

77 Sports, games and amusements

77a	Equipment for active exercising of the body; sports; training equipment
77a	(IPC: A63B) Apparatus for physical training, gymnastics, swimming, climbing and fencing; ball games; training equipment
77b	Skates, skis, water skis, roller skates, etc.; courts or courses therefor
77b	(IPC: A63C) Skates; Skis; Water-shoes; Roller skates; Courts; Rinks
77c	Games with balls or similar rolling or sliding bodies
77c	(IPC: A63D) Bowling-alleys; Bagatelle; Billiards
77d	Games
77d	(IPC: A63F) Card games; Dice; Roulette; Patience; Racing games; Similar games
77e	Roundabouts, swings, rocking-horses, chutes and similar devices for public amusement
77e	(IPC: A63G) Roundabouts; Swings; Rocking-horses; Chutes; Switchbacks; Similar devices for public amusement
77f	Toys
77f	(IPC: A63H) Toys
77g	Devices for theatres, panoramas and circuses, conjuring appliances, labyrinths, etc
77g	(IPC: A63J) Devices for theatres, circuses, etc.; Conjuring appliances and the like
77h	(IPC: A63K) Racing; Riding sports; Equipment or accessories therefor
77a	Equipment for active exercising of the body, e.g. gymnastics (therapeutic gymnastics 30f); sports, e.g. swimming, climbing, fencing (weapons 69), boxing, boll games, etc.; training equipment
	Gymnastic exercising apparatus
77a-1/01	Horizontal bars
77a-1/02	Horizontal bars for indoor use
77a-1/03	Cleaning the rods of horizontal bars
77a-1/04	Safety devices
77a-2	Parallel bars
77a-3/01	High-jumping posts
77a-3/02	High-leaping poles
77a-3/03	Ropes for high-jumping
77a-3/04	Spring-boards
77a-3/05	Bolster vaulting apparatus, e.g. horses, bucks, tables
77a-3/06	Hurdles

77a-3/07	Training devices for jumping; Jumping aids
77a-3/08	Mats and mattresses for jumping
77a-3/09	Skipping-ropes
77a-3/10	Foot obstacles for skipping
77a-3/11	Apparatus for rope-dancing
77a-4/01	Swinging rings, trapezes and similar suspended gymnastic apparatus
77a-4/02	Combined gymnastic apparatus
77a-4/03	Climbing poles, frames, or stages
77a-4/04	Apparatus for running on the spot
77a-4/05	Miscellaneous gymnastic apparatus, e.g. rotating, particularly for suspended exercising
77a-5/01	Dumb-bells in general (42k-6)
77a-5/02	Dumb-bells with variable weights
77a-5/03	Dumb-bells with rotary parts
77a-5/04	Dumb-bells with electrification devices
77a-5/05	Combined dumb-bells and clubs
77a-5/06	Dumb-bells with transverse springs
77a-5/07	Elastic dumb-bells
77a-5/08	Dumb-bells with lengthwise resistance springs
77a-5/09	Energy dumb-bells
77a-6/01	Clubs
77a-6/02	Clubs with illuminating devices
77a-7/01	Machines and supports for active exercises
77a-7/02	Hoop exercising apparatus, e.g. aero wheels
77a-7/03	Freely-movable rolling hoops, e.g. gyro-wheels
77a-7/04	Devices for measuring muscular power (42k-6)
77a-7/05	Universal supports for equipment
77a-7/06	Resisting devices for body or limbs for muscular training
77a-7/07	Draw-out apparatus with springs
77a-7/08	Draw-out apparatus with tension produced by weights
77a-7/09	Draw-out devices necessitating additional movement of the hand
77a-7/10	Draw-out devices attachable to the body of the user
77a-7/11	Anchored draw-out apparatus with springs, in general
77a-7/12	Anchored draw-out apparatus with tension produced by weights
77a-7/13	Draw-out devices for persons lying down
77a-7/14	Wearing-apparel equipped with resisting devices for physical exercises
77a-7/15	Resisting devices for use while stooping or rising
77a-7/16	Resisting devices with rotary bodies
77a-7/17	Resisting devices with electrification arrangements
77a-7/18	Belts giving resistance when running
77a-7/19	Supports for suspension of draw-out devices
77a-7/20	Devices for two persons operating in opposition
77a-8/01	Forced movement of the limbs (for animals 56b)
77a-8/02	Training rods linked to the floor
77a-8/03	Rod-formed devices for exercising the muscles of the arms
77a-8/04	Devices for exercising the fingers (51b-46; 51b-47; 51e-6)
77a-8/05	Bendable resisting devices
77a-8/06	Training appliances for fencing
77a-8/07	Apparatus simulating the movements of horses
77a-8/08	Devices for exercising body parts not mentioned above
77a-9/01	Implements for exercising legs and feet

- 77a-9/02 Running on the spot, rolling floors (apparatus for assisting walking or running 77a-12/07; for therapy 30f-1 – 30f-4)
- 77a-10/01 Training appliances for rowing
- 77a-10/02 Installations for rowing exercise or training
- 77a-11/01 Punching balls suspended from a fixed support
- 77a-11/02 Punching balls suspended from a movable support
- 77a-11/03 Punching balls attached to the human body for shadow boxing
- 77a-11/04 Punching balls attached at top and bottom
- 77a-11/05 Punching balls attached to resilient stands
- 77a-11/06 Boxing dummies
- 77a-11/07 Boxing apparatus with indicating devices
- 77a-11/08 Implements for throwing exercises
- 77a-11/09 Javelins, spears
- 77a-11/10 Throwing-hammers
- 77a-11/11 Heavy throwing-balls (discus discs 77a-26/04)

Appliances for climbing, mountaineering, etc.

- 77a-12/01 Stilts of common type (as prosthesis 30d)
- 77a-12/02 Elastic stilts
- 77a-12/03 Stilts with wheels, etc.
- 77a-12/04 Stilts with devices for extending the steps
- 77a-12/05 Hopping-sticks
- 77a-12/06 Elastic bouncing shoes fastened to the foot
- 77a-12/07 Apparatus assisting walking, running or jumping (for disabled 30f)
- 77a-13/01 Climbing devices for round poles attachable to the feet
- 77a-13/02 Climbing devices for profile poles attachable to the feet
- 77a-13/03 Hoisting seats
- 77a-13/04 Fittings for climbing ropes
- 77a-13/05 Climbing spurs
- 77a-13/06 Harness for use with climbing shoes
- 77a-13/07 Steps for climbing
- 77a-13/08 Climbing irons attachable to the feet for mountaineering or climbing ladders
- 77a-13/09 Mountain guy-ropes or accessories, avalanche ropes
- 77a-13/10 Hand equipment for climbers
- 77a-13/11 Special equipment attached to shoes for ascending inclines

Swimming aids, appliances for training swimming (65b-27 – 65b-33; 65c-7)

- 77a-14/01 Swimming gloves
 - 77a-14/02 Swimming gloves with arrangements for enlarging the propulsive surface
 - 77a-14/03 Swimming paddles or the like for hands and arms
 - 77a-14/04 Swimming appliances with propulsive effect for hands and feet simultaneously
 - 77a-14/05 Swim-flaps attached to the sole
 - 77a-14/06 Foldable swim-fins attached to the sole
 - 77a-14/07 Swim-flaps attached to the legs
 - 77a-14/08 Foldable swim-fins attached to the legs
 - 77a-14/09 Swim-fins with valve-flaps
 - 77a-14/10 Retractable fins
- Swimming equipment with driving mechanisms operated by the swimmer
- 77a-15/01 shaped like a fish tail
 - 77a-15/02 with paddle wheels
 - 77a-15/03 with oar-like propulsion devices
 - 77a-15/04 with propeller propulsion

- 77a-15/05 with motor-driven propulsion devices
- 77a-15/06 Devices for swimming instruction (77e-4/02)
- 77a-15/07 Installations for swimming instruction (77e-4/02)
- 77a-15/08 Swimming equipment attachable to the head

Sporting games, e.g. ball games, and equipment

Solid and hollow balls (chemical part 39b-5; mechanical treatment and working of caoutchouc, gutta-percha and balata masses for balls 39a-10/13)

- 77a-16/01 Golf balls
- 77a-16/02 Cricket balls
- 77a-16/03 Croquet balls
- 77a-16/04 Hockey balls
- 77a-16/05 Other solid balls
- 77a-16/06 Tennis balls, etc., without internal bladder (feather balls 77a-26/19)
- 77a-16/07 Arrangements for achieving internal pressure
- 77a-16/08 Balls inflatable by means of insertable pointed tubes
- 77a-17/01 Devices for picking-up balls
- 77a-17/02 Accessories for balls and ball games
- 77a-17/03 Apparatus or methods for manufacturing and testing balls

- Hollow balls with internal bladder, e.g. footballs, etc.
- 77a-18/01 Bladders
- 77a-18/02 Closures for inflation tubes
- 77a-18/03 Valves for bladders
- 77a-18/04 Ball covers; Closures therefor
- 77a-18/05 Bladder and cover united
- 77a-18/06 Tools or devices for blowing up, closing or adjusting balls

- Rubber balls, etc. for playing (39a-10/13; 39a-19)
- 77a-19/01 Special coverings
- 77a-19/02 Balls made of two halves
- 77a-19/03 Special surfaces
- 77a-19/04 Balls with decorated or patterned surfaces, e.g. earth globe designs
- 77a-19/05 Marking of balls
- 77a-19/06 Balls with special arrangements, e.g. with illuminating devices

- Bats, etc. for ball games in which the ball is struck in the air

- Tennis rackets
- 77a-20/01 Frames
- 77a-20/02 Special apparatus for manufacturing frames
- 77a-20/03 Rackets with rounded surfaces
- 77a-20/04 Frames with slits
- 77a-20/05 Protection devices for the frame
- 77a-20/06 Frames with balancing devices
- 77a-20/07 Frames with special arrangements
- 77a-20/08 Special non-metallic materials for frames
- 77a-20/09 Striking implements attached to the palm of the hand (77a-20/24)
- 77a-20/10 Tennis rackets made of metal
- 77a-20/11 Bags, etc. for tennis rackets

- Stringing tennis rackets
- 77a-20/12 Special sheet-like structures used as string substitutes
- 77a-20/13 Strings and string substitutes for tennis rackets
- 77a-20/14 Machines for stringing tennis rackets

- 77a-20/15 Auxiliary tools for stringing tennis rackets
- 77a-20/16 Double-sided stringing
- 77a-20/17 Reinforcements for stringing
- 77a-20/18 Diagonal stringing
- 77a-20/19 Devices arranged in or on the racket for adjusting the tension of the strings
- 77a-20/20 Presses for tennis rackets

- 77a-20/21 Bats, rackets, etc., for lacrosse, pelota and other national games
- 77a-20/22 Baseball bats
- 77a-20/23 Cricket bats
- 77a-20/24 Rackets for table tennis, etc. (77a-20/09)

- Bats, etc. for ball games in which the ball is struck from the ground
- 77a-21/01 for miscellaneous games, general
- 77a-21/02 for croquet
- 77a-21/03 for hockey
- 77a-21/04 for ice hockey
- 77a-21/05 for polo
- 77a-21/06 Golf clubs in general
- 77a-21/07 Construction of the heads of golf clubs
- 77a-21/08 Adjustable heads for golf clubs
- 77a-21/09 Arrangements for fastening the heads of golf clubs to the shafts
- 77a-21/10 Non-metallic shafts for golf clubs
- 77a-21/11 Metallic shafts for golf clubs
- 77a-21/12 Handles for golf clubs
- 77a-21/13 Golf clubs with special arrangements

- 77a-21/14 Golf bags in general
- 77a-21/15 Golf bags with devices for anchoring to the ground
- 77a-21/16 Golf bags with retractable feet at the bottom
- 77a-21/17 Golf bags with tripod or like set-up stands
- 77a-21/18 Wheeled golf bags
- 77a-21/19 Golf bags with special receptacles for balls
- 77a-21/20 Holders for golf bags
- 77a-21/21 Stands for golf clubs
- 77a-22/01 Special types of golf games
- 77a-22/02 Golf game accessories, e.g. golf cups, golf tees, pegs, arrangements for practicing golf

- 77a-22/03 Tennis nets or accessories for tennis, posts, revolvably-mounted posts for rolling-up the net, straining or adjusting devices for nets
- 77a-22/04 Accessories for miscellaneous games

- Body-protectors for players or sportsmen
- 77a-23/01 for the head (41c-1; 41c-2)
- 77a-23/02 for the body or the legs
- 77a-23/03 for the hands, e.g. baseball or boxing gloves, e.g. air-filled (72g-1/01)

- 77a-24 Indicating or scoring devices for games or players (timing devices 43a-38)

- Courts for sports or games
- 77a-25/01 Apparatus for setting-out or dividing courts using dry methods
- 77a-25/02 Apparatus for setting-out or dividing courts using wet methods
- 77a-25/03 Mechanical means for marking-out
- 77a-25/04 Arrangements for treating and dividing courts
- 77a-25/05 Surfaces for courts that come in contact with the ball (19c-5/40; 80b)
- 77a-25/06 Courts for particular games

77a-25/07	Mats or carpet for courts
77a-25/08	Removable protective covers for courts
77a-25/09	Special arrangements for spectators (37f-1/04)
Miscellaneous sports and games	
77a-26/01	Appliances for outdoor sports and games
77a-26/02	Appliances for indoor sports and games
77a-26/03	Table games physically beneficial for the human body, modelled on outdoor sports (as games 77d-10-17)
77a-26/04	Throwing discs, e.g. discus discs (implements for throwing exercises 77a-11/08 – 77a-11/11)
77a-26/05	Ring or disc tossing games
77a-26/06	Juggling or spinning ball games played as games of skill
77a-26/07	Ring games
77a-26/08	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
77a-26/09	? [German: "Klippspiele"]
77a-26/10	Curling and similar games
77a-26/11	Ball-throwing devices with or without ball-catching devices; yieldable nets, etc. for throwing or catching balls (72b-6/01)
77a-26/12	Inclined planes for ball-rolling games
77a-26/13	Boomerangs
77a-26/14	Miscellaneous implements for ball games
77a-26/15	Static targets or goal for ball games
77a-26/16	Static but movable targets or goal for ball games
77a-26/17	Moving targets or goal for ball games
77a-26/18	Spinning top games, e.g. diablo
77a-26/19	Feather balls; badminton or like games with feathered missiles
77a-27	Training appliances

77a (IPC: A63B) Apparatus for physical training, gymnastics, swimming, climbing and fencing; Ball games; Training equipment

Gymnastic exercising apparatus

77a-1/00 Horizontal bars

- 77a-1/02 . indoor
- 77a-1/04 . Cleaning the rods
- 77a-1/06 . Safety devices for securing the rods

77a-3/00 Parallel bars or similar apparatus

77a-5/00 Apparatus for jumping

- 77a-5/02 . High-jumping posts
- 77a-5/04 . . Ropes therefor
- 77a-5/06 . High-leaping poles
- 77a-5/08 . Spring-boards
- 77a-5/10 . . for aquatic sports
- 77a-5/12 . Bolster vaulting apparatus, e.g. horses, bucks, tables
- 77a-5/14 . Hurdles
- 77a-5/16 . Training devices for jumping; Devices for balloon-jumping; Jumping aids
- 77a-5/18 . Mats
- 77a-5/20 . Skipping-ropes
- 77a-5/22 . Foot obstacles for skipping

77a-7/00 Freely-suspended gymnastic apparatus

- 77a-7/02 . Swinging rings, Trapezes
- 77a-7/04 . Climbing-ropes
- 77a-7/06 . Rotors with hanging ropes

77a-7/08	. Apparatus for rope-dancing
77a-9/00	Climbing poles, frames, or stages
77a-11/00	Dumb-bells
77a-11/02	. with variable weights
77a-11/04	. with rotary parts
77a-11/06	. with electrification devices
77a-11/08	. with compressible and extensible springs for strengthening the hand muscles
77a-11/10	. Combined dumb-bells and clubs
77a-13/00	Hand bars; Bar-bells
77a-13/02	. jointed or attached to the floor
77a-15/00	Clubs
77a-15/02	. with illuminating devices
77a-17/00	Exercising apparatus combining several parts such as ladders, rods, beams, slides
77a-17/02	. rigidly combined
77a-17/04	. separable
77a-19/00	Hoop exercising apparatus
77a-19/02	. Freely-movable rolling hoops, e.g. gyro-wheels
77a-19/04	. movably supported on a framework
77a-21/00	Exercising apparatus for developing or strengthening the muscles or joints of the body by overcoming resisting forces, with or without measuring devices (measuring devices for muscle strength 42k-6)
77a-21/02	. Draw-out apparatus with spring or resilient ropes
77a-21/04	. . anchored at one end
77a-21/06	. Draw-out apparatus with tension produced by weights
77a-21/08	. . anchored at one end
77a-21/10	. Draw-out devices for persons lying down
77a-21/12	. Draw-out devices attachable to the body of the user
77a-21/14	. Draw-out devices necessitating additional movement of the hand
77a-21/16	. Supports for anchoring the draw-out devices
77a-21/18	. Wearing-apparel equipped with resisting devices for physical exercises
77a-21/20	. Resisting devices for use while stooping or rising
77a-21/22	. Resisting devices with rotary bodies
77a-21/24	. Resisting devices with electrification arrangements
77a-21/26	. Exercising belts with resisting devices
77a-21/28	. Devices for two persons operating in opposition
77a-21/30	. Grip exercisers for developing the muscles of the fingers (in dumb-bells 77a-11/08; in draw-out devices 77a-21/14)
77a-21/32	. Devices with a pair of lever arms or handles connected together by flexible elements, e.g. bending devices
77a-23/00	Exercising apparatus for special parts of the body (devices for exercising or strengthening of fingers, or arms in teaching operation of keyboards 51b-46, 51b-47)
77a-23/02	. for the abdomen, the spinal column, the torso, or the shoulders
77a-23/04	. for legs or feet
77a-23/06	. . with movable endless bands or rolls on which the person is running on the spot (walking aids for curative purposes 30f-4)
77a-25/00	Stilts or the like (as prosthesis 30d-3/02, 30d-3/03)
77a-25/02	. Elastic stilts
77a-25/04	. with wheels
77a-25/06	. Shoes formed with stilts to elongate the step
77a-25/08	. Hopping-sticks
77a-25/10	. Elastic bouncing shoes fastened to the foot

Climbing; Mountaineering**77a-27/00****Apparatus for climbing poles, trees, etc.**

- 77a-27/02 . Climbing devices for round poles attachable to the feet
- 77a-27/04 . Climbing devices for profile poles attachable to the feet
- 77a-27/06 . Safety harness for climbing

77a-29/00**Apparatus for mountaineering**

- 77a-29/02 . Mountain guy-ropes or accessories, e.g. avalanche ropes; Means for indicating the location of accidentally buried, e.g. snow-buried, persons
- 77a-29/04 . Steps for climbing
- 77a-29/06 . Climbing irons attachable to the feet; Ice cleats
- 77a-29/08 . Hand equipment for climbers
- 77a-29/10 . Special equipment attached to shoes for ascending inclines

Swimming**77a-31/00****Swimming aids (life suits with buoyant linings 65b-27 – 65b-31, buoyant devices 65c-7)**

- 77a-31/02 . Swimming gloves
- 77a-31/04 . . with arrangements for enlarging the propulsive surface
- 77a-31/06 . Swimming paddles or the like; Hand-held swimming aids
- 77a-31/08 . Swim-flaps; Swim-fins
- 77a-31/10 . . attached to the sole or toe
- 77a-31/12 . . attached to the legs
- 77a-31/14 . . with valve-flaps
- 77a-31/16 . . with arrangements for varying the size of the swimming surface
- 77a-31/18 . Swimming appliances with propulsive effect for hands and feet simultaneously

77a-33/00**Swimming equipment attachable to the head, e.g. swimming helmets, swimming goggles****77a-35/00****Swimming framework with driving mechanisms operated by the swimmer or by a motor**

- 77a-35/02 . shaped like a fish tail
- 77a-35/04 . with paddle wheels
- 77a-35/06 . with twin-bladed paddles or buoyant members
- 77a-35/08 . with propeller propulsion
- 77a-35/10 . . operated by the swimmer
- 77a-35/12 . . operated by a motor

Balls**77a-37/00****Solid balls; Marbles**

- 77a-37/02 . Special cores
- 77a-37/04 . . Rigid cores
- 77a-37/06 . . Elastic cores
- 77a-37/08 . . Liquid cores; Plastic cores
- 77a-37/10 . . with eccentric centre of gravity
- 77a-37/12 . Special coverings
- 77a-37/14 . Special surfaces

77a-39/00**Hollow non-inflatable balls**

- 77a-39/02 . Arrangements for maintaining the pressure
- 77a-39/04 . . Pricking balls
- 77a-39/06 . Special coverings
- 77a-39/08 . . made of two halves

77a-41/00**Hollow inflatable balls**

- 77a-41/02 . Bladders
- 77a-41/04 . . Closures therefor
- 77a-41/06 . . Valves; Self-closing valves
- 77a-41/08 . Ball covers; Closures therefor
- 77a-41/10 . Bladder and cover united

77a-41/12	. Tools or devices for blowing up or closing balls
77a-43/00	Balls with special arrangements
77a-43/02	. with a handle
77a-43/04	. with an eccentric centre of gravity; with mechanism for changing the centre of gravity (solid balls 77a-37/10)
77a-43/06	. with illuminating devices
77a-45/00	Apparatus or methods for manufacturing balls (from rubber or plastics 39; mechanical working of caoutchouc and gutta-percha in order to make balls 39a-10/13, 39a6-7/00)
77a-45/02	. Marking of balls
77a-47/00	Devices for handling or treating balls
77a-47/02	. for picking-up
77a-47/04	. for cleaning balls
<u>Rackets, bats, or other accessories for ball games</u>	
77a-49/00	Tennis, badminton, or like rackets
77a-49/02	. Frames
77a-49/04	. . with balancing devices
77a-49/06	. . with slits
77a-49/08	. . with special construction of the handle
77a-49/10	. . made of non-metallic materials, other than wood
77a-49/12	. . made of metal
77a-49/14	. . Protection devices on the frame
77a-49/16	. Presses
77a-49/18	. Covers
77a-51/00	Stringing tennis rackets
77a-51/02	. Strings; String substitutes
77a-51/04	. . Sheet-like structures used as substitutes
77a-51/06	. Double-sided stringings
77a-51/08	. Diagonal stringings
77a-51/10	. Reinforcements for stringings
77a-51/12	. Devices arranged in or on the racket for adjusting the tension of the strings
77a-51/14	. Devices for stringing
77a-51/16	. . Machines or apparatus for stringing while manufacturing
77a-53/00	Golf clubs
77a-53/02	. Joint structures between the head and the shaft
77a-53/04	. Heads
77a-53/06	. . adjustable
77a-53/08	. with special arrangements for obtaining a variable impact
77a-53/10	. Non-metallic shafts
77a-53/12	. Metallic shafts
77a-53/14	. Handles
77a-53/16	. . adjustable
77a-55/00	Bags for golf clubs; Stands for golf clubs for use on the course
77a-55/02	. with special receptacles for the balls
77a-55/04	. Supports with devices for anchoring to the ground
77a-55/06	. . Bags with tripod or like set-up stands
77a-55/08	. Wheeled carriers for golf bags
77a-55/10	. Stands for golf clubs for use on the course
77a-57/00	Golf game accessories, e.g. golf cups, golf tees
77a-57/02	. Stands for golf clubs
77a-59/00	Bats, rackets, etc., for other games
77a-59/02	. for lacrosse, pelota, or similar games
77a-59/04	. for table tennis
77a-59/06	. for baseball, rounders, or similar games

77a-59/08	. for cricket
77a-59/10	. for croquet
77a-59/12	. for hockey
77a-59/14	. for ice hockey
77a-59/16	. for polo
77a-59/18	. Circular bats for other games
77a-61/00	Tennis nets or accessories for tennis or like games
77a-61/02	. Posts; Revolvably-mounted posts
77a-61/04	. Straining or adjusting devices for nets
77a-63/00	Targets or goals for ball games
77a-63/02	. rigidly mounted
77a-63/04	. adjustably or pivotally mounted
77a-63/06	. Revolving targets
77a-65/00	Implements for throwing
77a-65/02	. Darts, spears or the like
77a-65/04	. Throwing-hammers
77a-65/06	. Heavy throwing-balls
77a-65/08	. Boomerangs
77a-65/10	. Discus discs; Quoits
77a-65/12	. Ball-throwing apparatus with or without catchers
77a-67/00	Miscellaneous sporting games
77a-67/02	. Special golf games, e.g. miniature golf
77a-67/04	. Table games physically beneficial for the human body, modelled on outdoor sports (other table games 77d)
77a-67/06	. Ring or disc tossing games
77a-67/08	. Juggling or spinning ball games played as games of skill
77a-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
77a-67/12	. Flip games
77a-67/14	. Curling stone; Shuffleboard; Similar sliding games
77a-67/16	. Tethered aerial top or spinner games
77a-67/18	. Badminton, shuttlecock, or like games with feathered missiles
77a-69/00	Training appliances or apparatus for special sports
77a-69/02	. for fencing
77a-69/04	. simulating the movements of horses
77a-69/06	. for rowing or sculling
77a-69/08	. . with water-filled pools
77a-69/10	. Swimming instruction apparatus for use without water
77a-69/12	. Arrangements in swimming pools for teaching swimming
77a-69/14	. . Teaching frames for swimming
77a-69/16	. for cycling
77a-69/18	. for skiing
77a-69/20	. Punching balls
77a-69/22	. . mounted on or suspended from a fixed support
77a-69/24	. . mounted on or suspended from a movable support
77a-69/26	. . . attached to the human body
77a-69/28	. . Attachments located on the balls at opposite points
77a-69/30	. . . Resilient attachments
77a-69/32	. . with indicating devices
77a-69/34	. Boxing or football dummies
77a-69/36	. for golf
77a-69/38	. for tennis
77a-69/40	. Stationarily-arranged devices for projecting balls (as weapons 72b-6/01)
77a-71/00	Accessories for miscellaneous games or sports
77a-71/02	. for large-room or outdoor sporting games
77a-71/04	. for small-room or indoor sporting games
77a-71/06	. Indicating or scoring devices for games or players (timing devices 43a-38)

77a-71/08	. Body-protectors for players or sportsmen
77a-71/10	. . for the head (in the form of caps or hats 41c)
77a-71/12	. . for the body or the legs
77a-71/14	. . for the hands, e.g. baseball, boxing, or golfing gloves
77a-71/16	. . . air-filled

77b Skates, skis, water skis, roller skates, etc.; courts or courses therefor

Skates; Accessories for skating

Skates

77b-1	with two lengthwise fastening rails, each carrying a sole clamp and a heel clamp
77b-2	with simultaneously-tightened special sole and heel clamps
77b-3	with clamps tightened by putting down the foot
77b-4	with clamps tightened by lateral swinging or shifting of the blade or of the whole skate
77b-5	with clamps tightened by means of springs
77b-6/01	fastened by special metal fastening devices on the boot
77b-6/02	with special fastening devices not mentioned above
77b-7	with elastic foot-plates
77b-8	with foot-plates divided into parts permitting adjustment to the size of the foot
77b-9/01	with multi-part blades
77b-9/02	with several blades or auxiliary blades
77b-10	Special constructions of single blades
77b-11	fastened by means of straps
77b-12/01	with special structure of the clamp fastening devices
77b-12/02	of the tubular type
77b-12/03	Skates collapsible to planar form
77b-13/01	Manufacture of skates (treating and hardening steel 18c)
77b-13/02	Skates formed from one piece (7c-47; 7f-10; 49i-16)
77b-14/01	Supports for the foot-joint
77b-14/02	Supports for skaters, particularly for teaching
77b-14/03	Supports for use while putting skates on
77b-14/04	Special spikes for the blades of skates
77b-14/05	Auxiliary devices for sharpening blades
77b-14/06	Guards for skate blades
77b-14/07	Keys for skates (manufacture thereof 49i-16)

Snow shoes, skis and accessories for skiing

77b-15/01	Construction of skis
77b-15/02	Special structure of the running sole, longitudinal guiding grooves, edge-protectors (77b-15/19)
77b-15/03	Material for skis, e.g. wood, metal, plastics
77b-15/04	Collapsible or divided skis
77b-15/05	Motor-driven skis
77b-15/06	Skis with rolling or like devices
77b-15/07	Details of skis
77b-15/08	Arrangements for stretching, clamping, or pressing skis
77b-15/09	Arrangements for waxing or treating skis
77b-15/10	Apparatus for repairing damaged skis
77b-15/11	Arrangements for carrying or towing skis
77b-15/12	Arrangements for connecting skis, e.g. to form ski sleds
77b-15/13	Arrangements for resilient connection between skis and boots
77b-15/14	Devices for removing snow from skis
77b-15/15	Snow-protectors on skis

- 77b-15/16 Special arrangements on the boots for fastening skis
Devices preventing skis from slipping back
- 77b-15/17 Skins; Substitutes for skins
- 77b-15/18 Fastening devices for skins
- 77b-15/19 Step-shaped running sole-plates (77b-15/02)
- 77b-15/20 Fixed, non-movable devices preventing skis from slipping back, not covered by 77b-15/19
- 77b-15/21 Hinged stoppage blades
- 77b-15/22 Clamp-irons preventing lateral slipping
- Ski bindings
- 77b-15/23 Ski bindings in general
- 77b-15/24 Ski bindings with yieldable sole or swivelling parts
- 77b-15/25 Long strap bindings
- 77b-15/26 Heel-engaging cable bindings fastened at the front of the boot
- 77b-15/27 Ski bindings that are yieldable or self-releasing in the event of an accident
- 77b-15/28 Special toe jaw-irons, Huitfeldt clamps and binding hooks made of one piece
- 77b-15/29 Elastic heel-straps
- 77b-15/30 Tighteners for ski bindings
- 77b-15/31 Ski bindings with arrangements for adjusting the toe-clamps
- 77b-15/32 Ski bindings without heel-straps without heel-straps, but with both guiding cheeks and toe-straps
- 77b-15/33 Ski bindings without heel-straps without straps, but with guiding cheeks
- 77b-15/34 Ski bindings without heel-straps, but with a clamping device arranged at the front
- 77b-15/35 Ski bindings with special sole edge holders instead of toe-straps
- 77b-15/36 Ski-sticks
- 77b-15/37 Snow skates
- 77b-15/38 Snow shoes, etc.
- 77b-16 Water skis, sticks for water skis
- Roller skates**
- 77b-17 Roller skates with wheels arranged in two pairs, attached to foot or leg
- 77b-18 Roller skates with driving mechanisms
- 77b-19/01 Roller skates with brakes or means to avoid rolling backwards
- 77b-19/02 Single-track roller skates with two or more wheels
- 77b-19/03 Single-wheel roller skates
- 77b-19/04 Roller skates with wheels arranged otherwise than in two pairs, not covered by 77b-19/01 or 77b-19/02
- 77b-19/05 Roller skates with endless tracks
- 77b-19/06 Roller skates med special travelling gear
- 77b-19/07 Wheels for roller skates
- 77b-19/08 Wheels for roller skates with ball-shaped or spherical running surfaces
- 77b-19/09 Roller skates convertible into ice or snow-running skates
- 77b-19/10 Roller skates with fixable wheels permitting the skates to be used for walking
- 77b-19/11 Roller skates with special auxiliary arrangements, e.g. illuminating or push-off devices
- 77b-19/12 Roller skates with arrangements for sitting
- 77b-20 Skating, roller-skating, skiing, ski-jumping or toboggan rinks (17b-5/01; 19c; 77e-16/01; 37f-1; 39b-26/02)

77b (IPC: A63C) Skates; Skis; Water-shoes; Roller skates; Courts; Rinks**Skates; Accessories for skating****77b-1/00 Skates**

- 77b-1/02 . rigidly mounted on the sole of the boot
- 77b-1/04 . fastened by means of clamps
- 77b-1/06 . . with sole and heel plates each equipped with clamps
- 77b-1/08 . . with simultaneously-tightened sole and heel clamps
- 77b-1/10 . . tightened by the movement of the foot
- 77b-1/12 . . tightened by lateral swinging or shifting of the blade or of the whole skate
- 77b-1/14 . . tightened by means of springs
- 77b-1/16 . . Special structure of the clamp fastening devices
- 77b-1/18 . fastened by means of straps
- 77b-1/20 . with fastening means on special metal parts of the boot (boots for skaters 71a-5/16)
- 77b-1/22 . with special foot-plates
- 77b-1/24 . . Elastic plates
- 77b-1/26 . . divided into two parts permitting adjustment to the size of the foot
- 77b-1/28 . . Pivotaly-mounted plates
- 77b-1/30 . with special blades
- 77b-1/32 . . Special constructions of the simple blade
- 77b-1/34 . . Multi-part blades
- 77b-1/36 . . with several blades
- 77b-1/38 . of the tubular type
- 77b-1/40 . manufactured of one piece of material
- 77b-1/42 . Manufacture of skates (manufacture from sheet metal 7c; by rolling 7f-10, 7f-7/00; by forging or pressing 49i-16, 7h-17/00)

77b-3/00 Accessories for skates

- 77b-3/02 . Supports for the foot-joint (footwear with foot-supporting parts 71a-7/18)
- 77b-3/04 . Supporting frames or gliders for skaters
- 77b-3/06 . Supports for use whilst strapping skates on to boots
- 77b-3/08 . Special spikes for the blades of skates
- 77b-3/10 . Auxiliary devices for sharpening blades
- 77b-3/12 . Guards for skate blades
- 77b-3/14 . Keys for skates (manufacture thereof 49i-16, 7h-5/00)

Skis; Accessories for skiing**77b-5/00 Skis; Ski vehicles**

- 77b-5/02 . collapsible; divided
- 77b-5/04 . Special structure of the running sole; Longitudinal guiding grooves; Edge-protectors
- 77b-5/06 . Special devices on parts of the skis, e.g. steering devices
- 77b-5/07 . . Means for adjusting stiffness of skis
- 77b-5/08 . Motor-driven skis
- 77b-5/10 . . with rolling or like devices
- 77b-5/12 . Methods of making; Selection of particular materials

77b-7/00 Devices preventing skis from slipping back

- 77b-7/02 . Skins; Substitutes for skins
- 77b-7/04 . Fastening-devices for skins
- 77b-7/06 . Tooth-shaped running sole-plates
- 77b-7/08 . Stoppage blades attachable to the skis in such manner that these blades are permanently in the operative position
- 77b-7/10 . Hinged stoppage blades attachable to the skis in such manner that these blades can be moved out of the operative position
- 77b-7/12 . Clamp-irons preventing lateral slipping

77b-9/00 Ski bindings

- 77b-9/02 . Non-self-releasing bindings with swivel sole-plate or swivel parts, i.e. Ellefsen-type
- 77b-9/04 . Non-self-releasing long strap bindings
- 77b-9/06 . Non-self-releasing heel-engaging cable bindings fastened to the front end of the ski

- 77b-9/08 . yieldable or self-releasing in the event of an accident, i.e. safety bindings
- 77b-9/081 . . with swivel sole-plate
- 77b-9/082 . . with swivel heel-plate
- 77b-9/083 . . with loosenable cable strap
- 77b-9/084 . . with heel hold-downs, e.g. swingable
- 77b-9/085 . . with sole hold-downs, e.g. swingable
- 77b-9/086 . . using parts which are fixed on the shoe of the user and are releasable from the ski binding
- 77b-9/10 . Non-self-releasing toe jaw-irons; Non-self-releasing binding hooks made of one piece
- 77b-9/12 . Non-self-releasing elastic heel-straps
- 77b-9/14 . Non-self-releasing bindings without heel-straps, but with both guiding cheeks and toe-straps
- 77b-9/16 . Non-self-releasing bindings without straps, but with guiding cheeks
- 77b-9/18 . Non-self-releasing bindings without heel-straps, but with a clamping device arranged at the front end of, or behind, the binding
- 77b-9/20 . Non-self-releasing bindings with special sole edge holders instead of toe-straps
- 77b-9/22 . Arrangements for adjusting the toe-clamps
- 77b-9/24 . Tighteners for ski bindings

77b-11/00 Accessories for skis

- 77b-11/02 . Arrangements for stretching, clamping, or pressing skis, for transportation or storage
- 77b-11/04 . for treating skis
- 77b-11/06 . . Edge-sharpeners
- 77b-11/08 . . Apparatus for waxing or de-waxing
- 77b-11/10 . Apparatus for towing skis
- 77b-11/12 . Apparatus for hooking the heel part of the boot to the ski
- 77b-11/14 . Apparatus for repairing damaged skis
- 77b-11/16 . Special devices on boots for fastening skis thereto
- 77b-11/18 . Devices for removing snow from skis
- 77b-11/20 . Snow-protectors on skis
- 77b-11/22 . Ski-sticks
- 77b-11/24 . . Rings for ski-sticks

Other devices for walking on snow, gliding on water, etc.

77b-13/00 Snow shoes

- 77b-13/02 . Snow shoe rings

77b-15/00 Water skis, Water shoes; Bog shoes; Sticks for water skiing; Surf-riding appliances (skis either for snow or on water 77b-5/00)

- 77b-15/02 . with means for additional lift by provision of hollow bodies
- 77b-15/04 . with propelling means
- 77b-15/06 . Bindings; Accessories

77b-17/00 Roller skates

- 77b-17/02 . with wheels arranged in two pairs
- 77b-17/04 . with wheels arranged otherwise than in two pairs
- 77b-17/06 . . Single-track type
- 77b-17/08 . . . Single-wheel type
- 77b-17/10 . with endless tracks
- 77b-17/12 . with driving mechanisms
- 77b-17/14 . with brakes, e.g. toe stoppers, freewheel roller clutches
- 77b-17/16 . for use on specially shaped or arranged runways
- 77b-17/18 . convertible into ice or snow-running skates
- 77b-17/20 . with fixable wheels permitting the skates to be used for walking
- 77b-17/22 . Wheels for roller skates
- 77b-17/24 . . with ball-shaped or spherical running surfaces
- 77b-17/26 . with special auxiliary arrangements, e.g. illuminating, marking, or push-off devices
- 77b-17/28 . with arrangements for sitting

77b-19/00	Playing-courts; Rinks; Bowling greens
77b-19/02	. Special shaping of the surface of courts according to the necessities of the different games (surface construction 19c-5/40, 19c-13/00)
77b-19/04	. Mats or carpet for courts
77b-19/06	. Apparatus for setting-out or dividing courts
77b-19/08	. . Mechanical means for marking-out
77b-19/10	. Skating, roller-skating, skiing, ski-jumping or toboggan rinks; Rinks for water-skiing (chutes 77e-21/00; constructional part 19e, 37f-1)
77b-19/12	. Removable protective covers for courts, rinks, or games pitches

77c Games with balls or similar rolling or sliding bodies

Bowling-alleys

77c-1/01	Bowling-alleys
77c-1/02	Collapsible or portable bowling-alleys
77c-1/03	Surfaces and pin-stands
77c-1/04	Apparatus for catching, lifting or returning the balls
77c-1/05	Indicating devices
77c-1/06	Arrangements for raising fallen pins
77c-1/07	Miscellaneous arrangements; for adjusting, cleaning balls, indicating missed shots, auxiliary devices for bowling alleys
77c-2/01	Table alleys
77c-2/02	Appliances for propelling or projecting the balls, e.g. spring, string, sling drive, roll-off devices
77c-2/03	Guiding or steering balls
77c-2/04	Arrangements for supporting or catching pins
77c-2/05	Arrangements for raising pins and returning balls
77c-3	Games of pins with tethered balls, e.g. suspended from strings
77c-4	Miniature bowling-alleys, automatic or mechanical bowling games (43b)
77c-5	Pins
77c-6	Balls for bowling alleys
77c-7	Tivoli, bagatelle or similar games

Billiards and accessories

77c-8	Different types of billiards
77c-9	Billiard tables, billiard tables convertible into other tables
77c-10	Cushions or fastenings therefor
77c-11	Cues
77c-12	Tip fastenings
77c-13	Means for roughening the cue-tips; miscellaneous means for treating, holding or hanging-up cues
77c-14	Chalk holders
77c-15	Balls
77c-16	Scoring or registering devices (42p; 43a-37)

Miscellaneous ball games

77c-17	Roulette-like games
77c-18	Games with falling balls
77c-19	Games with balls to be shaken or rolled in small boxes
77c-20	Games imitating football or other outdoor ball games
77c-21	Miscellaneous ball games

Accessories for ball games

77c-22	Apparatus for projecting or rolling-off the balls
77c-23	Goal-posts; Winning-posts for rolling balls
77c-24	Specially shaped rolling-boards for the balls

- 77c-25 Rolling-boards to be rocked during play
77c-26 Games with gliding bodies, e.g. rings or coins (77c-8)

77c (IPC: A63D) Bowling-alleys; Bagatelle; Billiards

77c-1/00 Bowling-alleys; Boccia courts

- 77c-1/02 . collapsible; portable
77c-1/04 . Form or material of the surface; Pin-stands integral with the surface
77c-1/06 . Adjusting apparatus; Stands for players
77c-1/08 . Tracks for returning or circulating the balls

77c-3/00 Table alleys; Miniature bowling-alleys; Bowling games (coin-freed 43b)

- 77c-3/02 . Appliances for propelling or projecting the balls, e.g. spring, string, sling drive, roll-off devices

77c-5/00 Accessories for bowling-alleys or table alleys

- 77c-5/02 . Apparatus for trapping or lifting the balls; Separate devices for returning the balls
77c-5/04 . Indicating devices
77c-5/06 . Pin stands
77c-5/08 . Arrangements for setting-up or taking away pins
77c-5/09 . . the pins being assembled in right order before setting down
77c-5/10 . Apparatus for cleaning balls, pins, or alleys

77c-7/00 Games of pins, e.g. ninepins, with tethered balls

77c-9/00 Pins

77c-11/00 Special balls for bowling alleys

77c-13/00 Tivoli, bagatelle or similar games

77c-15/00 Billiards; Billiard tables; Pocket Billiards

- 77c-15/02 . Billiard tables adapted to rest on ordinary tables or the like
77c-15/04 . Billiard tables convertible into other tables, etc. (into beds 34g-14/03, 34g-17/62)
77c-15/06 . Cushions or fastenings therefor
77c-15/08 . Cues
77c-15/10 . . Apparatus for holding or hanging-up cues
77c-15/12 . . Tip fastenings
77c-15/14 . . Means for roughening the cue-tips
77c-15/16 . Chalk holders
77c-15/18 . Balls
77c-15/20 . Scoring or registering devices (counting mechanisms 42p; game timers 43a-37)

77d Games (ball games 77c)

Card games

- 77d-1 Card-presses and card-holders
77d-2 Card-shufflers
77d-3 Card-dealers
77d-4 Apparatus for indicating the dealer
77d-5 Score-computers and miscellaneous indicators for card games (43a-38)
77d-6/01 Special shapes of cards (printing of cards 15h-5, 15k-9)
77d-6/02 Accessories for card games, e.g. for teaching bridge

Board games

- 77d-7 Chess and similar board games
77d-8 Military games
77d-9 Geographical or like games

Miscellaneous games

- 77d-10/01 Lotto
77d-10/02 Raffle games
77d-10/03 Shooting or hurling games

77d-10/04	Combinations of card games and other games
77d-10/10	Miscellaneous games of skill and chance
77d-11	Dice, dice-boxes and mechanical dice-throwing devices
77d-12	Roulette
77d-13	Patience, puzzles
77d-14	Racing games with figures moved by action of the players
77d-15	Racing games with mechanically moved figures
77d-16	Spinning-top games, dice-tops
77d-17	Pointer games
77d-18	Question-and-answer games
77d-19	Dominoes or like games; Mah-Jong games

77d (IPC: A63F) Card games; Dice; Roulette; Patience; Racing games; Similar games

77d-1/00 Card games

- 77d-1/02 . Cards; Special shapes of cards (card-printing methods 15h-5/01, 15k-9)
- 77d-1/04 . Card games combined with other games
- 77d-1/06 . Card game appurtenances
- 77d-1/08 . . Card-presses
- 77d-1/10 . . Card-holders
- 77d-1/12 . . Card-shufflers
- 77d-1/14 . . Card-dealers
- 77d-1/16 . . Apparatus for indicating the dealer
- 77d-1/18 . . Score-computers; Miscellaneous indicators (timing devices 43a-38, 43a2-1/22)

77d-3/00 Board games

- 77d-3/02 . Chess; Similar board games
- 77d-3/04 . Geographical or like games
- 77d-3/06 . Lottos; Bingo games
- 77d-3/08 . Raffle games that can be played by a fairly large number of people

77d-5/00 Roulette games

- 77d-5/02 . Roulette-like ball games
- 77d-5/04 . Disc roulettes; Dial roulettes; Teetotums; Dice-tops

77d-7/00 Indoor games played with small balls (bagatelle or similar games 77c-13/00)

- 77d-7/02 . with falling balls
- 77d-7/04 . with balls to be shaken or rolled in small boxes
- 77d-7/06 . Games imitating football or other outdoor ball games (if physically beneficial for the human body 77a-67/00)
- 77d-7/08 . Accessories therefor
- 77d-7/10 . . Apparatus for projecting or rolling-off the balls
- 77d-7/12 . . Goal-posts; Winning-posts for rolling balls
- 77d-7/14 . . Specially shaped rolling-boards for the balls
- 77d-7/16 . . Rolling-board adapted to be rocked during play
- 77d-7/18 . . Rolling-bodies used instead of balls

77d-9/00 Miscellaneous games; Accessories of general use for games covered in this sub-class

- 77d-9/02 . Shooting or hurling games (throwing or projecting toys per se 77f-33/18; as a sport 77a-65/12, 77a-67/00)
- 77d-9/04 . Dice (dice-tops 77d-5/04); Dice-boxes; Mechanical dice-throwing devices
- 77d-9/06 . Patience; Other games for self-amusement (balls to be shaken in small boxes 77d-7/04)
- 77d-9/08 . . Puzzles provided with elements movable in relation to each other
- 77d-9/10 . . Two-dimensional jig-saw puzzles
- 77d-9/12 . . Three-dimensional jig-saw puzzles

77d-9/14	. Racing games, traffic games, or obstacle games characterised by figures moved by action of the players
77d-9/16	. Spinning-top games
77d-9/18	. Question-and-answer games
77d-9/20	. Dominoes or like games; Mah-Jong games

77e Roundabouts, swings, rocking-horses, chutes and similar devices for public amusement

Roundabouts

77e-1/01	Roundabouts with fixed seats, in general
77e-1/02	Roundabouts with masking tunnels
77e-1/03	Roundabouts with toboggans
77e-1/04	Electrically driven roundabouts
77e-1/05	Roundabouts rotated by the passengers themselves
77e-1/06	Roundabouts rotated by pushing the feet against a fixed surface or by running
77e-1/07	Roundabouts rotated by means of grip-rings
77e-1/08	Roundabouts rotated by oars
77e-1/09	Roundabouts rotated by swinging or rocking
77e-2	Roundabouts with bicycles serving as seats
77e-3/01	Roundabouts med with centrifugally-swingable suspended seats
77e-3/02	Roundabouts med with seats moving up-and-down, e.g. figure-seats
77e-3/03	Roundabouts med seats two or more of which form a see-saw
77e-4/01	Roundabouts with floating seats
77e-4/02	Roundabouts for swimmers
77e-4/03	Submarine roundabouts
77e-5	Roundabouts with special movement of the seats
77e-6/01	Roundabouts with rocking turntables
77e-6/02	Roundabouts with rocking turntables and oblique masts
77e-6/03	Roundabouts med with cone-shaped rocking turntables
77e-7/01	Roundabouts med helically moving turntable
77e-7/02	Roundabouts med with turntables moved up and down
77e-8	Roundabouts med several concentric turntables
77e-9/01	Roundabouts med with seats moving with a planetary motion in a horizontal plane
77e-9/02	Roundabouts with several crossing tracks
77e-10	Roundabouts med with seats moving in an undulating track, also roller-coasters

Swings

77e-11/01	Suspended swings in general
77e-11/02	Swings with rocking runners
77e-11/03	Suspended swings med with two suspension axles
77e-11/04	Trouser swings
77e-11/05	Oar swings
77e-11/06	Suspended swings with moving supporting-points
77e-11/07	Rotatable suspended swings
77e-11/08	Fastenings of the suspension point of suspended swings
77e-11/09	Elastically suspended swings
77e-11/10	Looping-the loop swings; Climbing swings
77e-11/11	Suspended swings with seats shaped as riding horses
77e-11/12	Double suspended swings
77e-11/13	Brakes for suspended swings
77e-11/14	Driving mechanisms for suspended swings, e.g. ropes, motors
77e-12/01	See-saws
77e-12/02	See-saws with rocking runners

- 77e-12/03 Elastic see-saws
- Rocking-horses and other toy animals for riding**
- 77e-13/01 Rocking-horses on runners
- 77e-13/02 Rocking-horses mounted on links or springs
- 77e-13/03 Rocking-horses with runners usable for other purposes
- 77e-13/04 Hobby-horses
- Rocking horses which move on runners when rocked
- 77e-14/01 with divided runners
- 77e-14/02 with arrangements for pushing forward
- 77e-14/03 with other means for travelling
- 77e-15/01 Toy horses made to travel by riding movements
- 77e-15/02 Toy horses made to travel by riding movements, with eccentric wheels
- 77e-15/03 Motor-driven toy animals for riding
- 77e-15/04 Toy animals for riding made to travel by means of parallelogram-joints
- 77e-15/05 Toy animals for riding with ratchet-wheels, made to travel by stretching the legs
- 77e-15/06 Toy animals for riding made to travel by pressing the seats up-and-down
- 77e-15/07 Toy animals for riding made to travel by punting or pushing against the ground
- 77e-15/08 Toy animals for riding made to travel by pacing
- 77e-15/09 Toy animals for riding made to travel by ratchet mechanisms
- 77e-15/10 Toy animals for riding made to travel by performing oscillations
- 77e-15/12 Toy animals for riding made to travel by moving the stirrups or pedals
- Chutes, slides and similar apparatus for public amusement**
- 77e-16/01 without rails
- 77e-16/02 with fixed rails
- 77e-16/03 with passing arrangements for cars
- 77e-16/04 with additional rotation of cars
- 77e-16/05 with cars or gondolas moving back and forth
- 77e-16/06 with spiral tracks
- 77e-16/07 with horse-shaped cars
- 77e-16/08 with rowing boat-like movement of the seats
- 77e-16/09 with driven slideways
- 77e-16/10 with forced removal of the seat from the slide
- 77e-16/11 Water-chutes
- 77e-16/12 Slideways with cars moving on ropes, etc.
- 77e-16/13 Suspended slideways
- 77e-16/14 Roundabouts with cars that are articulated for centrifugal movement
- 77e-16/15 Turning or rocking cars, cars free to perform centrifugal movement
- 77e-16/16 Automobile-like cars
- Russian swings; Great wheels, e.g. Ferris wheels
- 77e-17/01 in general
- 77e-17/02 with special movement of the seat-carriers
- 77e-17/03 Conversion of roundabouts to Ferris-wheels
- 77e-17/04 horizontally rolling
- 77e-17/05 Roundabouts with vertical wheels
- 77e-17/06 Rolling drums turning somersaults, with seats rolling with the movement
- 77e-17/07 Rolling drums turning somersaults, with seats staying at the bottom of the drum
- Miscellaneous apparatus for active public amusement, race courses**
- 77e-18/01 with moving substructures over which persons are moved (ski lifts 20a-16)
- 77e-18/02 with shaking substructures

77e-18/03	with substructures mounted on springs; with substructures movable up and down
77e-18/04	with substructures mounted on turntables, etc.
77e-18/05	with inflatable and movable substructures
77e-18/06	with undulating motion of the substructure
77e-18/07	with hopping or throwing motions of the substructure
77e-18/08	with escalators or similar moving substructures
77e-18/09	with rotatable platforms with vertical axis
77e-18/10	Water amusement devices, e.g. for surfing
77e-18/11	creating illusions of travel
77e-18/12	creating submarine illusions
77e-18/13	Amusement devices with flying machines
77e-18/14	Miscellaneous arrangements for public amusement, e.g. disappearing seats, frightening devices, amusement rides, etc.
77e-18/15	Arrangements for playing on roundabouts
77e-18/16	Arrangements for dancing
77e-18/17	Arrangements for competitions between several persons, racing games
77e-18/18	Racing games in which the competitors remain in place
77e-18/19	Electrically driven racing games
77e-18/20	Greyhound racing, e.g. starting arrangements (43a-33)
77e-18/21	Racecourses

77e (IPC: A63G) Roundabouts; Swings; Rocking-horses; Chutes; Switchbacks; Similar devices for public amusement

Merry-go-rounds or roundabouts

77e-1/00	Roundabouts
77e-1/02	. with masking tunnels
77e-1/04	. with toboggans
77e-1/06	. with several concentric turntables
77e-1/08	. power-driven
77e-1/10	. . electrically driven
77e-1/12	. rotated by the passengers themselves
77e-1/14	. . rotated by pushing the feet against a fixed surface or by running
77e-1/16	. . rotated by means of grip-rings
77e-1/18	. . rotated by oars
77e-1/20	. . rotated by swinging or rocking
77e-1/22	. with bicycles serving as seats
77e-1/24	. with seats performing movements in a horizontal plane, other than circular movements
77e-1/26	. . with seats moving with a planetary motion in a horizontal plane
77e-1/28	. with centrifugally-swingable suspended seats
77e-1/30	. with seats moving up-and-down, e.g. figure-seats
77e-1/32	. with seats two or more of which form a see-saw
77e-1/34	. with seats moving in an undulating track
77e-1/36	. with movably-mounted swing-like seats not moving radially outwards
77e-1/38	. with rocking turntables
77e-1/40	. . and oblique masts
77e-1/42	. . cone-like shaped
77e-1/44	. with turntables moved up and down
77e-1/46	. . moved by a screw spindle
77e-1/48	. with turntables and movably-mounted vehicles thereon which move to the outside when the roundabout is rotated
77e-3/00	Water roundabouts, e.g. freely floating
77e-3/02	. with floating seats
77e-3/04	. for swimmers
77e-3/06	. Submarine roundabouts

77e-4/00 Accessories for roundabouts not restricted to one of groups 77e-1/00 and 77e-3/00

77e-5/00 Games on roundabouts

77e-7/00 Up-and-down-hill tracks; Switchbacks

Swings; Rocking horses; Other toy animals for riding

77e-9/00 Swings

- 77e-9/02 . with two suspension axles
- 77e-9/04 . with moving supporting-points
- 77e-9/06 . Climbing swings
- 77e-9/08 . Looping-the loop swings
- 77e-9/10 . with seats shaped as riding horses, breeches, or the like
- 77e-9/12 . Special fastenings of the suspension point
- 77e-9/14 . elastically suspended
- 77e-9/16 . Driving mechanisms, such as ropes, gear, belt, motor drive
- 77e-9/18 . . moved by rocking runners
- 77e-9/20 . . Oar swings
- 77e-9/22 . Brakes

77e-11/00 See-saws

77e-13/00 Cradle swings; Rocking-horses; Like devices resting on the ground

- 77e-13/02 . Cradle swings
- 77e-13/04 . . Spring-supported cradle swings
- 77e-13/06 . Rocking-horses
- 77e-13/08 . . mounted on links or springs
- 77e-13/10 . . with dismountable runners usable for other purposes

77e-15/00 Rocking horses on runners adapted for progressive movement

- 77e-15/02 . with divided runners
- 77e-15/04 . with arrangements for pushing forward

77e-17/00 Hobby-horses

77e-19/00 Toy animals for riding

- 77e-19/02 . made to travel by riding movements other than by ratchet wheels
- 77e-19/04 . with eccentric wheels
- 77e-19/06 . Swingably-mounted toy animals for riding made to travel by means of parallelogram-joints
- 77e-19/08 . made to travel by ratchet-wheels, e.g. by stretching the legs
- 77e-19/10 . . by pressing the seats or saddles up-and-down
- 77e-19/12 . . by performing oscillations
- 77e-19/14 . . by moving the stirrups or pedals
- 77e-19/16 . made to travel by punting
- 77e-19/18 . made to travel by pacing
- 77e-19/20 . motor-driven

Chutes; Slides; Similar apparatus for public amusement

77e-21/00 Chutes; Helter-skelters

- 77e-21/02 . without rails
- 77e-21/04 . with fixed rails
- 77e-21/06 . with passing arrangements for cars
- 77e-21/08 . with additional rotation of cars
- 77e-21/10 . with spiral tracks
- 77e-21/12 . with special cars, e.g. horse-shaped
- 77e-21/14 . with driven slideways
- 77e-21/16 . with forced removal of the passenger from the seat
- 77e-21/18 . Water-chutes
- 77e-21/20 . Slideways with movably suspended cars, or with cars moving on ropes, etc.
- 77e-21/22 . Suspended slideways

77e-23/00	Rotating or rocking pots
77e-25/00	Autocar-like self-drivers; Runways therefor
77e-27/00	Russian swings; Great wheels, e.g. Ferris wheels
77e-27/02	. with special movements of the seat-carriers
77e-27/04	. with tiltable axis
77e-27/06	. rolling on the level
77e-27/08	. mounted on roundabouts
77e-29/00	Rolling drums turning somersaults with or without rolling seats
77e-29/02	. with seats staying at the bottom of the drum
<u>Miscellaneous apparatus for public amusement</u>	
77e-31/00	Amusement arrangements
77e-31/02	. with moving substructures
77e-31/04	. . with jolting substructures
77e-31/06	. . with undulating motion of the substructure
77e-31/08	. . with looping, hopping, or throwing motions of the substructure
77e-31/10	. . with escalators or similar moving substructures
77e-31/12	. . with inflatable and movable substructures
77e-31/14	. . with planes mounted on springs; with movable planes
77e-31/16	. creating illusions of travel
77e-33/00	Devices allowing competitions between several persons, not otherwise covered
77f	Toys, e.g. tops, musical toys, dolls, driven figures and vehicles, mechanical or electrical toy railways, floating toys, hoops, construction sets, jokes
	Tops, etc.
77f-1/01	Tops driven by strings
77f-1/02	String-driven tops with detachable winding devices
77f-1/03	String-driven tops with integral winding devices
77f-1/04	String-driven tops with winding and launching devices which detach after winding
77f-1/05	Flying tops or air propellers for winding and throwing with strings
77f-1/06	Climbing tops, e.g. yoyos (sound producing 77f-6/03)
77f-1/07	Whirling or spinning discs driven by twisted cords, with or without music or colour effects
77f-1/08	Centrifugal and torsional tops, driven by strings
77f-2/01	Tops driven by springs or clockworks
77f-2/02	Spring-driven tops or flying tops, with the driving device attached to the top
77f-2/03	Tops or flying tops with winding and launching devices, driven by springs or clockworks, which are launched from the driving device
77f-2/04	Tops or flying tops with winding and launching devices of pistol form
77f-3/01	Tops or flying tops wound by means of threaded axles, scissor mechanisms or toothed rods, i.e. by reciprocating parts
77f-3/02	Winding tops by turning the axle with hands or fingers, by blowing or by means of slings
77f-3/03	Hopping, dancing, or curve-drawing tops
77f-3/04	Double tops, multiple tops mounted in or on one another, with different drives, figure tops, jumping figures
77f-3/05	Tops with illuminating arrangements and colour effects, tops emitting blasts or explosions
77f-3/06	Miscellaneous driving and launching arrangements for tops and flying tops
77f-3/07	General construction of tops and flying tops, other than driving and launching arrangements

77f-3/08	Whip tops, top whips, etc.
77f-4/01	Colour tops
77f-4/02	Musical tops
77f-5/01	Musical toys
77f-5/02	Music boxes, toy pianos or toy wind instruments
77f-6/01	Bellows and speaking devices for dolls, etc.
77f-6/02	Generation of sound by means of air
77f-6/03	Toys with sound-generating devices, suspended from strings
77f-6/04	Sound-generating toys in the form of pistols, machine guns, cannons, spring guns, bombs or hand grenades
77f-6/05	Miscellaneous sound-generating objects, e.g. balls, music balls
77f-6/06	Rattles, ticking toys, etc.
77f-6/07	Sounds generated by vehicles and wheels, sound generation by friction
77f-6/08	Means for sound generation by beating, shaking or bells

Dolls

77f-7/01	Dolls with sound-producing means
77f-7/02	Toy animals with sound-producing means
77f-7/03	Dolls and toy animals with music-producing devices, phonographs, radio sets, etc.
77f-7/04	Dolls' houses, furniture, or other equipment; Dolls' clothing
77f-7/05	General features of dolls
77f-7/06	Drinking dolls
77f-7/07	Floating dolls
77f-7/08	Movable dolls, made of parts that can be put together
77f-7/09	Dolls and toy animals with deformable framework
77f-7/10	Dolls made of fabrics or stuffed
77f-7/11	Double dolls, double-faced dolls
77f-7/12	Dolls into which the fingers of the hand can be inserted
77f-7/13	Flat toy figures with joints, with or without arrangements for making them stand up
77f-8/01	Paper dolls, dolls to be cut-out, folded, or clothed
77f-8/02	Jumping jacks
77f-9/01	Interconnected movement of limbs on dolls or toy animals
77f-9/02	Connections for limbs
77f-10/01	Frames, stands, or wheels for dolls or toy animals
77f-10/02	Running or walking dolls led by the hand; Self-walking two-legged dolls; Dolls with special arrangements for supporting the doll while walking
77f-11/01	Dolls' eyes in general
77f-11/02	Movable dolls' eyes
77f-11/03	Mounting of parts within dolls, automatic eyes, manufacture of eyes
77f-11/04	Dolls' hair or wigs; Eyelashes; Eyebrows
77f-11/05	Dolls with movable facial feature
77f-12/01	Manufacture of dolls or parts thereof, materials therefor
77f-12/02	Air-filled inflatable toy figures

Movable toy figures and toy vehicles, also toy machines and trains

77f-13/01	Toy figure movable by means of their own oscillations
77f-13/02	Climbing figures moving up-and-down
77f-14/01	Toy figures moved by rolling or pulling, continuous movement of figures on vehicles
77f-14/02	Figure toys with leg movements by means of rotatable means, e.g. wheels with radially arranged feet
77f-14/03	Reptiles, rodents, etc.
77f-14/04	Jumping toys
77f-14/05	Toys performing somersaults

- 77f-14/06 Figures staggering down an inclined path by means of the gravity effect
- 77f-14/07 Figures with walking, rolling, jumping or like movement
- 77f-14/08 Figures with walking or rolling movement, caused by eccentric parts
- 77f-14/09 Figures moved by tops
- 77f-14/10 Running movement produced by moving the pairs of legs together and apart
- 77f-14/11 Running movement produced by discontinuous pulling of a string
- 77f-15/01 Toys with mechanically driven limbs
- 77f-15/02 Single-wheeled or single-axle figures which are put in motion by rolling
- 77f-15/03 Figures with several wheel axles, which are put in motion by rolling
- 77f-15/04 Snake or like figures, put in motion by rolling
- 77f-15/05 Figures put in motion by pulling a string or rod
- 77f-15/06 Figures put in motion by pressurised air, inflated balls or Bowden cables
- 77f-15/07 Movable flat figures, cat-and-mouse figures
- 77f-15/08 Hunting scenes in general
- 77f-15/09 Figures put in motion by mutual movement of two parts
- 77f-15/10 Animal figures which jump, kick or the like
- 77f-15/11 Fighting toy figures of all kinds, boxing figures
- 77f-15/12 Racing figures, etc.
- 77f-15/13 Marching and exercising figures, etc.
- 77f-15/14 Boxes from which figures jump
- 77f-15/15 Figures shooting arrows or other missiles
- 77f-15/16 Motor driven figures, which move while travelling
- 77f-15/17 Toy figures swinging about a point above the centre of gravity
- 77f-15/18 Pendulum-driven figures, self-righting toys
- 77f-15/19 Toy figures operated by balls or weights enclosed therein
- 77f-15/20 Figures imitating players, e.g. football players, ball players, bowlers, billiards players, etc.
- 77f-15/21 Figures imitating artisans or other working persons
- 77f-15/22 Gymnastic toy figures
- 77f-15/23 Rope-jumping toy figures
- 77f-15/24 Rocking toy figures
- 77f-15/25 Gymnastic toy figures, set in motion by tightening and relaxing twisted strings
- 77f-15/26 Dancing figures in general
- 77f-15/27 Dancing figures with tops
- 77f-15/28 Dancing figures set in motion by the player shaking a hand or foot
- 77f-15/29 Movable figures without movable limbs
- 77f-15/30 Games, roundabouts or other rotating toys
- 77f-15/31 Figures set in motion by rolling or unrolling a string
- 77f-16/01 Toy cars
- 77f-16/02 Toy airplanes (77f-28)
- 77f-16/03 Toy vehicles for land or water
- 77f-16/04 Toy bicycles
- 77f-16/05 Toy tanks or tractors
- 77f-16/06 Toy cable cars, tilting tracks, roller-coasters, helical tracks, looping tracks
- 77f-16/07 Driving mechanisms actuated by a sand stream
- 77f-16/08 Driving mechanisms actuated by a water stream
- 77f-16/09 Special vehicles, e.g. pumps, trailers with dumping platforms, ladders, etc.
- Toy vehicles and toy machines
- 77f-17/01 with flywheel driving mechanisms
- 77f-17/02 with clockwork mechanisms or driving mechanisms with extensible rubber bands
- 77f-17/03 with driving mechanisms actuated by balls or weights

- 77f-17/04 driven by rolling balls
- 77f-17/05 driven by means of gas, air, pressurised air, wind, hot air, steam
- 77f-17/06 Perpetual motion toys
- 77f-18/01 Toy vehicles with front axle steering by hand
- 77f-18/02 Toy vehicles steered by guiding surfaces
- 77f-18/03 Arrangements for stopping and braking toy vehicles
- 77f-18/04 Steering or reversing mechanisms for toy vehicles
- 77f-18/05 Toy vehicles driven or controlled by Bowden cables
- 77f-18/06 Controls for toy steam engines and gas engines
- 77f-18/07 Accessories and details of toy vehicles
- 77f-18/08 Toy vehicles that can be assembled from parts
- 77f-18/09 Wheels for toy vehicles
- 77f-19/01 Mechanically driven toy railways, locomotives, rail cars, controls, stopping arrangements, details
- 77f-19/02 Accessories and details of electric toy railways
- 77f-19/03 Electrical locomotives and their accessories
- 77f-19/04 Electrical track installations
- 77f-19/05 Toy tracks
- 77f-19/06 Switches and accessories, mechanical and electrical
- 77f-19/07 Rails, fastenings and joints for rails
- 77f-19/08 Vehicle connections, mechanically and electrically actuated
- 77f-19/09 Overhead power lines and posts for electric toy railways
- 77f-19/10 Bridges, signals, marshalling yards, etc. with and without signal boxes and control arrangements
- 77f-19/11 Electrical arrangements, e.g. for illumination or cargo transport
- 77f-19/12 Electric toy rail vehicles
- 77f-19/13 Details for electric track installations, transformers, etc.
- 77f-19/14 Miscellaneous electric driving arrangements for toys
- 77f-20 Rowing toys
- 77f-21/01 Over-water toys with driving arrangements
- 77f-21/02 Diving toys and submarines with driving arrangements
- 77f-21/03 Closed vessels with diving bodies, Cartesian divers
- 77f-21/04 Floating dolls and toy figures with or without driving arrangements
- 77f-21/05 Nautical games
- 77f-21/07 Toy vessels, jet driven by means of gas, steam, etc
- 77f-21/08 Toy vessels firing torpedoes or other missiles, vessels which explode when shot at

Miscellaneous toys

- 77f-22 Hoops
- 77f-23 Construction kits, building blocks
- 77f-24 Throwing or slinging toys
- 77f-25 Toy parachutes (parachutes for aviation 62c-21, 62c-22)
- 77f-26 Optical toys, colour toys, toy figures which simulate drawing, etc. (75d-5)
- 77f-27 Magnetic or electric toys
- 77f-28 Windmills, other toys actuated by air currents, toy balloons and airplanes
- 77f-29 Soap-bubble toys; Smoke toys (blowing smoke rings 44b-13)
- 77f-30/01 Imitations of miscellaneous apparatus, e.g. telephones, waggons, cranes, cash-registers savings boxes, etc.
- 77f-30/02 Moulds for playing with sand
- 77f-30/03 Egg-laying toy animals
- 77f-30/04 Sparking toys
- 77f-30/05 Picture books
- 77f-30/10 Miscellaneous toys

77f-31 Jokes, cracker bonbons or the like (33b-11)

77f (IPC: A63H) Toys, e.g. tops, dolls, hoops, building blocks**77f-1/00 Tops**

- 77f-1/02 . with detachable winding devices
- 77f-1/04 . . with string or band winding devices
- 77f-1/06 . with integral winding devices
- 77f-1/08 . with arrangements for winding-up by blowing
- 77f-1/10 . able to be spun by whirling the axis with both hands
- 77f-1/12 . Whip tops; Top whips
- 77f-1/14 . Flying tops
- 77f-1/16 . Hopping, dancing, or curve-drawing tops
- 77f-1/18 . Double tops; Multiple tops mounted in or on one another
- 77f-1/20 . with figure-like features; with movable objects, especially figures
- 77f-1/22 . Colour tops
- 77f-1/24 . with illuminating arrangements
- 77f-1/26 . emitting blasts or explosions
- 77f-1/28 . Musical tops
- 77f-1/30 . Climbing tops, e.g. Yo-Yo
- 77f-1/32 . Whirling or spinning discs driven by twisted cords

Dolls; Figures; Musical toys**77f-3/00 Dolls**

- 77f-3/02 . made of fabrics or stuffed
- 77f-3/04 . with deformable framework
- 77f-3/06 . Air-filled or inflatable toy figures
- 77f-3/08 . of flat paper to be cut-out, folded, or clothed
- 77f-3/10 . Flat toy figures provided with limbs, with or without arrangements for making them stand up
- 77f-3/12 . Double-faced dolls
- 77f-3/14 . into which the fingers of the hand can be inserted, e.g. hand-puppets
- 77f-3/16 . made of parts that can be put together
- 77f-3/18 . Jumping jacks
- 77f-3/20 . with parts moved due to movements of other parts, e.g. limbs
- 77f-3/22 . Running or walking dolls led by the hand; Self-walking two-legged dolls; Dolls with special arrangements for supporting the doll while walking
- 77f-3/24 . Drinking dolls; Dolls producing tears; Wetting dolls
- 77f-3/26 . Floating dolls
- 77f-3/28 . with sound-producing means
- 77f-3/30 . . Voices for dolls or the like, produced by bellows
- 77f-3/31 . . Bellows, cylinders or the like for sound production
- 77f-3/32 . . Doll voices produced by an air current
- 77f-3/33 . . Other sound-producing means specially adapted for dolls (recording and playback means per se 42t1)
- 77f-3/34 . . with music-producing devices, phonographs, radio sets, etc.
- 77f-3/36 . Details; Appurtenances
- 77f-3/38 . . Dolls' eyes
- 77f-3/40 . . . movable
- 77f-3/42 . . . Manufacture of eyes (artificial eyes for human beings 30d-26)
- 77f-3/44 . . Dolls' hair or wigs; Eyelashes; Eyebrows (in general 3e-3/00, 3e-5/10)
- 77f-3/46 . . Connections for limbs
- 77f-3/48 . . Mounting of parts within dolls, e.g. automatic eyes
- 77f-3/50 . . Frames, stands, or wheels for dolls or toy animals
- 77f-3/52 . . Dolls' houses, furniture, or other equipment; Dolls' clothing

77f-5/00 Musical or noise-producing toys

77f-5/00 Musical or noise-producing devices for additional toy effects other than acoustical (musical tops 77f-1/28; music, sound or noise production per se 42g, 42t, 51, 74)

- 77f-5/02 . Music boxes, carillons, automatic instruments, toy pianos or toy wind instruments

- 77f-5/04 . Pistols or machine guns operated without detonators; Crackers (cracker bon-bons 77f-35/00)
- 77f-5/06 . Rattles, ticking toys, etc.
- 77f-5/08 . Means for sound production by beating, shaking or by single bells

77f-7/00 Toy figures propelled by the user

- 77f-7/02 . by pushing or drawing
- 77f-7/04 . . moving together with a toy vehicle
- 77f-7/06 . . with feet formed by rotary members

77f-9/00 Special methods or materials for the manufacture of dolls, toy animals, toy figures, or parts thereof**Mechanically or gravity driven toy figures****77f-11/00 Self-movable toy figures**

- 77f-11/02 . moved by vibrations produced by rotating eccentric weights
- 77f-11/04 . Climbing figures moving up-and-down
- 77f-11/06 . Jumping toys
- 77f-11/08 . Toys performing somersaults
- 77f-11/10 . Figure toys with single- or multiple-axle undercarriages, by which the figures perform a realistic running motion when the toy is moving over the floor
- 77f-11/12 . . Wheeled toys with figures performing a wriggling motion when moving
- 77f-11/14 . Mechanically-moved walking figures balanced by gyrostatic effects
- 77f-11/16 . Toy animals with pairs of legs performing turtle-like motions

77f-13/00 Toy figures with self-moving parts, with or without movement of the toy as a whole

- 77f-13/02 . imitating natural actions, e.g. catching a mouse by a cat, the kicking of an animal
- 77f-13/04 . . Mechanical figures imitating the movement of players or workers
- 77f-13/06 . . . imitating boxing or fighting
- 77f-13/08 . . . able to perform military exercises
- 77f-13/10 . . . shooting arrows or other missiles
- 77f-13/12 . . . Gymnastic or acrobatic toy figures
- 77f-13/14 . . . Rope-jumping toy figures
- 77f-13/16 . Boxes from which figures jump
- 77f-13/18 . Toy swinging chairs; Rocking-figure toys
- 77f-13/20 . Toy roundabouts with moving figures; Toy models of fairs or the like, with moving figures

77f-15/00 Other gravity-operated toy figures

- 77f-15/02 . Figures staggering down an inclined path by means of the gravity effect
- 77f-15/04 . Toy figures swinging about a point above the centre of gravity
- 77f-15/06 . Self-righting toys
- 77f-15/08 . Tumbling toy figures operated by balls enclosed therein

Toy vehicles; Toy engines**77f-17/00 Toy vehicles, e.g. with self-drive; Accessories therefor**

- 77f-17/02 . convertible into other forms under the action of impact or shock, e.g. arrangements for imitating accidents
- 77f-17/04 . shaped as armoured cars, tanks or the like with spark-producing devices driven by a spring motor
- 77f-17/05 . Trucks; Lorries
- 77f-17/06 . . with tipping bodies
- 77f-17/08 . . carrying a mechanically-raised ladder
- 77f-17/10 . . carrying a tank for transporting liquids
- 77f-17/12 . Cranes; Winches; Like devices
- 77f-17/14 . Endless-track automobiles or trucks
- 77f-17/16 . in the form of a bicycle, with or without riders thereon
- 77f-17/18 . Tricycles, e.g. with moving figures
- 77f-17/20 . Motor-cycles running on a curved or winding path with movably-mounted pillion-riders swinging outwardly on curves

77f-17/22	. Scooters with driver figure propelled by their wheels or by movement of the figure
77f-17/24	. shaped as sledges, sleighs, or bobsleighs with or without figures
77f-17/25	. Other wheeled vehicles with moving figures
77f-17/26	. Details; Accessories (drive mechanisms 77f-29/00)
77f-17/28	. . Electric lighting systems
77f-17/30	. . Direction-indicators
77f-17/32	. . Acoustical, or optical signalling devices
77f-17/34	. . Arrangements for imitating the noise of motors
77f-17/36	. . Steering-mechanisms for toy vehicles
77f-17/38	. . . actuated by hand
77f-17/40	. . . Toy vehicles automatically steering or reversing by collision with an obstacle
77f-17/42	. . Automatic stopping or braking arrangements
77f-17/44	. . Toy garages for receiving toy vehicles; Filling stations
77f-18/00	Highways or trackways for toys (railway permanent way 77f-19/30; for special railways 77f-21/00); Propulsion by special interaction between vehicle and track
77f-18/02	. Construction or arrangement of the trackway
77f-18/04	. . Up-and-down-hill trackways (77f-18/06 takes precedence)
77f-18/06	. . designed to cause movement of a vehicle by alteration of the inclination of part of the trackway
77f-18/08	. with mechanical means for guiding or steering
77f-18/10	. with magnetic means for steering
77f-18/12	. Electric current supply to toy vehicles through the track
77f-18/14	. Drives arranged in the track, e.g. endless conveying means, magnets, driving-discs
77f-18/16	. Control of vehicle drives by interaction between vehicle and track; Control of track elements by vehicles
77f-19/00	Model railways (propulsion by special interaction between vehicle and track 77f-18/00)
77f-19/02	. Locomotives; Motor coaches
77f-19/04	. . spring-driven
77f-19/06	. . Steam-driven locomotives; Engines therefor
77f-19/08	. . . Boilers for locomotives
77f-19/10	. . electrically driven
77f-19/12	. . . with electric reversing gear
77f-19/14	. . Arrangements for imitating locomotive features, e.g. whistling, signalling, puffing
77f-19/15	. Special types of cars
77f-19/16	. Parts for model railway vehicles
77f-19/18	. . Car coupling or uncoupling mechanisms
77f-19/20	. . Illuminating arrangements
77f-19/22	. . Wheels; Wheel axles; Bogies
77f-19/24	. Electric toy railway systems therefor
77f-19/26	. . Toy vehicles with overhead trolley-wire; Trolley-buses
77f-19/28	. Mechanical toy railway systems
77f-19/30	. Permanent way; Rails; Rail-joint connections
77f-19/32	. . Switches or points; Operating means therefor
77f-19/34	. Bridges; Stations; Signalling systems
77f-19/36	. Model railway structures, e.g. kinds of arrangement of several units in containers, or on plates, or in combination with scenics for toy purposes
77f-21/00	Other toy railways
77f-21/02	. with cable- or rail-suspended vehicles
77f-21/04	. Mono-railways, e.g. with vehicles embracing the rail in the form of a saddle (77f-21/02 takes precedence)
77f-23/00	Toy boats; Floating toys
77f-23/02	. Boats; Sailing boats
77f-23/04	. . Self-propelled boats, ships or submarines
77f-23/06	. . . jet-propelled
77f-23/08	. Cartesian or other divers
77f-23/10	. Other water toys, floating toys, or like buoyant toys

- 77f-23/12 . . Waterborne toy projectiles; Knock-apart toys; Exploding ship toys
- 77f-23/14 . . Special drives
- 77f-23/16 . . Aquatic toy installations; Harbour arrangements
- 77f-25/00 Toy steam, gas, or compressed-air engines (for locomotives 77f-19/06)**
- 77f-25/02 . Distributing-gear
- 77f-27/00 Aeroplanes; Other flying toys (flying tops 77f-1/14)**
- 77f-27/02 . Model aircraft
- 77f-27/04 . Captive toy aircraft
- 77f-27/06 . Jet-propelled flying toys, e.g. aeroplanes (77f-27/04, 77f-27/12 take precedence)
- 77f-27/08 . Kites
- 77f-27/10 . Balloons
- 77f-27/12 . Helicopters (77f-27/04 takes precedence)
- 77f-27/14 . Starting or launching devices for toy aircraft; Arrangements on toy aircraft for starting or launching

Driving or controlling toys, e.g. toy vehicles

- 77f-29/00 Drive mechanisms for toys in general**
- 77f-29/02 . Clockwork mechanisms
- 77f-29/04 . . Helical-spring driving mechanisms
- 77f-29/06 . . Other elements therefor
- 77f-29/08 . Driving mechanisms actuated by balls or weights
- 77f-29/10 . Driving mechanisms actuated by flowing media
- 77f-29/12 . . by a sand stream
- 77f-29/14 . . by a water stream
- 77f-29/16 . . by steam or compressed air
- 77f-29/18 . Driving mechanisms with extensible rubber bands
- 77f-29/20 . Flywheel driving mechanisms
- 77f-29/22 . Electric drives
- 77f-29/24 . Details or accessories for drive mechanisms, e.g. means for winding-up or starting toy engines
- 77f-30/00 Remote-control arrangements specially adapted for toys, e.g. for toy vehicles**
- 77f-30/02 . Electrical arrangements
- 77f-30/04 . . using wireless transmission
- 77f-30/06 . Hydraulic or pneumatic arrangements
- 77f-31/00 Gearings for toys**
- 77f-31/02 . Screw-spindle mechanisms
- 77f-31/04 . Friction mechanisms
- 77f-31/06 . Belt or string gear
- 77f-31/08 . Gear-control mechanisms; Gears for imparting a reciprocating motion
- 77f-31/10 . Gearing mechanisms actuated by movable wires enclosed in flexible tubes
- 77f-33/00 Other toys**
- 77f-33/02 . Toy hoops; Sticks for propelling
- 77f-33/04 . Building blocks, strips, or similar building parts
- 77f-33/06 . . to be assembled without the use of additional elements
- 77f-33/08 . . . provided with complementary holes, grooves, or protuberances, e.g. dovetails
- 77f-33/10 . . to be assembled by means of additional non-adhesive elements
- 77f-33/12 . . . Perforated strips or the like assembled by rods, bolts, etc.
- 77f-33/14 . . specially adapted to be assembled by adhesive or cement
- 77f-33/16 . Models made by folding paper
- 77f-33/18 . Throwing or slinging toys (sporting devices 77a; as part of a game 77d-9/02; weapon-like devices 72b)
- 77f-33/20 . Toys with parachutes; Toy parachutes (parachutes for aeronautics 62c-21, 62c-22)
- 77f-33/22 . Optical, colour, or shadow toys
- 77f-33/24 . Automatically-moving toy figures which simulate drawing or writing, etc. (changeable or secret pictures 75d-5)
- 77f-33/26 . Magnetic or electric toys (electric drives 77f-29/22)

77f-33/28	. Soap-bubble toys; Smoke toys (blowing smoke rings 44b-13)
77f-33/30	. Imitations of miscellaneous apparatus not otherwise included, e.g. telephones, weighing-machines, cash-registers, savings boxes
77f-33/32	. Moulds, shapes, spades, etc., for playing with sand
77f-33/34	. Egg-laying toy animals
77f-33/36	. Sparking toys
77f-33/38	. Picture books
77f-33/40	. Windmills; Other toys actuated by air currents (driving mechanisms for toy figures or vehicles 77f-29/16)
77f-33/42	. Toy models or toy scenery not otherwise provided for
77f-35/00	Jokes; Confetti, streamers, or other dance favours; Cracker bonbons or the like

77g **Devices for theatres, panoramas and circuses (constructional aspects 37f), conjuring appliances, labyrinths, etc**

77g-1	Scenery, curtains, other decorations, means for moving thereof, scenic effects (theatres, constructional aspects of stages and seats, open-air stages; theatre arrangements, rotatable stages, lowerable stages 37f-1/01; fabrics for theatre decorations, for costumes, for curtains 86c; protection of theatre decorations, e.g. costumes and curtains of textiles against fire by impregnation: chemical part 8k-4, mechanical part 8a-27)
77g-2	Illuminating devices for special effects, projected decorations, etc. for theatres (electric incandescent lighting in general 21f-61/02, 21f-61/03; with electric discharge lamps 21f-87; with arc lamps 21f-9, 21f-10; stage switches 21c-38; other illumination 4b)
77g-3	Apparatus for raising or lowering persons on stages (35)
77g-4	Panoramas, dioramas or the like
77g-5	Equipment for circuses (construction of circuses 37f-1/01)
77g-6	Conjuring appliances; Auxiliary apparatus for conjurers
77g-7	Centrifugal slides (77e-16/01 – 77e-16/16)
77g-8	Labyrinths
77g-9/01	Peep-shows, kaleidoscopic or other opalescence exhibitions (77f-26; kaleidoscopes 42h-24)
77g-9/10	Apparatus for performing colour-music
77g-10	Puppet, marionette, or shadow shows or theatres, miscellaneous equipment for amusement shows not covered by 77g-1 – 77g-9/10 (42h-23/01 – 42h-23/29; 57a-33 – 57a-37/02; 77e-18/01 – 77e-18/20)

77g **(IPC: A63J) Devices for theatres, circuses, etc.; Conjuring appliances and the like**

77g-1/00	Stage arrangements (structural arrangements of stage or theatre 37f-1/01, 37f-3/22; fabrics for theatre decorations, for costumes, for curtains 86c)
77g-1/02	. Scenery; Curtains; Other decorations; Means for moving same
77g-3/00	Equipment for, or arrangement of, circuses or arenas (circus buildings 37f-1/01, 37f-3/10)
77g-5/00	Auxiliaries for producing special effects on stages, or in circuses or arenas
77g-5/02	. Arrangements for making stage effects; Auxiliary stage appliances
77g-5/04	. . Arrangements for making sound-effects
77g-5/06	. Illuminating devices for special effects
77g-5/08	. . Projected decorations
77g-5/10	. Arrangements for making visible or audible the words spoken
77g-5/12	. Apparatus for raising or lowering persons (elevators 35a)
77g-7/00	Auxiliary apparatus for artistes

77g-9/00	Centrifugal tracks, loop-the-loops, or the like (chutes for public amusement 77e-21/00)
77g-11/00	Labyrinths
77g-13/00	Panoramas, dioramas, stereoramas, or the like
77g-15/00	Peep-shows, e.g. raree-shows; Kaleidoscopic or other opalescence exhibitions (colour toys 77f-33/22; kaleidoscopes 42h-24)
77g-17/00	Apparatus for performing colour-music
77g-19/00	Puppet, marionette, or shadow shows or theatres
77g-21/00	Conjuring appliances; Auxiliary apparatus for conjurers
77g-23/00 77g-23/02	Equipment for amusement shows other than mentioned before . specially adapted for cinemas
77h	(IPC: A63K) Racing; Riding sports; Equipment or accessories therefor
77h-1/00 77h-1/02	Racecourses; Race-tracks . for greyhounds or other dogs
77h-3/00 77h-3/02 77h-3/04	Equipment or accessories for racing or riding sports . Starting-appliances (starting gates 43a-33) . Hurdles or the like