## COOPERATIVE PATENT CLASSIFICATION

### A HUMAN NECESSITIES

#### AGRICULTURE

#### A01 AGRICULTURE; FORESTRY; ANIMAL HUSBANDRY; HUNTING; TRAPPING; FISHING

#### A01K ANIMAL HUSBANDRY; CARE OF BIRDS, FISHES, INSECTS; FISHING; REARING OR BREEDING ANIMALS, NOT OTHERWISE PROVIDED FOR; NEW BREEDS OF ANIMALS

**NOTE**

This subclass covers:

- equipment for the care, culture or rearing of all animals, or for obtaining their products, unless provided for elsewhere, e.g. milking A01J, shoeing animals A01L, veterinary devices A61D, culture of animal cells C12M, C12N;
- methods of breeding animals or new animal breeds.

**WARNING**

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.

**Animal husbandry in general, especially cattle-raising** (devices in connection with harnesses B68B)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>1/00</td>
<td>Housing animals; Equipment therefor</td>
</tr>
<tr>
<td>1/0005</td>
<td>[Stable partitions (devices for fastening animals A01K 1/00; pasturing enclosures A01K 3/00)]</td>
</tr>
<tr>
<td>1/0011</td>
<td>{Cubicle partitions}</td>
</tr>
<tr>
<td>1/0017</td>
<td>{Gates, doors}</td>
</tr>
<tr>
<td>1/0023</td>
<td>{Sorting gates}</td>
</tr>
<tr>
<td>1/0029</td>
<td>{Crowding gates or barriers}</td>
</tr>
<tr>
<td>1/0035</td>
<td>{Transportable or mobile animal shelters}</td>
</tr>
<tr>
<td>1/0041</td>
<td>{Rotary, round or circular animal barns}</td>
</tr>
<tr>
<td>1/0047</td>
<td>{Air-conditioning, e.g. ventilation, of animal housings}</td>
</tr>
<tr>
<td>1/0052</td>
<td>{Arrangement of fans or blowers}</td>
</tr>
<tr>
<td>1/0058</td>
<td>{Construction of air inlets or outlets in roofs}</td>
</tr>
<tr>
<td>1/0064</td>
<td>{Construction of air inlets or outlets in walls}</td>
</tr>
<tr>
<td>1/007</td>
<td>{Arrangement of curtain systems}</td>
</tr>
<tr>
<td>1/0076</td>
<td>{Arrangement of heaters or heat exchangers}</td>
</tr>
<tr>
<td>1/0082</td>
<td>{Water misting or cooling systems}</td>
</tr>
<tr>
<td>1/0088</td>
<td>{Animal shelters especially adapted for keeping young cattle, i.e. calves}</td>
</tr>
<tr>
<td>1/0094</td>
<td>{Animal shelters or barns especially adapted for keeping horses}</td>
</tr>
<tr>
<td>1/01</td>
<td>Removal of dung or urine, {e.g. from stables (A01K 1/015 takes precedence; from poultry houses A01K 31/04)}</td>
</tr>
<tr>
<td>1/0103</td>
<td>{of liquid manure (treating manure A01C 3/00; treatment of water, waste water, sewage or sludge C02F)}</td>
</tr>
<tr>
<td>1/0107</td>
<td>{Cat trays; Dog urinals; Toilets for pets}</td>
</tr>
<tr>
<td>1/011</td>
<td>[with means for removing excrement (A01K 1/0114 and A01K 1/0117 take precedence)]</td>
</tr>
<tr>
<td>1/0114</td>
<td>{Litter boxes with screens for separating excrement from litter}</td>
</tr>
<tr>
<td>1/0117</td>
<td>{with conveying belts for removing excrement}</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/0121</td>
<td>{adapted to fit on conventional toilets}</td>
</tr>
<tr>
<td>1/0125</td>
<td>{Foldable or collapsible litter boxes}</td>
</tr>
<tr>
<td>1/0128</td>
<td>{by means of scrapers or the like moving continuously}</td>
</tr>
<tr>
<td>1/0132</td>
<td>{by means of scrapers or the like moving to-and-fro or step-by-step}</td>
</tr>
<tr>
<td>1/0135</td>
<td>{by means of conveyor belts}</td>
</tr>
<tr>
<td>1/0139</td>
<td>{by means of screw conveyors}</td>
</tr>
<tr>
<td>1/0142</td>
<td>{by means of a moving piston}</td>
</tr>
<tr>
<td>1/0146</td>
<td>{by means of manure-loaders, manure-ramps or manure-elevators associated with in-house removal systems (independent manure-loaders A01C 3/04)}</td>
</tr>
<tr>
<td>1/015</td>
<td>Floor coverings, e.g. bedding-down sheets {; Stable floors}</td>
</tr>
<tr>
<td>1/0151</td>
<td>{Grids; Gratings; Slatted floors}</td>
</tr>
<tr>
<td>1/0152</td>
<td>{Litter}</td>
</tr>
<tr>
<td>1/0154</td>
<td>{comprising inorganic material}</td>
</tr>
<tr>
<td>1/0155</td>
<td>{comprising organic material}</td>
</tr>
<tr>
<td>1/0157</td>
<td>{Mats; Sheets}</td>
</tr>
<tr>
<td>1/0158</td>
<td>{Floor heating or cooling systems}</td>
</tr>
<tr>
<td>1/02</td>
<td>Pigsties; Dog-kennels; Rabbit-hutches or the like</td>
</tr>
<tr>
<td>1/0209</td>
<td>{Feeding pens for pigs or cattle}</td>
</tr>
<tr>
<td>1/0218</td>
<td>{Farrowing or weaning crates}</td>
</tr>
<tr>
<td>1/0227</td>
<td>{Battery cages for piglets}</td>
</tr>
<tr>
<td>1/0236</td>
<td>{Transport boxes, bags, cages, baskets, harnesses for animals; Fittings therefor (for poultry A01K 31/02; for pigeons A01K 31/07)}</td>
</tr>
<tr>
<td>1/0245</td>
<td>{Boxes or cages}</td>
</tr>
<tr>
<td>1/0254</td>
<td>{Bags or baskets}</td>
</tr>
<tr>
<td>1/0263</td>
<td>{Harnesses}</td>
</tr>
<tr>
<td>1/0272</td>
<td>{Boxes, bags, cages, baskets, harnesses especially adapted for transport in or on automobiles}</td>
</tr>
</tbody>
</table>
Animal husbandry in general, especially cattle-raising

5/00 Feeding devices for stock or game \((A01K 1/10\) takes precedence); feeding devices for poultry or other birds \(A01K 39/00\); \{Feeding wagons; Feeding stacks\)

5/001 \{Fodder distributors with mixer or shredder (adaptations of cutting machine \(A01F 29/00\))\}

5/002 \{with mixing or shredding element rotating on horizontal axis\}

5/004 \{with mixing or shredding element rotating on vertical axis\}

5/005 \{where fodder, e.g. bales, is conveyed by conveyor or slide to mixing or shredding elements on transversal and horizontal axes\}

5/007 \{with mixing or shredding area contained inside an endless chain or belt conveyor\}

5/008 \{Feed bags\}

5/01 Feed troughs; Feed pails \((A01K 1/10\) takes precedence)\)

5/0107 \{Transportable fodder pails or troughs\}

5/0114 \{Pet food dispensers; Pet food trays (time-controlled \(A01K 5/0291)\)\}

5/0121 \{Disposable pet feeders\}

5/0128 \{Pet feeders including liners; liners therefor; Means for holding liners to pet feeders\}

5/0135 \{with means for preventing or catching spillage\}

5/0142 \{with means for preventing other animals or insects from eating\}

5/015 Licking-stone holders \{Other dispensers for minerals\}

5/02 Automatic devices \{automatic identification devices for stock \(A01K 11/006)\)

5/0208 \{with conveyor belts or the like\}

5/0216 \{for the distribution of liquid fodder \(A01K 9/00\) takes precedence\)

5/0225 \{Gravity replenishment from a reserve, e.g. a hopper \(for poultry \(A01K 39/012)\)\)

5/0233 \{dispensing by dosing means actively operated by the animal\}

5/0241 \{dispensing by means of stirring mechanisms or agitators operated by the animal\}

5/025 \{with doors or lids activated by the animals to access feeding place or trough\}

5/0258 \{with endless screws\}

5/0266 \{with stable trolleys, e.g. suspended\}

5/0275 \{with mechanisms for delivery of measured doses \(A01K 5/0233\) takes precedence\}

5/0283 \{by weight\}

5/0291 \{with timing mechanisms, e.g. pet feeders\}

7/00 Watering equipment for stock or game

7/005 \{Drinking bowls with anti-splash or anti-spilling features\}

7/02 Automatic devices \{Medication dispensers\}

7/022 \{Pumps actuated by the drinking animal\}

7/025 \{Water tanks\}

7/027 \{Drinking equipment with water heaters, coolers or means for preventing freezing\}

7/04 \{actuated by float\}

7/06 \{actuated by the animal \(for poultry \(A01K 39/0213)\)\}

9/00 Sucking apparatus for young stock \{Devices for mixing solid food with liquids\}

9/005 \{Teats or nipples (teats for feeding bottles for humans \(A61J 11/00)\)\}

11/00 Marking of animals \{marking poultry or other birds \(A01K 35/00)\)

11/001 \{Ear-tags\}

11/002 \{Pliers specially adapted for fixing ear-tags to ears\}

11/003 \{with means for taking tissue samples, e.g. for DNA analysis\}

11/004 \{with electronic identification means, e.g. transponders\}

11/005 \{Branding or tattooing devices for animals\}
Animal husbandry in general, especially cattle-raising

11/006 . (Automatic identification systems for animals, e.g. electronic devices, transponders for animals (identification systems for access to feeding pens A01K 1/0209; ear tags with electronic identification means A01K 11/004))

11/007 . (Boluses)

11/008 . (incorporating GPS)

13/00 Devices for grooming or caring of animals, e.g. curry-combs; Fetlock rings; Tail-holders (as part of the harness B68B 5/04); Devices for preventing crib-biting; Washing devices; Protection against weather conditions or insects

13/001 . (Washing, cleaning, or drying devices (for veterinary purposes A61D 7/00; A61D 11/00))

13/002 . (Curry-combs; Brushes (shearing sheep B26B 19/24))

13/003 . (Devices for applying insecticides or medication (A01K 27/007 takes precedence; for veterinary purposes A61D 7/00))

13/004 . (Rubbing-posts)

13/005 . (Tail-holders)

13/006 . (Protective coverings (Elastic soles or covers for hoofs A01L 5/00, A01L 7/02; for veterinary purposes A61D))

13/007 . (Leg, hoof or foot protectors)

13/008 . (Horse blankets)

14/00 Removing the fleece from live sheep or similar animals (hand-held clippers or shavers with a plurality of cutting edges, specially adapted for shearing animals, e.g. sheep, B26B 19/24)

15/00 Devices for taming animals, e.g. nose-rings or hobbles; Devices for overturning animals in general; Training or exercising equipment; Covering boxes

15/003 . (Nose-rings; Fastening tools therefor; Catching or driving equipment)

15/006 . (Devices for impeding passage of animals under fences, preventing butting or the like)

15/02 . Training or exercising equipment, e.g. mazes or labyrinths for animals (A01K 15/04 takes precedence) ; Electric shock devices (circuits therefor H03K 3/537); Toys specially adapted for animals)

15/021 . (Electronic training devices specially adapted for dogs or cats)

15/022 . (Anti-barking devices)

15/023 . (Anti-evasion devices)

15/024 . (Scratching devices, e.g. for cats)

15/025 . (Toys specially adapted for animals)

15/026 . (Chewable toys, e.g. for dental care of pets)

15/027 . (Exercising equipment, e.g. tread mills, carousels (equipment for racing or riding sports events A63K))

15/028 . (Cow trainers)

15/029 . (Electric or similar shock devices, e.g. prods)

15/04 . Devices for impeding movement; Devices for impeding passage through fencing; Anti-hobbling devices (impeding passage under fences A01K 15/006)

17/00 Dehorners; Horn trainers

19/00 Weaning apparatus

21/00 Devices for assisting or preventing mating

23/00 Manure or urine pouches

23/005 . (Manure or urine collecting devices used independently from the animal, i.e. not worn by the animal but operated by a person)

25/00 Muzzles

27/00 Leads or collars, e.g. for dogs

27/001 . (Collars)

27/002 . (Harnesses)

27/003 . (Leads, leashes)

27/004 . (Retractable leashes)

27/005 . (Quick-couplings, safety-couplings or shock-absorbing devices between leash and collar)

27/006 . (with light-emitting or ornamental devices)

27/007 . (with insecticide-dispensing means)

27/008 . (with pockets or similar for carrying accessories)

27/009 . (with electric-shock, sound, magnetic- or radio-waves emitting devices)

29/00 Other apparatus for animal husbandry

29/005 . (Monitoring or measuring activity, e.g. detecting heat or mating)

Aviculture: Testing, cleaning, stamping or grading eggs

31/00 Housing birds

31/002 . (Poultry cages, e.g. transport boxes (Harvesting or transport of poultry A01K 45/005))

31/005 . (Battery breeding cages, with or without auxiliary features, e.g. feeding, watering, demanuring, heating, ventilation)

31/007 . (Floors (for stables A01K 1/015))

31/02 . Door appliances; Automatic door-openers

31/04 . Dropping-boards; Devices for removing excrement

31/06 . Cages (, e.g. for singing birds (for poultry A01K 31/002))

31/07 . Transportable cages (A01K 31/08 takes precedence) ; Travelling cages for pigeons; Opening or closing of cages)

31/08 . Collapsible cages

31/10 . Doors; Trap-doors

31/12 . Perches (for poultry or birds, e.g. roosts)

31/14 . Nest-boxes (, e.g. for singing birds or the like)

31/16 . Laying nests for poultry; Egg collecting

31/165 . (Egg collecting or counting)

31/17 . Laying batteries (including auxiliary features, e.g. feeding, watering, demanuring, heating, ventilation)

31/18 . Chicken coops or houses (for baby chicks); Brooders (including auxiliary features, e.g. feeding, watering, demanuring, heating, ventilation (battery breeding cages A01K 31/005))

31/19 . Brooders (; Foster-mothers; Hovers)

31/20 . Heating arrangements (; Ventilation)

31/22 . Poultry runs (; Poultry houses, including auxiliary features, e.g. feeding, watering, demanuring (air-conditioning of poultry runs or houses A01K 120047))

31/24 . Dovecots; Pigeon lofts

33/00 Nest-eggs
Aviculture; Testing, cleaning, stamping or grading eggs

49/00 Appliances for treating beehives or parts thereof, e.g. for cleaning or disinfecting

53/00 Feeding or drinking appliances for bees

55/00 Bee-smokers; Bee-keepers' accessories, e.g. veils

57/00 Appliances for providing, preventing or catching swarms; Drone-catching devices

59/00 Honey collection

59/02 Devices for uncapping honeycombs

59/04 Honey strainers; Strainers with centrifuges or presses

59/06 Devices for extracting wax

Pisciculture; Aquaria; Terraria

61/00 Culture of aquatic animals (receptacles for live fish, e.g. aquaria, A01K 63/00)

61/10 . . of fish

61/13 . . Prevention or treatment of fish diseases

61/17 . . Hatching, e.g. incubators

61/20 . . of zooplankton, e.g. water fleas or Rotatoria

61/30 . . of sponges, sea urchins or sea cucumbers

61/40 . . of annelids, e.g. lugworms or Eunice

61/50 . . of shellfish (A01K 61/30; A01K 61/40 take precedence)

61/51 . . of gastropods, e.g. abalones or turban snails

61/53 . . . Baskets therefor

61/54 . . . of bivalves, e.g. oysters or mussels

61/55 . . . Baskets therefor

61/56 . . . for pearl production

61/57 . . . . . Pearl seeds

61/59 . . . of crustaceans, e.g. lobsters or shrimps

61/60 . . Floating cultivation devices, e.g. rafts or floating fish-farms

61/65 . . Connecting or mooring devices therefor

61/70 . . Artificial fishing banks or reefs

61/72 . . made of tyres

61/73 . . . assembled of components (A01K 61/72 takes precedence)

61/75 . . floating (A01K 61/72 takes precedence)

61/77 . . . of monolithic form, e.g. blocks

61/78 . . . Arrangements for sinking or mooring thereof

61/80 . . Feeding devices

61/85 . . . for use with aquaria

61/90 . . Sorting, grading, counting or marking live aquatic animals, e.g. sex determination

61/95 . . . specially adapted for fish

63/00 Receptacles for live fish, e.g. aquaria (keepnets or other containers for keeping captured fish A01K 97/20; Terraria

63/003 . . . [Aquaria; Terraria (A01K 63/04; A01K 63/06 take precedence)]

63/006 . . . [Accessories for aquaria or terraria]

63/002 . . . Receptacles specially adapted for aquaria or terraria

63/04 . . . Arrangements for treating water specially adapted to receptacles for live fish

63/042 . . . [Introducing gases into the water, e.g. aerators, air pumps]

63/045 . . . [Filters for aquaria]

63/047 . . . [Liquid pumps for aquaria (air pumps for aquaria A01K 63/042)]

Apiculture (rearing insects in general A01K 67/00)

47/00 Bees

47/02 . . . Construction or arrangement of frames for honeycombs

47/04 . . . Artificial honeycombs

47/06 . . . Other details of beehives, e.g. ventilating devices, entrances to hives, guards, partitions or bee escapes

49/00 Rearing-boxes; Queen transporting or introducing cages
63/06 Arrangements for heating or lighting in, or attached to, receptacles for live fish
63/065 [Heating or cooling devices]
63/10 Cleaning bottoms or walls of ponds or receptacles

**Fish stringers** ([devices for threading fish on strings A22C 25/10])

67/00 Rearing or breeding animals, not otherwise provided for; New breeds of animals

**NOTE**
In this group the following term is used with the meaning indicated:
- "breeding" means obtaining animals up to and including their birth or hatching.

67/02 Breeding vertebrates

**NOTE**
(Documents relating to new peptides or new DNA or its corresponding mRNA encoding for peptides, and their use for the obtention of transgenic animals, are classified in subclass C07K or in group C12N 9/00 according to the peptides, with the appropriate indexing codes)

67/027 New breeds of vertebrates

**NOTE**
In group A01K 67/027, it is desirable to add the indexing codes of A01K 22227/00 and subgroups relating to animals characterised by species. In group A01K 67/027 it is desirable to add the indexing codes of A01K 2267/00 and subgroups relating to animals characterised by their purpose

67/0271 [Chimeric animals, e.g. comprising exogenous cells]
67/0273 [Cloned animals]
67/0275 [Genetically modified vertebrates, e.g. transgenic]
67/0276 [Knockout animals]
67/0278 [Humanized animals, e.g. knockin]
67/033 Rearing or breeding invertebrates; New breeds of invertebrates

**NOTE**
In group A01K 67/033, it is desirable to add the indexing codes relating to transgenic animals. In group A01K 67/033, it is desirable to add the indexing codes relating to animals characterised by their purpose

67/0331 [Snails (A01K 67/0333 takes precedence)]
67/0332 [Earthworms (A01K 67/0333 takes precedence)]
67/0333 [Genetically modified invertebrates, e.g. transgenic, polyploid]
67/0334 [Genetically modified molluscs]
67/0335 [Genetically modified worms]
67/0336 [Genetically modified nematodes, e.g. Caenorhabditis elegans]
67/0337 [Genetically modified arthropods]
67/0338 [Genetically modified crustaceans]
67/0339 [Genetically modified insects, e.g. Drosophila melanogaster, medfly]

67/04 Silkworms ([A01K 67/0333 takes precedence])

**Fishing** (fish stringers A01K 65/00)

69/00 Stationary catching devices
69/02 Fixed nets without traps
69/04 Fixed nets with traps
69/06 Traps
69/08 Rigid traps, e.g. lobster pots
69/10 Collapsible traps

71/00 Floating nets ([if drawn A01K 73/00])

73/00 Drawn nets
73/02 Trawling nets
73/025 (Regulation of net depth)
73/04 Devices for spreading or positioning, e.g. control thereof
73/045 For lateral sheering, e.g. trawl boards
73/05 For vertical sheering
73/053 Ground-line rollers
73/06 Hauling devices for the headlines { also for nets; Winches (A01K 73/12 takes precedence)}
73/10 Determining the quantity of the catch, e.g. by the pull or drag on the lines
73/12 Nets held vertically in the water, e.g. seines

74/00 Other catching nets or the like

75/00 Accessories for nets; Details of nets, e.g. structure
75/02 Illuminating devices for nets
75/04 Floats
75/06 Sinkers

77/00 Landing-nets; Landing-spoons

79/00 Methods or means of catching fish in bulk not provided for in groups A01K 69/00 - A01K 77/00, {e.g. fish pumps; Detection of fish; Whale fishery}
79/02 by electrocution { Attracting or stunning fish; Scaring sharks}

80/00 Harvesting oysters, mussels, sponges or the like

81/00 Fishing with projectiles (weapons, projectiles other than fish-spears F41L, F42)
81/04 Fish-spears
81/06 Equipment for hunting fish under water (swimming equipment A63B 31/00 - A63B 35/00)

**Angling**

83/00 Fish-hooks ([making fish-hooks B21F 45/12])
83/02 Expanding fish-hook assembly
83/04 with special gripping arms
83/06 Devices for holding bait on hooks { (baiting trotlines A01K 91/18; non-living bait A01K 97/045)}

85/00 Artificial baits, i.e. Lures
85/005 [without hooks]
85/01 with light emission, sound emission, scent dispersal or the like
85/02 with means for concealing or protecting hooks, e.g. to prevent entanglement with weeds
85/08 Artificial flies
85/10 with at least one flat rotating body having its axis of rotation substantially non-coincident with the longitudinal axis of the body {, e.g. spinners}
Angling

89/012 . . . comprising a body rotating around its longitudinal axis, e.g. devons
89/014 . . . with flat, or substantially flat, undulating bodies, e.g. spoons
89/016 . . . with other than flat, or substantially flat, undulating bodies, e.g. plugs
89/018 . . . in two or more pieces

87/00 Rods
87/002 . . . { with the line passing through the hollow rod }
87/005 . . . { comprising internal line guides }
87/007 . . . { with built-in accessories, e.g. lighting means or measuring devices }
87/004 . . . Fishing-line guides on rods {, e.g. tips (internal line guides A01K 87/005) }
87/006 . . . Devices for fixing reels on rods
87/008 . . . Handgrips
87/0085 . . . { Heating devices or other means to protect against the cold }

89/00 Reels
89/003 . . . { Devices for transferring line to a reel }
89/004 . . . { Alternate right or left side drives }
89/006 . . . { Hand crank features }
89/009 . . . { Collapsible or extensible }
89/01 . . . with pick-up, i.e. with the guiding member rotating and the spool not rotating during normal retrieval of the line { (A01K 89/0127 takes precedence) }
89/0102 . . . { with a closed face }
89/01025 . . . { with line snubber shifted by a remote actuator }
89/01026 . . . { with line snubber shifted by a remote actuator }
89/01029 . . . { with guiding members shifted radially }
89/0105 . . . { Multi-speed mechanisms }
89/0106 . . . { Ratchet-type drives }
89/0108 . . . { Pick-up details }
89/01081 . . . { Guiding members on rotor axially rearward of spool }
89/01082 . . . { Guiding members shiftable on rotor }
89/01083 . . . { to wind position by rotor drive }
89/01084 . . . { Guiding members shifted to unwind position by discrete manual operators }
89/01085 . . . { Guiding members on rotor forward of spool (A01K 89/0102 takes precedence) }
89/01086 . . . { with rotor drive shifting the guiding member to unwind and wind positions }
89/01087 . . . { with manual actuator to shift guiding member to unwind position }
89/01088 . . . { Actuators forward of spool }
89/0111 . . . { Spool details }
89/01121 . . . { Frame details }
89/011221 . . . { with line or water shields }
89/011222 . . . { with lubrication features }
89/011223 . . . { with bearing features }
89/01123 . . . { Frame disassembly features }
89/01124 . . . { Hinged frame sections }
89/01125 . . . { Rotated joints }
89/01126 . . . { Threaded }
89/01127 . . . { Reel supports }
89/0113 . . . { Spool locking devices on spool shaft }
89/0114 . . . { Reciprocating mechanisms }
89/01141 . . . { including eccentric cams reciprocating the spool }
89/01142 . . . { for reciprocating the guiding member }
89/01143 . . . { Reversely threaded screws }
89/0117 . . . { Anti-reverse mechanisms }
89/0118 . . . { defining home position of reel part }
89/012 . . . motor-driven
89/0121 . . . { Spring motors }
89/0122 . . . { with unwinding indicators, e.g. bell or flashing light }
89/0123 . . . { Clicking indicators, e.g. flexible light or flashing }
89/0124 . . . { Spring biased pawls }
89/0125 . . . { Plural spring sections }
89/0126 . . . { with line unwinding limiters }
89/015 . . . { with a [a] rotary drum {, i.e. with a rotating spool (A01K 89/033 takes precedence) }
89/0155 . . . { Anti backlash devices }
89/01555 . . . { using magnets }
89/01556 . . . { Line tension responsive actuators }
89/01557 . . . { Centrifugal }
89/016 . . . { Fly reels {, i.e. with a stub shaft support }
89/0162 . . . { with a releasable latch to retain spool on shaft }
89/0165 . . . { for trolling }
89/017 . . . { motor-driven }
89/0171 . . . { Spring motors }
89/0172 . . . { actuated in response to pull on line }
89/0173 . . . { with independent manual drive }
89/0174 . . . { with spring chargers }
89/0175 . . . { Axial unwinding }
89/0176 . . . { with guide shiftable between wind and unwind positions }
89/0178 . . . { with unwinding indicators, e.g. a bell or a flashing light }
89/0179 . . . { Clicking indicators, e.g. a bell or a flashing light }
89/018 . . . { Spring biased pawls }
89/0181 . . . { Plural spring sections }
89/0182 . . . { with line unwinding limiters }
89/0183 . . . { Drive mechanism details }
89/0184 . . . { Multiple drive ratio }
89/0185 . . . { Ratchet-type drive }
89/0186 . . . { with disengageable positive drive components, e.g. a clutch }
89/0187 . . . { having alternative yieldable mechanism }
89/0188 . . . { Axially engaged }
89/0189 . . . { Coaxial of spool }
89/01901 . . . { Reengageable responsive to drive rotation }
89/01902 . . . { Gear pair }
89/01903 . . . { with yieldable drive coupling, e.g. friction or fluid clutch }
89/01904 . . . { adjustable by crank manipulation }
89/01905 . . . { adjustable within distinct ranges }
89/01906 . . . { between drive shaft and crank }
89/01907 . . . { between drive shaft and gear }
89/01908 . . . { Coaxial with spool }
89/01909 . . . { Axially applied }
89/0191 . . . { by centre pin }
89/01911 . . . { with feed roller }
89/01912 . . . { with level winding }
89/019125 . . . { Line shifts along a rotatable cam bar }
Angling

Lines

91/02 . Devices for casting lines
91/03 . Connecting devices (devices for fixing on or removing sinkers from lines A01K 95/02)
91/04 . for connecting lines to hooks or lures
91/047 . for connecting lines to lines
91/053 . Fishing booms, i.e. connecting devices spreading out the leaders, e.g. to avoid tangling thereof

91/06 . Apparatus on lines not otherwise provided for, e.g. automatic hookers
91/065 . [Jiggling devices, i.e. devices for moving the lure]
91/08 . Trolling devices
91/10 . for automatic hook setting
91/12 . Fly lines
91/14 . Leaders
91/16 . for fly fishing
91/18 . Trotlines, longlines; Accessories therefor, e.g. baiting devices, lifters or setting reeles
91/20 . Line length or depth measuring devices

93/00 Floats for angling, with or without signalling devices
93/02 . with signalling devices
95/00 Sinkers for angling (for trowing A01K 75/06)
95/005 . [Sinkers not containing lead]
95/02 . Devices for fixing on or removing sinkers from lines

97/00 Accessories for angling (fish stringers A01K 65/00; landing-nets or landing-spoons for fishing A01K 77/00) ; [fish finder G01S 15/96]
97/01 . for ice-fishing ; Ice drilling, hook-setting or signalling devices
97/02 . Devices for laying ground-bait, e.g. chum dispensers, e.g. also for throwing ground-bait
97/04 . Containers for bait; Preparation of bait
97/045 . [Preparation of bait; Ingredients]
97/05 . Containers for live bait kept in water, e.g. for minnows or shrimps
97/06 . Containers or holders for hooks, lines, sinkers, flies or the like
97/08 . Containers for rods
97/10 . Supports for rods
97/11 . with automatic hooking devices
97/12 . Signalling devices, e.g. tip-up devices (A01K 91/06 takes precedence ; for floats A01K 93/02; for ice-fising A01K 97/01; for supports A01K 97/10)
97/125 . [using electronic components]
97/14 . Gaffs
97/16 . Devices for drying fishing lines
97/18 . for removing fish-hooks from the fish
97/20 . Keepnets or other containers for keeping captured fish (A01K 97/05 takes precedence)
97/22 . Platforms or seat-boxes specially adapted for angling, e.g. tackle boxes for use as seats
97/24 . Arrangements for disengaging fish-hooks from obstacles
97/26 . Fly tying devices
97/28 . Vices specially adapted therefor

99/00 Methods or apparatus for fishing not provided for in groups A01K 69/00 - A01K 97/00

2207/00 Modified animals
2207/05 . Animals modified by non-integrating nucleic acids, e.g. antisense, RNAi, morpholino, episomal vector, for non-therapeutic purpose
2207/10 . Animals modified by protein administration, for non-therapeutic purpose
### 2207/00 Animals modified by administration of exogenous cells

- **Animals modified by administration of exogenous cells**
- **Humanized animals**

**NOTE**

This group covers animals comprising human nucleic acids, proteins or cells. Classification in this group should be done in combination with A01K 2217/00 codes.

### 2207/20 Animals treated with compounds which are neither proteins nor nucleic acids

- **Animals on a special diet**
- **Animals modified by surgical methods**

### 2207/30 Animals modified by environmental factors, e.g. temperature, O₂

### 2217/00 Genetically modified animals

- **Animals modified by random mutagenesis, e.g. using ENU, chemicals**
- **Animals comprising random inserted nucleic acids (transgenic)**
  - **... inducing gain of function**
  - **... inducing loss of function**
  - **... due to mutation of coding region of the transgene (dominant negative)**
  - **... due to expression of inhibitory nucleic acid, e.g. siRNA, antisense**
- **Animals genetically altered by homologous recombination**
  - **... maintaining or altering function, i.e. knock in**
  - **... inducing loss of function, i.e. knock out**
  - **... heterozygous knock out animals displaying phenotype**
- **Animals comprising multiple alterations of the genome, by transgenesis or homologous recombination, e.g. obtained by cross-breeding**
- **Animal model comprising regulated expression system**
  - **... Animal model comprising inducible/conditional expression system, e.g. hormones, tet**
  - **... Animal model comprising tissue-specific expression system, e.g. tissue specific expression of transgene, of Cre recombinase**
- **Animal model comprising expression system for selective cell killing, e.g. toxins, enzyme dependent prodrug therapy using ganciclovir**

### 2227/00 Animals characterised by species

- **Mammal**
- **Bovine**
- **Caprine**
- **Ovine**
- **Murine**
- **Primate**
- **Rabbit**
- **Swine**
- **Bird**
- **Fish**
- **Amphibians, e.g. Xenopus**
- **Invertebrates**
- **Worms, e.g. Caenorhabditis elegans**
- **Insects, e.g. Drosophila melanogaster, medfly**

### 2267/00 Animals characterised by purpose