

# 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 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>	<b>6/00</b>	<b>Mats or the like for absorbing shocks for jumping, gymnastics or the like</b>
1/005	• {Safety devices for securing the rods}	6/02	• for landing, e.g. for pole vaulting
1/04	• Cleaning the rods	6/025	• • {Sand landing pits, e.g. for long jumping}
<b>3/00</b>	<b>Parallel bars or similar apparatus</b>	<b>7/00</b>	<b>Freely-suspended gymnastic apparatus</b>
<b>4/00</b>	<b>Balance beams</b>	7/02	• Swinging rings; Trapezes
<b>5/00</b>	<b>Apparatus for jumping</b> (mats for jumping <a href="#">A63B 6/00</a> ; for racing or riding sports, e.g. hurdles <a href="#">A63K</a> )	7/04	• Climbing-ropes
5/02	• High-jumping posts	7/045	• • {Using endless ropes}
5/04	• • Ropes {or similar devices} therefor	7/08	• Apparatus for rope-dancing
5/06	• Vaulting poles {; Take-off boxes therefor}	7/085	• • {Balancing on a band tensioned between two anchor points, e.g. Slackline type}
5/08	• Spring-boards (of trampoline type <a href="#">A63B 5/11</a> {; in the form of spring mats <a href="#">A63B 6/00</a> )	<b>9/00</b>	<b>Climbing poles, frames, or stages</b> {(climbing walls for mountaineering training <a href="#">A63B 69/0048</a> ; endless loop ladders <a href="#">A63B 22/04</a> )}
2005/085	• • {for launching, e.g. catapulting}	2009/002	• {Flat climbing nets}
5/10	• • for aquatic sports	2009/004	• {Three-dimensional rope or cable networks}
5/11	• Trampolines	2009/006	• {Playground structures}
5/12	• Bolster vaulting apparatus, e.g. horses, bucks, tables	2009/008	• • {with water spraying means}
5/16	• Training devices for jumping; Devices for balloon-jumping; Jumping aids {( <a href="#">A63B 25/02</a> , <a href="#">A63B 25/10</a> take precedence)}	<b>15/00</b>	<b>Clubs for gymnastics or the like</b> {, e.g. for swinging exercises}
2005/163	• • {Free-fall jumping on elastic cords, e.g. Bungee jumping}	15/005	• {with a weight movable along the longitudinal axis of the club due to centrifugal forces}
5/166	• • {Devices for balloon-jumping}	15/02	• with illuminating devices
5/20	• Skipping-ropes {or similar devices rotating in a vertical plane}	<b>17/00</b>	<b>Exercising apparatus combining several parts such as ladders, rods, beams, slides</b>
5/205	• • {Powered skipping rope devices}	17/02	• rigidly combined
5/22	• Foot obstacles for skipping {, e.g. horizontally-rotating obstacles}	17/04	• separable
		<b>19/00</b>	<b>Hoop exercising apparatus</b> {( <a href="#">A63B 21/0608</a> 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-resisters
- 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-resisters
- 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-resisters}
- 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-resisters { (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-resisters
- 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}
- 2022/002 . . . {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}
- 2022/0028 . . {the movement path being non-parallel to the body-symmetrical-plane, e.g. support elements moving at an angle to the body-symmetrical-plane}
- 2022/003 . . . {the movement path being perpendicular to the body-symmetrical-plane}
- 2022/0033 . . {Lower limbs performing together the same movement, e.g. on a single support element}
- 2022/0035 . . {Upper limbs performing together the same movement, e.g. on a single support element}
- 2022/0038 . . {One foot moving independently from the other, i.e. there is no link between the movements of the feet}
- 2022/0041 . . {one hand moving independently from the other hand, i.e. there is no link between the movements of the hands}
- 2022/0043 . . {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 resistors 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)}
- 2022/0051 . . {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}
- 2022/0053 . . {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 [A63B 21/068](#); with adjustable inclination [A63B 22/0023](#))}
- 2022/206 . . . {on a curved path}
- 22/208 . . . {On a track which is itself moving during exercise}
- 23/00 Exercising apparatus specially adapted for particular parts of the body ([A63B 22/00](#) takes precedence; force-resisting aspects [A63B 21/00](#); electric or electronic controls therefor [A63B 24/00](#); devices for exercising or strengthening of fingers, or arms in teaching operation of keyboards [G09B 15/00](#))**
- 2023/003 . {by torsion of the body part around its longitudinal axis}

- 2023/006 . . . {for stretching exercises}
- 23/02 . . . for the abdomen, the spinal column or the torso  
{muscles related to shoulders (e.g. chest muscles)}
- 23/0205 . . . {Abdomen}
- 23/0211 . . . {moving torso with immobilized lower limbs}
- 23/0216 . . . {moving lower limbs with immobilized torso}
- 23/0222 . . . {moving torso and lower limbs}
- 23/0227 . . . {moving torso or lower limbs laterally, i.e.  
substantially in the frontal plane}
- 23/0233 . . . {Muscles of the back, e.g. by an extension of the  
body against a resistance, reverse crunch}
- 23/0238 . . . {Spinal column (for the neck [A63B 23/025](#))}
- 23/0244 . . . {with signalling or indicating means, e.g. of  
incorrect posture, for deep-breathing exercises}
- 23/025 . . . for the head or the neck
- 23/03 . . . for face muscles
- 23/032 . . . {for insertion in the mouth}
- 23/035 . . . for limbs, i.e. upper or lower limbs, e.g.  
simultaneously
- 23/03508 . . . {For a single arm or leg, ([A63B 21/0726 takes  
precedence](#))}
- 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}
- 23/03525 . . . {Supports for both feet or both hands  
performing simultaneously the same  
movement, e.g. single pedal or single handle  
([A63B 21/0724 takes precedence](#))}
- 23/03533 . . . {With separate means driven by each limb, i.e.  
performing different movements}
- 23/03541 . . . . {Moving independently from each other  
([A63B 22/00 takes precedence](#))}
- 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}
- 23/03558 . . . {Compound apparatus having multiple stations  
allowing an user to exercise different limbs}
- 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}
- 23/04 . . . for lower limbs {(training appliances for special  
sports [A63B 69/00](#); for the purpose of producing  
mechanical power [F03G 5/00](#))}
- 23/0405 . . . {involving a bending of the knee and hip  
joints simultaneously ([A63B 23/0476 takes  
precedence](#))}
- 2023/0411 . . . . {Squatting exercises}
- 23/0417 . . . . {with guided foot supports moving  
parallel to the body-symmetrical-plane by  
translation}
- 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}
- 23/0429 . . . . {with guided foot supports moving parallel  
to the body-symmetrical-plane by being  
cantilevered about a horizontal axis}
- 2023/0441 . . . . {cantilevered about two horizontal axes,  
e.g. parallelogram systems}
- 2023/0447 . . . . {the axis being in the body-symmetrical-  
plane}
- 2023/0452 . . . . {the foot support being substantially below  
said axes}
- 23/0458 . . . . {Step exercisers without moving parts (with  
movable steps [A63B 22/04](#))}
- 23/0464 . . . . {Walk exercisers without moving parts (with  
movable endless bands [A63B 22/02](#))}
- 23/047 . . . . {Walking and pulling or pushing a load (for  
exercising the player ability for rugby or  
American football [A63B 69/34](#))}
- 23/0476 . . . {by rotating cycling movement (arrangements  
on or for real bicycles [A63B 69/16](#))}
- WARNING**
- Group [A63B 23/0476](#) is no longer used for  
classification. Documents are in the process  
of being reorganised to group [A63B 22/06](#)
- 23/0482 . . . {primarily by articulating the hip joints  
([A63B 23/0211](#), [A63B 23/0405](#), [A63B 23/0476  
take precedence](#))}
- 23/0488 . . . . {by spreading the legs}
- 23/0494 . . . {primarily by articulating the knee joints  
([A63B 23/0405](#), [A63B 23/0476 take  
precedence](#))}
- 23/08 . . . for ankle joints
- 23/085 . . . . {by rotational movement of the joint in a  
plane substantially parallel to the body-  
symmetrical-plane}
- 23/10 . . . for feet or toes
- 23/12 . . . for upper limbs {or related muscles, e.g. chest,  
upper back or shoulder muscles ([bench press  
exercises \[A63B 21/078\]\(#\); for teaching music  
\[G09B 15/06\]\(#\)](#))}
- 23/1209 . . . {Involving a bending of elbow and shoulder  
joints simultaneously}
- 23/1218 . . . . {Chinning, pull-up, i.e. concentric  
movement}
- 23/1227 . . . . {Dips, i.e. push-ups in a vertical position, i.e.  
eccentric movement, e.g. between parallel  
bars}
- 23/1236 . . . . {Push-ups in horizontal position, i.e.  
eccentric movement}
- 23/1245 . . . {Primarily by articulating the shoulder joint  
([A63B 23/129 takes precedence](#))}
- 23/1254 . . . . {Rotation about an axis parallel to the  
longitudinal axis of the body, e.g. butterfly-  
type exercises}
- 23/1263 . . . . {Rotation about an axis passing through both  
shoulders, e.g. cross-country skiing-type arm  
movements}
- 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}
- 23/1281 . . . {primarily by articulating the elbow joint}
- 23/129 . . . {for arm wrestling}
- 23/14 . . . for wrist joints
- 23/16 . . . for hands or fingers {(for teaching typing  
[G09B 13/00](#))}
- 23/18 . . . for improving respiratory function
- 23/185 . . . {Rhythm indicators}

- 23/20 . for vaginal muscles {or other sphincter-type muscles}
- 24/00** **Electric or electronic controls for exercising apparatus of preceding groups; {Controlling or monitoring of exercises, sportive games, training or athletic performances}**
- 24/0003 . {Analysing the course of a movement or motion sequences during an exercise or trainings sequence, e.g. swing for golf or tennis}
- 24/0006 . . {Computerised comparison for qualitative assessment of motion sequences or the course of a movement}
- 2024/0009 . . . {Computerised real time comparison with previous movements or motion sequences of the user}
- 2024/0012 . . . {Comparing movements or motion sequences with a registered reference}
- 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}
- 2024/0018 . . . {using non electronic means}
- 24/0021 . {Tracking a path or terminating locations}
- 2024/0025 . . {Tracking the path or location of one or more users, e.g. players of a game}
- 2024/0028 . . {Tracking the path of an object, e.g. a ball inside a soccer pitch}
- 2024/0031 . . . {at the starting point}
- 2024/0034 . . . {during flight}
- 2024/0037 . . {on a target surface or at impact on the ground}
- 2024/004 . . . {Multiple detectors or sensors each defining a different zone}
- 2024/0043 . . . {Systems for locating the point of impact on a specific surface}
- 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}
- 24/0062 . {Monitoring athletic performances, e.g. for determining the work of a user on an exercise apparatus, the completed jogging or cycling distance}
- 2024/0065 . . {Evaluating the fitness, e.g. fitness level or fitness index}
- 2024/0068 . . {Comparison to target or threshold, previous performance or not real time comparison to other individuals}
- 2024/0071 . . {Distinction between different activities, movements, or kind of sports performed}
- 24/0075 . {Means for generating exercise programs or schemes, e.g. computerized virtual trainer, e.g. using expert databases}
- 2024/0078 . . {Exercise efforts programmed as a function of time}
- 2024/0081 . . {Coaching or training aspects related to a group of users}
- 24/0084 . {Exercising apparatus with means for competitions, e.g. virtual races}
- 24/0087 . {Electric or electronic controls for exercising apparatus of groups [A63B 21/00](#) - [A63B 23/00](#), e.g. controlling load}
- 2024/009 . . {the load of the exercise apparatus being controlled in synchronism with visualising systems, e.g. hill slope}
- 2024/0093 . . {the load of the exercise apparatus being controlled by performance parameters, e.g. distance or speed}
- 2024/0096 . . {using performance related parameters for controlling electronic or video games or avatars}
- 25/00** **Stilts or the like**
- 25/02 . Elastic stilts {(devices for balloon jumping [A63B 5/166](#))}
- 25/04 . with wheels
- 25/06 . Shoes formed with stilts to elongate the step
- 25/08 . Hopping-sticks, e.g. pogo sticks {; Hopping apparatus with a single resilient support (devices for balloon jumping [A63B 5/166](#))}
- 25/10 . Elastic bouncing shoes fastened to the foot
- 26/00** **Exercising apparatus not covered by groups [A63B 1/00](#) - [A63B 25/00](#)**
- 26/003 . {for improving balance or equilibrium (balance beams [A63B 4/00](#); apparatus for rope dancing [A63B 7/08](#); balancing drums, balancing boards or the like [A63B 22/16](#))}
- 2026/006 . . {with feet supports below their pivotal point}
- Climbing; Mountaineering**
- 27/00** **Apparatus for climbing poles, trees, or the like ({ropes [A63B 29/02](#); } safety belts for climbers [A62B 35/00](#))**
- 27/02 . Climbing devices for round poles {or trees} attachable to the feet
- 27/04 . Climbing devices for profile poles attachable to the feet
- 29/00** **Apparatus for mountaineering (helmets [A42B 3/00](#); non-skid devices or attachments for footwear, e.g. crampons, [A43C 15/00](#); breathing masks or helmets for use at high altitudes [A62B 18/00](#); picks [B25D 7/00](#))**
- 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**

<b>31/00</b>	<b>Swimming aids (teaching swimming <a href="#">A63B 69/10</a> - <a href="#">A63B 69/14</a>; life-saving in water {, e.g. life-buoys, life-belts,} <a href="#">B63C 9/00</a>)</b>	37/0002	. . {Arrangements for adjusting, improving or measuring the grip, i.e. location, size, orientation or the like of finger holes}
31/02	. Swimming gloves	37/0003	. {Golf balls}
31/04	. . with arrangements for enlarging the propulsive surface	37/0004	. . {Surface depressions or protrusions}
31/08	. Swim fins, flippers or other swimming aids held by, or attachable to, the hands, arms, feet or legs ( <a href="#">A63B 31/18</a> takes precedence; worn as gloves <a href="#">A63B 31/02</a> )	37/0005	. . . {Protrusions}
31/10	. . held by, or attachable to, the hands or feet	37/0006	. . . {Arrangement or layout of dimples}
31/11	. . . attachable only to the feet	37/00065	. . . . {located around the pole or the equator}
2031/112	. . . . {with means facilitating walking, e.g. retractable, detachable or pivotable blades}	37/0007	. . . . {Non-circular dimples}
2031/115	. . . . {with blade at an angle to the plane of the foot when in use, e.g. to reduce plantar flexion}	37/0008	. . . . {Elliptical}
2031/117	. . . . . {with blade lying substantially in the body-symmetrical plane, e.g. for breast stroke}	37/0009	. . . . {Polygonal}
31/12	. . held by, or attachable to, the arms or legs	37/001	. . . . {Annular}
31/14	. . with valve-flaps	37/0011	. . . . {Grooves or lines}
31/18	. Swimming appliances with propulsive effect for hands and feet simultaneously	37/0012	. . . {Dimple profile, i.e. cross-sectional view}
<b>33/00</b>	<b>Swimming equipment attachable to the head, e.g. swim caps or goggles (diving masks <a href="#">B63C 11/12</a>; breathing aids, e.g. snorkels, <a href="#">B63C 11/18</a>)</b>	37/0013	. . . . {The dimple being formed in both the cover and the underlying layer}
33/002	. {Swimming goggles}	37/0015	. . . . {with sub-dimples formed within main dimples}
33/004	. . {comprising two separate lenses joined by a flexible bridge}	37/0016	. . . {Specified individual dimple volume}
33/006	. . {with means allowing adjustment of the bridge}	37/0017	. . . {Specified total dimple volume}
33/008	. . . {with stepless adjustment}	37/0018	. . . {Specified number of dimples}
<b>35/00</b>	<b>Swimming framework with driving mechanisms operated by the swimmer or by a motor (other vessels or like floating structures for pleasure or sport <a href="#">B63B 32/00</a>, <a href="#">B63B 34/00</a>; divers' sleds or like craft <a href="#">B63C 11/46</a>)</b>	37/0019	. . . {Specified dimple depth}
	<b>NOTE</b>	37/002	. . . {Specified dimple diameter}
	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:	37/0021	. . . {Occupation ratio, i.e. percentage surface occupied by dimples}
	Effecting propulsion of vessels by muscle power <a href="#">B63H 16/00</a>	37/00215	. . . {Volume ratio}
35/02	. shaped like a fish tail	37/0022	. . {Coatings, e.g. paint films; Markings}
35/04	. with paddle wheels	37/00221	. . . {characterised by the material}
35/06	. with twin-bladed paddles or buoyant members	37/00222	. . . {Physical properties, e.g. hardness}
35/08	. with propeller propulsion	37/00223	. . . {Colour tone}
35/10	. . operated by the swimmer	37/0023	. . {Covers}
35/12	. . operated by a motor	37/0024	. . . {Materials other than ionomers or polyurethane}
35/125	. . . {the motor being driven by compressed air carried by the swimmer}	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}
		37/00376	. . . . {Transparency or semitransparency}
		37/0038	. . {Intermediate layers, e.g. inner cover, outer core, mantle}
		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}
		37/005	. . {Cores}
<b>Balls</b>			
<b>37/00</b>	<b>Solid balls; {Rigid hollow balls; } Marbles (heavy throwing balls <a href="#">A63B 65/06</a>)</b>		
37/0001	. {Balls with finger holes, e.g. for bowling}		



- 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}
- 37/00621 . . . . . {Centre hardness}
- 37/00622 . . . . . {Surface hardness}
- 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}
- 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}
- 37/00773 . . . . {Moment of inertia}
- 37/00776 . . . . {Slab hardness}
- 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}
- 37/00921 . . . . . {whereby hardness of the cover is higher than hardness of the intermediate layers}
- 37/00922 . . . . . {whereby hardness of the cover is lower than hardness of the intermediate layers}
- 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**
- 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}
- 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 [A63B 51/14](#))
  - 51/01 . . Pre-woven string-sets ready for insertion into a frame
  - 51/015 . . String-aligning tools
  - 51/02 . . Strings; String substitutes; Products applied on strings, e.g. for protection against humidity or wear
  - 51/023 . . . {Strings having characteristics varying along the length of the string, e.g. diameter or elasticity}
  - 51/026 . . . {Strings having non-circular cross-section}
  - 51/04 . . Sheet-like structures used as substitutes
  - 51/045 . . . . {Wooden blades with perforations}
  - 51/06 . . Double-sided stringing
  - 51/08 . . Diagonal stringing
  - 51/10 . . Reinforcements for stringing
  - 51/11 . . . Intermediate members for the cross-points of the strings
  - 51/12 . . Devices arranged in or on the racket for adjusting the tension of the strings
  - 51/14 . . Arrangements for stringing, e.g. for controlling the tension of the strings during stringing
  - 51/143 . . . {Hand-held string-tensioning devices}
  - 51/146 . . . {Devices simultaneously raising and lowering alternate longitudinal strings previously mounted in a frame, to facilitate the threading of the cross strings}
  - 51/16 . . Apparatus for stringing while manufacturing
  - 53/00** **Golf clubs**
  - NOTE**
  - When classifying in group [A63B 53/00](#) and subgroups, subject matter related to details or accessories of golf clubs, bats, rackets or the like are further classified in group [A63B 60/00](#).

- 53/002 . {Clubs made of composite, plastics or rubber materials, with integral head and shaft}
- 53/005 . {Club sets}
- 53/007 . {Putters}
- 53/02 . Joint structures between the head and the shaft
- 53/021 . . {the shaft axis being forwardly offset relative to the striking face of the head}
- 53/022 . . {allowing adjustable positioning of the head with respect to the shaft}
- 53/023 . . . {adjustable angular orientation}
- 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}
- 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}
- 53/027 . . . . {about the longitudinal axis of the shaft only}
- 53/028 . . . {with a range of alternative attachment points for the shaft}
- 53/04 . Heads
- 53/0408 . . {characterised by specific dimensions, e.g. thickness}
- 53/0412 . . . {Volume}
- 53/0416 . . {Heads having an impact surface provided by a face insert}
- 53/042 . . . {the face insert consisting of a material different from that of the head}
- 53/0425 . . . . {the face insert comprising two or more different materials}
- 53/0429 . . . {the face insert comprising two or more layers of material}
- 53/0433 . . {with special sole configurations}
- 53/0437 . . {with special crown configurations}
- 53/0441 . . {with visual indicators for aligning the golf club}
- 53/0445 . . {Details of grooves or the like on the impact surface}
- 53/045 . . {Strengthening ribs}
- 53/0454 . . . {Strengthening ribs on the rear surface of the impact face plate}
- 53/0458 . . {with non-uniform thickness of the impact face plate}
- 53/0462 . . . {characterised by tapering thickness of the impact face plate}
- 53/0466 . . {wood-type}
- 53/047 . . {iron-type}
- 53/0475 . . . {with one or more enclosed cavities}
- 2053/0479 . . . {Wedge-type clubs, details thereof}
- 2053/0483 . . . {Chipping clubs, details thereof}
- 53/0487 . . {for putters [\(A63B 53/065 takes precedence\)](#)}
- 2053/0491 . . {with added weights, e.g. changeable, replaceable}
- 2053/0495 . . . {moving on impact, slidable, spring or otherwise elastically biased}
- 53/06 . . adjustable
- 53/065 . . . {for putters}
- 53/08 . with special arrangements for obtaining a variable impact
- 53/10 . Non-metallic shafts
- 53/12 . Metallic shafts
- 53/14 . Handles
- 55/00** **Bags for golf clubs; Stands for golf clubs for use on the course; Wheeled carriers specially adapted for golf bags**
- 55/10 . Stands for golf clubs {, e.g.} for use on the course {; Golf club holders, racks or presses}
- 55/20 . with special receptacles for the balls
- 55/30 . Bags with wheels
- 55/40 . Bags with partitions or club holders
- 2055/402 . {Warning devices for indicating missing golf clubs}
- 2055/403 . {Security means for locking golf clubs in the bag}
- 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 [\(A63B 55/20 and A63B 55/50 take precedence\)](#)}
- 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}
- 2055/604 . . . {by mechanical links attached to the golf players}
- 2055/605 . . . {by remote control}
- 55/61 . . {motorised}
- 2055/615 . . . {Units for converting manually-driven golf carts into motorised ones}
- 57/00** **Golfing accessories**
- 57/0006 . {Automatic teeing devices [\(devices for automatically dispensing balls in general A63B 47/002\)](#)}
- 57/0012 . {Devices for forming the tees}
- 57/0032 . {Tee-gauges; Tee-repairing devices}
- 57/0037 . {Devices for inserting or extracting tees}
- 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 [\(to be fitted on golf bags or caddies A63B 55/408\)](#)}
- 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 ( <a href="#">cleaning balls A63B 47/04</a> ; <a href="#">devices for cleaning handles or grips of golf clubs or putters A63B 60/36</a> )	60/10	• • with means for indicating correct holding positions ( <a href="#">A63B 60/12 takes precedence</a> )
2057/605	• • {Means for heating or drying golf clubs}	60/12	• • contoured according to the anatomy of the user's hand
<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>	60/14	• • Coverings specially adapted for handles, e.g. sleeves or ribbons
	<b>NOTES</b>	60/16	• • Caps; Ferrules
1.	In this group, the following term is used with the meaning indicated:	60/18	• • with means for cooling, ventilating or sweat-reduction, e.g. holes or powder dispensers
•	"ball" covers also pucks or other objects to be hit during the game.	60/20	• • with two handgrips
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> .	60/22	• • Adjustable handles
59/20	• having means, e.g. pockets, netting or adhesive type surfaces, for catching or holding a ball, e.g. for lacrosse or pelota	60/24	• • • Weighted handles
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	60/26	• • • with adjustable stiffness
59/40	• Rackets or the like with flat striking surfaces for hitting a ball in the air, e.g. for table tennis	60/28	• • • with adjustable length
59/42	• • with solid surfaces	60/30	• • • with adjustable circumference
59/45	• • • Rubber parts thereof; characterised by bonding between a rubber part and the racket body	60/32	• • with means for changing the angular position of the handle about its longitudinal axis
59/48	• • with perforated surfaces	60/34	• • with the handle axis different from the main axis of the implement
59/50	• Substantially rod-shaped bats for hitting a ball in the air, e.g. for baseball	60/36	• Devices for cleaning handles or grips
59/51	• • made of metal	60/38	• Structurally associated means for storing and dispensing balls
59/52	• • made of wood or bamboo	60/40	• having holding means provided inside, on the edge or on the rear face of the striking surface
59/54	• • made of plastic	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
59/55	• • with non-circular cross-section	60/44	• • Presses for stringed rackets
59/56	• • characterised by the head	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
59/58	• • characterised by the shape ( <a href="#">A63B 59/55</a> , <a href="#">A63B 59/56 take precedence</a> )	2060/462	• • {Devices measuring hand characteristics to determine correct grip size}
2059/581	• • • {with a continuously tapered barrel}	2060/464	• • {Means for indicating or measuring the pressure on the grip}
59/59	• • with sound generators, e.g. with internal movable members therefor	60/48	• with corrugated cross-section
59/60	• of mallet type, e.g. for croquet {or polo}	60/50	• with through-holes ( <a href="#">A63B 60/18 takes precedence</a> ; for stringing purposes <a href="#">A63B 49/00</a> )
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	60/52	• with slits
59/80	• Circular bats or paddles not provided for in groups <a href="#">A63B 59/20</a> - <a href="#">A63B 59/70</a>	60/54	• with means for damping vibrations
<b>60/00</b>	<b>Details or accessories of golf clubs, bats, rackets or the like</b>	60/56	• Devices for protection, storage or transport, e.g. stands or cases
60/002	• {Resonance frequency related characteristics}	60/58	• • specially adapted for rackets
60/004	• {Striking surfaces coated with high-friction abrasive materials}	60/60	• • specially adapted for bats
60/006	• {Surfaces specially adapted for reducing air resistance}	60/62	• • specially adapted for clubs, e.g. head covers {, connector means therefor}
60/0081	• {Substantially flexible shafts; Hinged shafts}	60/64	• • • Sheaths for golf clubs
60/0085	• {Telescopic shafts}	<b>61/00</b>	<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>
60/02	• Ballast means for adjusting the centre of mass ( <a href="#">A63B 60/24</a> , <a href="#">A63B 60/54 take precedence</a> )	61/003	• {Nets for tennis or like games or accessories therefor (straining or adjusting devices on the posts <a href="#">A63B 61/02</a> )}
60/04	• • Movable ballast means ( <a href="#">A63B 15/005 takes precedence</a> )	61/006	• • {Accessories for training purposes mounted on the net}
60/06	• Handles	61/02	• Posts; Revolvably-mounted posts {; Straining or adjusting devices on the posts, e.g. coin- or time operated}
60/08	• • characterised by the material	2061/025	• • {electrically driven}

- 61/04 . Straining or adjusting devices for nets {, e.g. centre strainers, single-double adjusters, net height meters (straining or adjusting devices on the posts [A63B 61/02](#))}
- 63/00 Targets or goals for ball games (golf cups [A63B 57/40](#))**
- 2063/001 . {Targets or goals with ball-returning means}
- 2063/002 . {variable in size}
- 63/003 . {non-electronic means for locating the point of impact on a target or the point of entry in the goal}
- 63/004 . {Goals of the type used for football, handball, hockey or the like}
- 2063/005 . . {having means not protruding from the profile of the post for attachment of a net}
- 2063/006 . {Forming a target or goal by fixing net or target area to garage doorway or garage parts}
- 63/007 . {Target zones without opening defined on a substantially horizontal surface}
- 63/008 . {Goals for rugby or American football}
- 63/06 . Revolving targets {; Moving targets, e.g. moving or revolving on impact}
- 2063/065 . . {movable or switchable between discrete positions, e.g. after a successful shot}
- 63/08 . with {substantially} horizontal opening for ball, e.g. for basketball {([A63B 57/40](#), [A63B 63/06](#) take precedence)}
- 63/083 . . {for basketball}
- 2063/086 . . . {deflectable under excessive loads}
- 65/00 Implements for throwing (throwing toys [A63H 33/18](#)); Mechanical projectors, e.g. using spring force**
- 65/02 . Spears or the like {; Javelins}
- 65/04 . Throwing-hammers
- 65/06 . Heavy throwing-balls {, i.e. "medicine balls", shots, weights or stones for putting}
- 65/08 . Boomerangs {; Throwing apparatus therefor}
- 65/10 . Discus discs; Quoits
- 65/12 . Ball-throwing apparatus with or without catchers {(hand-held throwing or catching aids [A63B 59/20](#)); Mechanical projectors, e.g. using spring force}
- 65/122 . . {Hand-held mechanical projectors, e.g. for balls}
- 65/125 . . . {with handles or grips on both sides of the catching-throwing means, for two-handed use}
- 65/127 . . {Means for throwing or catching balls, attached to the foot}
- 67/00 Sporting games or accessories therefor, not provided for in groups [A63B 1/00](#) - [A63B 65/00](#)**
- 67/002 . {Games using balls, not otherwise provided for}
- 2067/005 . . {Games similar to volleyball or basketball and played on trampolines or the like, e.g. "Spaceball" or "Aeroball"}
- 67/007 . {played in water}
- 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}
- 2067/025 . . {with incorporated means acting on the track surface for varying its topography, e.g. slope}
- 67/04 . Table games physically beneficial for the human body, modelled on outdoor sports, e.g. table tennis (other table games [A63F](#))
- 67/045 . . {Supports for table tennis nets}
- 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}
- 2067/061 . . {Means to mark out tossing area}
- 2067/063 . . {tossing, e.g. rings or horseshoes around or on, e.g. posts, hooks}
- 2067/065 . . {used tossed devices of different sizes giving different degrees of difficulty for fitting in or over a target}
- 67/066 . . {using balls on a horizontal playing ground, e.g. petanque}
- 67/068 . . . {Devices used therewith for measuring distance or difference in distance}
- 67/08 . Juggling or spinning ball games played as games of skill ([A63B 67/16](#) takes precedence)
- 67/083 . . {Juggling games with integral catching or bouncing arrangements}
- 67/086 . . {Juggling games using sticks or discs}
- 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 (games using a bat with a ball tethered thereto [A63B 67/20](#), pin games with tethered balls [A63D 7/00](#)); Games using tethered bodies, e.g. balls, not otherwise provided for}
- 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}
- 67/14 . Curling stone; Shuffleboard; Similar sliding games
- 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 diabolo 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 69/34](#))}
- 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}
- 69/0046 . . {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}
- 69/0055 . . {with means for distracting the user, e.g. visual or audio means}
- 69/0057 . . {Means for physically limiting movements of body parts ([A63B 23/0211 takes precedence](#))}
- 69/0059 . . {worn by the user}
- 69/0062 . . {Leg restraining devices}
- 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}
- 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 devices for striking used during training of combat sports, e.g. bags}
- 69/215 . . . {Anthropomorphic devices}
- 69/22 . . . mounted on, or suspended from, a fixed support
- 69/222 . . . . {suspended from a fixed support}
- 69/224 . . . . {mounted on a resilient foot}
- 69/24 . . . mounted on, or suspended from, a movable support
- 69/244 . . . . {suspended from a movable support}
- 69/26 . . . . attached to the human body
- 69/28 . . . Attachments located on the balls {or other training devices} at opposite points
- 69/30 . . . . Resilient attachments
- 69/305 . . . {Hanging heavy punching bags}
- 69/32 . . . with indicating devices
- 69/322 . . . . {to instruct user where to strike}
- 69/325 . . . . {for vertical blows on a horizontal surface}
- 69/331 . . {Breaking boards or holders therefore, i.e. devices for destroying exercises}
- 69/333 . . {Fake or disarmed practise weapons, i.e. for mimicking combat situations in martial arts training}
- 69/34 . . {Tackling, blocking or grappling dummies, e.g.} boxing or {wrestling or American-} football dummies
- 69/36 . . for golf
- 69/3605 . . . {Golf club selection aids informing player of his average or expected shot distance for each club}
- 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}
- 69/362 . . . {electrical or electronic}
- 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)}
- 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}
- 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)}
- 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}
- 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
- 71/021 . . . {Stays or guy-ropes}
- 71/022 . . . {Backstops, cages, enclosures or the like, e.g. for spectator protection, for arresting balls}
- 71/023 . . . {Supports, e.g. poles}
- 2071/024 . . . . {with screws or pins in the earth}
- 2071/025 . . . . {on rollers or wheels}
- 2071/026 . . . . {stabilised by weight}
- 2071/027 . . . . . {using player's own weight, e.g. on a platform}
- 71/028 . . . . {Floor sockets for removable poles}
- 71/03 . . . {Athletic drills or obstacles for sport training, other than foot obstacles for skipping}
- 71/04 . . for small-room or indoor sporting games
- 71/06 . . Indicating or scoring devices for games or players {, or for other sports activities}
- 2071/0602 . . . {Non-electronic means therefor}
- 71/0605 . . . {Decision makers and devices using detection means facilitating arbitration}
- 71/0608 . . . . {using mechanical, i.e. non-electrical means}
- 2071/0611 . . . . {Automatic tennis linesmen, i.e. in-out detectors}
- 2071/0613 . . . . {Automatic net-fault detectors}
- 71/0616 . . . {Means for conducting or scheduling competition, league, tournaments or rankings}

- 71/0619 . . . {Displays, user interfaces and indicating devices, specially adapted for sport equipment, e.g. display mounted on treadmills}
- 71/0622 . . . {Visual, audio or audio-visual systems for entertaining, instructing or motivating the user}
- 2071/0625 . . . . {Emitting sound, noise or music}
- 2071/0627 . . . . . {when used improperly, e.g. by giving a warning}
- 2071/063 . . . . . {Spoken or verbal instructions}
- 2071/0633 . . . . . {without electronic means}
- 2071/0636 . . . . . {3D visualisation}
- 2071/0638 . . . . . {Displaying moving images of recorded environment, e.g. virtual environment}
- 2071/0641 . . . . . {with a marker advancing in function of the exercise}
- 2071/0644 . . . . . {with display speed of moving landscape controlled by the user's performance}
- 2071/0647 . . . . {Visualisation of executed movements}
- 2071/065 . . . . {Visualisation of specific exercise parameters}
- 2071/0652 . . . . . {Visualisation or indication relating to symmetrical exercise, e.g. right-left performance related to spinal column}
- 2071/0655 . . . . {Tactile feedback}
- 2071/0658 . . . . {Position or arrangement of display}
- 2071/0661 . . . . . {arranged on the user}
- 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}
- 71/0669 . . . . {Score-keepers or score display devices}
- 71/0672 . . . . . {using non-electronic means}
- 2071/0675 . . . {Input for modifying training controls during workout}
- 2071/0677 . . . . {Input by image recognition, e.g. video signals}
- 2071/068 . . . . {Input by voice recognition}
- 2071/0683 . . . . {Input by handheld remote control}
- 71/0686 . . . . {Timers, rhythm indicators or pacing apparatus using electric or electronic means}
- 2071/0688 . . . . {using non-electronic means, e.g. mechanical, visual, acoustic or tactile means}
- 2071/0691 . . . . {Maps, e.g. yardage maps or electronic maps}
- 2071/0694 . . . . {Visual indication, e.g. Indicia}
- 71/0697 . . . . {Reservation devices}
- 71/08 . . . . Body-protectors for players or sportsmen {, i.e. body-protecting accessories affording protection of body parts against blows or collisions} ([protective clothing or garments for sporting purposes A41D 13/00](#))
- 71/081 . . . . {fluid-filled, e.g. air-filled}
- 2071/083 . . . . {using bubble wrap}
- 71/085 . . . . {Mouth or teeth protectors ([A63B 71/081](#) takes precedence)}
- 2071/086 . . . . {Mouth inserted protectors with breathing holes}
- 2071/088 . . . . {Mouth inserted protectors with tether or strap}
- 71/10 . . . . for the head ([A63B 71/081](#) takes precedence ; in the form of caps or hats [A42B 1/08](#); helmets [A42B 3/00](#))
- 2071/105 . . . . {Fencing mask}
- 71/12 . . . . for the body or the legs {, e.g. for the shoulders ([A63B 71/081](#) takes precedence)}
- 2071/1208 . . . . {for the breast and the abdomen, e.g. breast plates}
- 71/1216 . . . . {for the genital area}
- 71/1225 . . . . {for the legs, e.g. thighs, knees, ankles, feet}
- 2071/1233 . . . . . {for the hip}
- 2071/1241 . . . . . {for the thigh}
- 2071/125 . . . . . {for the knee}
- 2071/1258 . . . . . {for the shin, e.g. shin guards}
- 2071/1266 . . . . . {for the calf}
- 2071/1275 . . . . . {for the ankle}
- 2071/1283 . . . . . {for the foot}
- 71/1291 . . . . {for the neck}
- 71/14 . . . . for the hands, e.g. baseball, boxing or golfing gloves ([archer's finger tabs F41B 5/1473](#))
- 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}
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- 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**
- 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
- 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 . . Infrared
- 2213/003 . . Ultraviolet
- 2213/004 . with electrotherapy
- 2213/005 . with respiratory gas delivering means, e.g. O<sub>2</sub>
- 2213/006 . . under hypoxia conditions, i.e. oxygen supply subnormal
- 2213/007 . combined with magnetotherapy
- 2213/008 . combined with ultrasound therapy
- 2214/00 Training methods**
- 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
- 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. ECG, 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
- 2244/102 . . Boxing
- 2244/104 . . Judo
- 2244/106 . . Karate
- 2244/108 . . Wrestling

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- 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