering means, e.g. O<sub>2</sub>
- 2213/006 . . under hypoxo conditions, i.e. oxygen supply subnormal
- 2213/007 . combined with magnetotherapy
- 2213/008 . combined with ultrasound therapy

**2214/00** Training methods

**WARNING**

Group [A63B 2214/00](#) is incomplete pending reclassification of documents from group [A63B 69/3623](#).

Groups [A63B 69/3623](#) and [A63B 2214/00](#) should be considered in order to perform a complete search.



**2220/00 Measuring of physical parameters relating to sporting activity****NOTE**

When classifying in this group, the purpose of the measurement takes precedence over the measuring method or device

- 2220/05 . Image processing for measuring physical parameters
- 2220/10 . Positions
- 2220/12 . . Absolute positions, e.g. by using GPS
- 2220/13 . . Relative positions
- 2220/14 . . Geo-tagging, e.g. for correlating route or track location data with specific information related to that specific location
- 2220/16 . . Angular positions
- 2220/17 . Counting, e.g. counting periodical movements, revolutions or cycles, or including further data processing to determine distances or speed
- 2220/18 . Inclination, slope or curvature
- 2220/20 . Distances or displacements
- 2220/22 . . Stride length
- 2220/24 . . Angular displacement
- 2220/30 . Speed
- 2220/31 . . Relative speed
- 2220/34 . . Angular speed
- 2220/35 . . . Spin
- 2220/36 . . Speed measurement by electric or magnetic parameters
- 2220/40 . Acceleration
- 2220/44 . . Angular acceleration
- 2220/50 . Force related parameters
- 2220/51 . . Force
- 2220/52 . . . Weight, e.g. weight distribution
- 2220/53 . . . Force of an impact, e.g. blow or punch
- 2220/54 . . Torque
- 2220/56 . . Pressure
- 2220/58 . . Measurement of force related parameters by electric or magnetic means
- 2220/62 . Time or time measurement used for time reference, time stamp, master time or clock signal
- 2220/64 . Frequency, e.g. of vibration oscillation
- 2220/70 . Measuring or simulating ambient conditions, e.g. weather, terrain or surface conditions
- 2220/72 . . Temperature
- 2220/73 . . Altitude
- 2220/74 . . Atmospheric pressure
- 2220/75 . . Humidity
- 2220/76 . . Wind conditions
- 2220/78 . . Surface covering conditions, e.g. of a road surface
- 2220/80 . Special sensors, transducers or devices therefor
- 2220/801 . . Contact switches
- 2220/802 . . Ultra-sound sensors
- 2220/803 . . Motion sensors
- 2220/805 . . Optical or opto-electronic sensors
- 2220/806 . . Video cameras
- 2220/807 . . Photo cameras
- 2220/808 . . Microphones
- 2220/83 . . characterised by the position of the sensor
- 2220/833 . . . Sensors arranged on the exercise apparatus or sports implement
- 2220/836 . . . Sensors arranged on the body of the user

- 2220/89 . . Field sensors, e.g. radar systems

**2225/00 Miscellaneous features of sport apparatus, devices or equipment**

- 2225/01 . Special aerodynamic features, e.g. airfoil shapes, wings or air passages
- 2225/02 . Testing, calibrating or measuring of equipment
- 2225/05 . with suction cups
- 2225/055 . . used for fixing
- 2225/08 . with writing point
- 2225/09 . Adjustable dimensions
- 2225/093 . . Height
- 2225/096 . . automatically adjusted according to anthropometric data of the user
- 2225/10 . Multi-station exercising machines
- 2225/102 . . having a common resisting device
- 2225/105 . . each station having its own resisting device, e.g. for training multiple users simultaneously
- 2225/107 . . . Resisting devices being of the same kind
- 2225/11 . specially adapted to be transported on a trailer

**WARNING**

Group [A63B 2225/11](#) is incomplete pending reclassification of documents from group [A63B 69/3623](#).

Groups [A63B 69/3623](#) and [A63B 2225/11](#) should be considered in order to perform a complete search.

- 2225/12 . with mirrors
- 2225/15 . with identification means that can be read by electronic means
- 2225/20 . with means for remote communication, e.g. internet or the like
- 2225/30 . Maintenance
- 2225/305 . . Remote servicing
- 2225/50 . Wireless data transmission, e.g. by radio transmitters or telemetry
- 2225/52 . . modulated by measured values
- 2225/54 . . Transponders, e.g. RFID
- 2225/60 . Apparatus used in water
- 2225/605 . . Floating
- 2225/62 . Inflatable
- 2225/64 . Heated
- 2225/66 . Cooled
- 2225/68 . with article holders
- 2225/682 . . for beverages
- 2225/685 . . for electronic devices, e.g. phone, PDA, GPS device, notebook
- 2225/687 . . for others, e.g. keys, wallets, books
- 2225/70 . Coin-operated
- 2225/72 . Means preventing unauthorised use, e.g. by lowering a tennis net
- 2225/74 . with powered illuminating means, e.g. lights
- 2225/76 . with means enabling use in the dark, other than powered illuminating means

**2230/00 Measuring physiological parameters of the user**

- 2230/01 . User's weight
- 2230/015 . . used as a control parameter for the apparatus
- 2230/04 . heartbeat characteristics, e.g. E.G.C., blood pressure modulations
- 2230/045 . . used as a control parameter for the apparatus
- 2230/06 . . heartbeat rate only

2230/062 . . . used as a control parameter for the apparatus  
 2230/065 . . . within a certain range  
 2230/067 . . . . used as a control parameter for the apparatus  
 2230/08 . . other bio-electrical signals  
 2230/085 . . used as a control parameter for the apparatus  
 2230/10 . . electroencephalographic signals  
 2230/105 . . . used as a control parameter for the apparatus  
 2230/20 . . blood composition characteristics  
 2230/201 . . used as a control parameter for the apparatus  
 2230/202 . . glucose  
 2230/203 . . . used as a control parameter for the apparatus  
 2230/205 . . P-CO<sub>2</sub>, i.e. partial CO<sub>2</sub> value  
 2230/206 . . . used as a control parameter for the apparatus  
 2230/207 . . P-O<sub>2</sub>, i.e. partial O<sub>2</sub> value  
 2230/208 . . . used as a control parameter for the apparatus  
 2230/30 . . blood pressure ([A63B 2230/04 takes precedence](#))  
 2230/305 . . used as a control parameter for the apparatus  
     ([A63B 2230/045 takes precedence](#))  
 2230/40 . . respiratory characteristics  
 2230/405 . . used as a control parameter for the apparatus  
 2230/42 . . rate  
 2230/425 . . . used as a control parameter for the apparatus  
 2230/43 . . Composition of exhaled air  
 2230/431 . . . used as a control parameter for the apparatus  
 2230/433 . . . partial CO<sub>2</sub> value  
 2230/435 . . . . used as a control parameter for the apparatus  
 2230/436 . . . partial O<sub>2</sub> value  
 2230/438 . . . . used as a control parameter for the apparatus  
 2230/50 . . temperature  
 2230/505 . . used as a control parameter for the apparatus  
 2230/60 . . muscle strain, i.e. measured on the user  
 2230/605 . . used as a control parameter for the apparatus  
 2230/62 . . posture  
 2230/625 . . used as a control parameter for the apparatus  
 2230/65 . . skin conductivity  
 2230/655 . . used as a control parameter for the apparatus  
 2230/70 . . body fat  
 2230/705 . . used as a control parameter for the apparatus  
 2230/75 . . calorie expenditure  
 2230/755 . . used as a control parameter for the apparatus

**2243/00**    **Specific ball sports not provided for in**  
               [A63B 2102/00](#) - [A63B 2102/38](#)

2243/002 . . Billiards  
 2243/0025 . . Football ([American football A63B 2243/007](#))  
 2243/0033 . . Handball  
 2243/0037 . . Basketball  
 2243/0054 . . Bowling, i.e. ten-pin bowling  
 2243/0058 . . Bowls, crown green bowling  
 2243/0062 . . Petanque  
 2243/0066 . . Rugby; American football  
 2243/007 . . . American football  
 2243/0095 . . Volleyball

**2244/00**    **Sports without balls**

2244/03 . . Skeet, clay pigeon shooting  
 2244/04 . . Bow shooting  
 2244/08 . . Jumping, vaulting  
 2244/081 . . . High jumping  
 2244/082 . . . Long jumping  
 2244/084 . . . Triple jump  
 2244/085 . . Pole vaulting

2244/087 . . without take off run  
 2244/088 . . hurdling  
 2244/09 . . Weight-lifting  
 2244/10 . . Combat sports ([Rugby, American football A63B 2243/0066](#))  
 2244/102 . . . Boxing  
 2244/104 . . . Judo  
 2244/106 . . . Karate  
 2244/108 . . . Wrestling  
 2244/12 . . Acrobats  
 2244/14 . . Shot putting  
 2244/15 . . Discus throwing  
 2244/16 . . Spear or javelin throwing  
 2244/17 . . Hammer throwing  
 2244/18 . . Skating  
 2244/183 . . . Artistic or figure skating  
 2244/186 . . . Roller skating  
 2244/19 . . Skiing  
 2244/20 . . Swimming  
 2244/203 . . . Diving  
 2244/206 . . . . artistic  
 2244/22 . . Dancing  
 2244/225 . . . Pole dancing  
 2244/24 . . Horse riding  
 2244/26 . . Bob-sleigh