SECTION A — HUMAN NECESSITIES

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

A01B SOIL WORKING IN AGRICULTURE OR FORESTRY; PARTS, DETAILS, OR ACCESSORIES OF AGRICULTURAL MACHINES OR IMPLEMENTS, IN GENERAL

(making or covering furrows or holes for sowing, planting or manuring A01C 5/00; machines for harvesting root crops A01D; mowers convertible to soil working apparatus or capable of soil working A01D 42/04; mowers combined with soil working implements A01D 43/12; soil working for engineering purposes E01, E02, E21)

Subclass index

HAND TOOLS.....1/00
PLOUGHS
General construction.....3/00, 5/00, 9/00, 11/00
Special adaptations.....13/00, 17/00
Details.....15/00
HARROWS
General construction.....19/00, 21/00
Special applications.....25/00
Details.....23/00
IMPLEMENTS USABLE EITHER AS PLOUGHS OR AS HARROWS OR THE LIKE.....7/00
OTHER MACHINES.....27/00-45/00, 49/00, 77/00
ELEMENTS OR PARTS OF MACHINES OR IMPLEMENTS.....59/00-71/00
TRANSPORT IN AGRICULTURE.....51/00, 73/00, 75/00
OTHER PARTS, DETAILS OR ACCESSORIES OF AGRICULTURAL MACHINES OR IMPLEMENTS..76/00
PARTICULAR METHODS FOR WORKING SOIL.....47/00, 79/00

1/00 **Hand tools** (edge trimmers for lawns A01G 3/06)
1/02 • Spades; Shovels
1/04 • • with teeth
1/06 • Hoes; Hand cultivators
1/08 • • with a single blade
1/10 • • with two or more blades
1/12 • • with blades provided with teeth
1/14 • • with teeth only
1/16 • Tools for uprooting weeds
1/18 • • Tong-like tools
1/20 • Combinations of different kinds of hand tools
1/22 • Attaching the blades or the like to handles (handles for tools, or their attachment, in general B25G); Interchangeable or adjustable blades
1/24 • for treating meadows or lawns **[2]**

Ploughs

3/00 **Ploughs with fixed plough-shares**
3/02 • Man-driven ploughs
3/04 • Animal-drawn ploughs
3/06 • • without alternating possibility, i.e. incapable of making an adjacent furrow on return journey
3/08 • • • Swing ploughs
3/10 • • • Trussed-beam ploughs; Single-wheel ploughs
3/12 • • • Two-wheel beam ploughs
3/14 • • • Frame ploughs
3/16 • • Alternating ploughs, i.e. capable of making an adjacent furrow on return journey
3/18 • • • Turn-wrest ploughs
3/20 • • • Balance ploughs
3/22 • • • with parallel plough units used alternately
3/24 • Tractor-drawn ploughs (A01B 3/04 takes precedence)
3/26 • • without alternating possibility
3/28 • • Alternating ploughs
3/30 • • • Turn-wrest ploughs
3/32 • • • Balance ploughs
3/34 • • • with parallel plough units used alternately
3/36 • Ploughs mounted on tractors
3/38 • • without alternating possibility
3/40 • • Alternating ploughs
3/42 • • • Turn-wrest ploughs
3/421 • • • • with a headstock frame made in one piece **[2]**
3/426 • • • • with a headstock frame made of two or more parts **[2]**
3/44 • • • with parallel plough units used alternately
3/46 • Ploughs supported partly by tractor and partly by their own wheels
3/50 • Self-propelled ploughs
3/52 • • with three or more wheels, or endless tracks
3/54 • • • without alternating possibility
3/56 • • • Alternating ploughs
3/58 • • with two wheels
3/60 • • • Alternating ploughs
3/62 • • • • Balance ploughs
3/64 • Cable ploughs; Indicating or signalling devices for cable plough systems
3/66 • • with motor-driven winding apparatus mounted on the plough

3/68 • • Cable systems with one or two engines
3/70 • • • Systems with one engine for working uphill
3/72 • • Means for anchoring the cables
3/74 • Use of electric power for propelling ploughs (electric current collectors B60L 5/00)

5/00 Ploughs with rolling non-driven tools, e.g. discs (with rotary driven tools A01B 9/00)
5/02 • drawn by animals
5/04 • drawn by tractors
5/06 • • without alternating possibility
5/08 • • Alternating ploughs
5/10 • mounted or partly-mounted on tractors
5/12 • • without alternating possibility
5/14 • • Alternating ploughs
5/16 • Self-propelled disc or like ploughs

7/00 Disc-like soil-working implements usable either as ploughs or as harrows, or the like

9/00 Ploughs with rotary driven tools (tilling implements with rotary driven tools A01B 33/00)

11/00 Ploughs with oscillating, digging or piercing tools

13/00 Ploughs or like machines for special purposes (for drainage E02B 11/02)
13/02 • for making or working ridges, e.g. with symmetrically arranged mouldboards
13/04 • for working in vineyards, orchards, or the like
13/06 • • Arrangements for preventing damage to the vines, or the like
13/08 • for working subsoil
13/10 • • Special implements for lifting subsoil layers
13/12 • • • Means for distributing the layers on the surface
13/14 • for working soil in two or more layers
13/16 • Machines for combating erosion, e.g. basin-diggers, furrow-dammers

15/00 Elements, tools, or details of ploughs
15/02 • Plough blades; Fixing the blades
15/04 • • Shares
15/06 • • • Interchangeable or adjustable shares
15/08 • • Mouldboards
15/10 • • • Interchangeable or adjustable mouldboards
15/12 • Beams; Handles (handles for tools or their attachment in general B25G)
15/14 • Frames (means or arrangements to facilitate transportation A01B 73/00) **[4]**
15/16 • Discs (bearings therefor A01B 71/04); Scrapers for cleaning discs; Sharpening attachments (sharpening in general B24)
15/18 • Coulters
15/20 • Special adjusting means for tools of ploughs drawn by, or mounted on tractors working on hillsides or slopes

17/00 Ploughs with special additional arrangements, e.g. means for putting manure under the soil, clod-crushers (A01B 49/00 takes precedence; ploughs for working subsoil A01B 13/08) **[2]**

Harrows

19/00 Harrows with non-rotating tools
19/02 • with tools rigidly or elastically attached to a tool-frame
19/04 • • with two or more tool-frames
19/06 • • with tools or tool-frames moved to-and-fro mechanically
19/08 • with link network supporting tooth-like tools
19/10 • Lifting or cleaning apparatus

21/00 Harrows with rotary non-driven tools (tilling implements with rotary driven tools A01B 33/00)
21/02 • with tooth-like tools
21/04 • • on horizontally-arranged axles
21/06 • • on vertically-arranged axles
21/08 • with disc-like tools

23/00 Elements, tools, or details of harrows
23/02 • Teeth; Fixing the teeth
23/04 • Frames (means or arrangements to facilitate transportation A01B 73/00); Drawing-arrangements **[4]**
23/06 • Discs (A01B 15/16 takes precedence; bearings therefor A01B 71/04); Scrapers for cleaning discs; Sharpening attachments (sharpening in general B24) **[2]**

25/00 Harrows with special additional arrangements, e.g. means for distributing fertilisers; Harrows for special purposes (A01B 39/00 takes precedence)

Other machines for working soil

27/00 Clod-crushers

29/00 Rollers
29/02 • with smooth surface
29/04 • with non-smooth surface formed of rotatably-mounted rings or discs or with projections or ribs on the roller body; Land packers
29/06 • with special additional arrangements

31/00 Drags

33/00 Tilling implements with rotary driven tools
33/02 • with tools on horizontal shaft transverse to direction of travel
33/04 • with tools on horizontal shaft parallel to direction of travel
33/06 • with tools on vertical or steeply-inclined shaft
33/08 • Tools; Details, e.g. adaptations of transmissions or gearings
33/10 • • Structural or functional features of the tools
33/12 • • Arrangement of the tools; Screening of the tools
33/14 • • Attaching the tools to the rotating shaft, e.g. resiliently-attached tools
33/16 • with special additional arrangements (A01B 49/00 takes precedence; for sowing or fertilising A01B 49/06) **[2]**

35/00 Other machines for working soil (A01B 37/00, A01B 39/00, A01B 77/00 take precedence)
35/02 • with non-rotating tools
35/04 • • drawn by animal or tractor
35/06 • • • with spring tools
35/08 • • • with rigid tools
35/10 • • mounted on tractors
35/12 • • • with spring tools
35/14 • • • with rigid tools
35/16 • with rotating or circulating non-propelled tools
35/18 • with both rotating and non-rotating tools

35/20 • Tools; Details
35/22 • • Non-rotating tools; Mounting non-rotating tools
35/24 • • • Spring tools
35/26 • • • Rigid tools
35/28 • • Rotating tools; Mounting rotating tools
35/30 • • Undercarriages (A01B 23/04 takes precedence) **[2]**
35/32 • with special additional arrangements

37/00 Devices for loosening soil compacted by wheels or the like

39/00 Other machines specially adapted for working soil on which crops are growing
39/02 • with non-rotating tools
39/04 • • drawn by animal or tractor
39/06 • • Self-propelled machines
39/08 • with rotating tools
39/10 • with oscillating tools
39/12 • for special purposes
39/14 • • for working ridges
39/16 • • for working in vineyards, orchards, or the like
39/18 • • for weeding
39/19 • • • Rod weeders, i.e. weeder with rotary rods propelled beneath the soil surface
39/20 • Tools; Details
39/22 • • Tools; Mounting tools
39/24 • • Undercarriages (A01B 23/04 takes precedence) **[2]**
39/26 • • Arrangements for protecting plants
39/28 • with special additional arrangements (A01B 49/00 takes precedence) **[2]**

41/00 Thinning machines
41/02 • with oscillating tools
41/04 • with rotating tools
41/06 • with electric, e.g. photo-electric control of thinning operations

43/00 Gatherers for removing stones, undesirable roots or the like from the soil, e.g. tractor-drawn rakes [4]

45/00 Machines for treating meadows or lawns
45/02 • for aerating
45/04 • for cutting sods or turf

47/00 Soil-working with electric potential applied between tools and soil

49/00 Combined machines (auxiliary devices attached to machines of a different kind, e.g. harrows attached to ploughs, see the relevant groups for the machines)
49/02 • with two or more soil-working tools of different kind
49/04 • Combinations of soil-working tools with non-soil-working tools, e.g. planting tools
49/06 • • for sowing or fertilising

Parts, details or accessories of agricultural machines or implements, in general [3]

51/00 Undercarriages specially adapted for mounting-on various kinds of agricultural tools or apparatus (general vehicle aspects, see the relevant subclass of class B60 or B62)
51/02 • propelled by a motor
51/04 • drawn by animal or tractor

59/00 Devices specially adapted for connection between animals or tractors and agricultural machines or implements (A01B 63/00 takes precedence; vehicle connections in general B60D; draught assemblies for animal drawn vehicles, in general B62C 5/00) **[3]**
59/02 • for animal-drawn machines
59/04 • for machines pulled or pushed by a tractor
59/041 • • preventing or limiting side-play of implements (preventing overstrain A01B 61/00) **[2]**
59/042 • • having pulling means arranged on the rear part of the tractor
59/043 • • • supported at three points, e.g. by quick-release couplings (A01B 59/06 takes precedence)
59/044 • • having pulling means arranged on the middle part of the tractor
59/046 • • having pulling or pushing means arranged on the side of the tractor
59/048 • • having pulling or pushing means arranged on the front part of the tractor
59/06 • for machines mounted on tractors

61/00 Devices for, or parts of, agricultural machines or implements for preventing overstrain (preventing overstrain in vehicle connections, in general B60D; preventing overstrain in couplings per se F16D) **[3]**
61/02 • of the coupling devices between tractor and machine
61/04 • of the connection between tools and carrier beam or frame

63/00 Lifting or adjusting devices or arrangements for agricultural machines or implements (lifting mechanisms for the cutter-bar of a mower A01D 34/24; adjusting devices for the cutter-bar of a mower A01D 34/28; constructional features of lifting devices per se B66F) **[3]**
63/02 • for implements mounted on tractors
63/04 • • Hand devices; Hand devices with mechanical accumulators, e.g. springs
63/06 • • operated mechanically by tractor motor
63/08 • • operated by the movement of the tractor
63/10 • • operated by hydraulic or pneumatic means
63/102 • • • characterised by the location of the mounting on the tractor, e.g. on the rear part
63/104 • • • • on the middle part, i.e. between front and rear wheels
63/106 • • • • on the side
63/108 • • • • on the front part
63/11 • • • for controlling weight transfer between implements and tractor wheels **[2]**
63/111 • • • regulating working depth of implements
63/112 • • • • to control draught load, i.e. tractive force **[2]**
63/114 • • • • to achieve a constant working depth **[2]**
63/118 • • • Mounting implements on power-lift linkages (A01B 59/043 takes precedence; preventing or limiting side-play of implements A01B 59/041; preventing overstrain A01B 61/00) **[2]**
63/12 • • operated by an electric motor
63/14 • for implements drawn by animals or tractors
63/16 • • with wheels adjustable relatively to the frame
63/18 • • • with clutch between Z-type axle and wheel
63/20 • • • with gear and rack
63/22 • • • operated by hydraulic or pneumatic means
63/24 • • Tools or tool-holders adjustable relatively to the frame
63/26 • • • by man-power
63/28 • • • operated by the machine or implement

63/30 • • • operated by motor power through a mechanical transmission
63/32 • • • operated by hydraulic or pneumatic means

67/00 Devices for controlling the tractor motor by resistance of tools (preventing overstrain A01B 61/00)

69/00 Steering of agricultural machines or implements; Guiding agricultural machines or implements on a desired track [3]
69/02 • Ridge-marking or like devices; Checkrow wires; Accessories therefor
69/04 • Special adaptations of automatic tractor steering, e.g. electric system for contour ploughing
69/06 • Lateral steering of machines by an additional operator
69/08 • Lateral steering of machines derived from the lateral movement of tractor

71/00 Construction or arrangement of setting or adjusting mechanisms, of implement or tool drive or of power take-off; Means for protecting parts against dust, or the like; Adapting machine elements to or for agricultural purposes
71/02 • Setting or adjusting mechanisms
71/04 • Bearings of rotating parts, e.g. for soil-working discs (bearings in general F16C)
71/06 • Special adaptations of coupling means between power take-off and transmission shaft to the implement or machine (couplings for transmitting rotation F16D)
71/08 • Means for protecting against dust or the like, or for cleaning agricultural implements (A01B 15/16, A01B 19/10, A01B 23/06 take precedence; screening of rotary driven tilling tools A01B 33/12; screening of rotary parts in general F16P 1/00) **[2]**

73/00 Means or arrangements to facilitate transportation of agricultural machines or implements, e.g. folding frames to reduce overall width (arrangements of lifting devices for soil working implements A01B 63/00; vehicles adapted for load transportation or to transport, to carry or to comprise special loads or objects B60P; motor vehicles, trailers B62D) **[4]**
73/02 • Folding frames **[4]**
73/04 • • foldable about a horizontal axis **[4]**
73/06 • • foldable about a vertical axis **[4]**

75/00 Carriers for supporting persons when working in the field, e.g. while thinning beet

---

76/00 Parts, details or accessories of agricultural machines or implements, not provided for in groups A01B 51/00-A01B 75/00 [2006.01]

77/00 Machines for lifting and treating soil (biocides, pest repellants or attractants, plant growth regulators A01N 25/00-A01N 65/00; fertilisers C05; soil-conditioning or soil-stabilising materials C09K 17/00)

79/00 Methods for working soil (essentially requiring the use of particular machines, see the relevant groups for the machines)
79/02 • combined with other agricultural processing, e.g. fertilising, planting

A01C PLANTING; SOWING; FERTILISING (combined with general working of soil A01B 49/04; parts, details or accessories of agricultural machines or implements, in general A01B 51/00-A01B 75/00)

Subclass index

FERTILISING
Methods.....3/00, 21/00
Apparatus.....3/00, 15/00, 17/00, 19/00, 23/00
WORK PREVIOUS TO SOWING OR PLANTING.....1/00
PLANTING.....9/00, 11/00, 13/00, 14/00
SOWING.....7/00, 17/00, 19/00
COMMON APPARATUS.....5/00

1/00 Apparatus, or methods of use thereof, for testing or treating seed, roots, or the like, prior to sowing or planting (chemicals therefor A01N 25/00-A01N 65/00)
1/02 • Germinating apparatus; Determining germination capacity of seeds or the like (germinating in preparation of malt C12C 1/027)
1/04 • Arranging seed on carriers, e.g. on tapes, on cords
1/06 • Coating or dressing seed
1/08 • Immunising seed

3/00 Treating manure; Manuring (dung forks A01D 9/00; organic fertilisers from waste or refuse C05F)
3/02 • Storage places for manure, e.g. cisterns for liquid manure; Installations for fermenting manure (sewerage structures E03F 5/00; silos, bunkers E04H 7/22)
3/04 • Manure loaders (loaders in general B65G)
3/06 • Manure distributors, e.g. dung distributors
3/08 • • for manure already laying on the soil **[2]**

5/00 Making or covering furrows or holes for sowing, planting, or manuring (ploughs for making ridges A01B 13/02)
5/02 • Hand tools for making holes for sowing, planting or manuring (transplanting devices for trees A01G 23/02)
5/04 • Machines for making or covering holes for sowing or planting
5/06 • Machines for making or covering drills or furrows for sowing or planting
5/08 • Machines for both manuring and sowing or both manuring and planting

7/00 **Sowing** (arrangements for driving working parts A01C 19/00)
7/02 • Hand sowing implements
7/04 • Single-grain seeders with or without suction devices
7/06 • Seeders combined with fertilising apparatus (combinations with soil working tools A01B 49/04)
7/08 • Broadcast seeders; Seeders depositing seeds in rows
7/10 • • Devices for adjusting the seed-box
7/12 • • Seeders with feeding-wheels
7/14 • • • Seeders with spoon or bucket wheels
7/16 • • Seeders with other distributing devices, e.g. brushes, discs, screws, slides (with endless chains A01C 15/18)
7/18 • Machines for depositing quantities of seed at intervals
7/20 • Parts of seeders for conducting and depositing seed

9/00 **Potato planters** (combinations with soil-working A01B 49/04)
9/02 • with conveyer belts
9/04 • with bucket wheels
9/06 • with piercing or grasping devices
9/08 • with other distributing devices, e.g. flaps, screws, horizontal turning plates

11/00 **Transplanting machines** (carriers for supporting persons A01B 75/00; transplanting devices for trees A01G 23/02)
11/02 • for seedlings
11/04 • for deeper setting or shifting of plants

13/00 **Machines or apparatus for consolidating soil around plants**

14/00 **Methods or apparatus for planting not provided for in other groups of this subclass [2006.01]**

15/00 **Fertiliser distributors** (A01C 7/06 takes precedence; with centrifugal wheels A01C 17/00; arrangements for driving working parts A01C 19/00; sand, gravel or salt spreaders for roads E01C 19/20) **[2]**
15/02 • for hand use
15/04 • using blowers
15/06 • with distributing slots
15/08 • • with pushers or stirrers in the slots
15/10 • • • with reciprocating pushers
15/12 • with movable parts of the receptacle
15/14 • with means for lifting out the fertiliser
15/16 • with means for pushing out the fertiliser, e.g. by a roller
15/18 • with endless chains

17/00 **Fertilisers or seeders with centrifugal wheels** (mechanical throwing machines for articles or solid bulk materials, in general B65G 31/00; sand, gravel, or salt spreaders E01C 19/20) **[3]**

19/00 **Arrangements for driving working parts of fertilisers or seeders [4]**
19/02 • by a motor **[4]**
19/04 • by a ground-engaging wheel **[4]**

21/00 **Methods of fertilising** (fertilisers C05; soil-conditioning or soil-stabilising materials C09K 17/00)

23/00 **Distributing devices specially adapted for liquid manure or other fertilising liquid, including ammonia, e.g. transport tanks, sprinkling wagons** (watering fields in general A01G 25/00; spraying or applying liquids or other fluent materials in general B05)
23/02 • Special arrangements for delivering the liquid directly into the soil
23/04 • Distributing under pressure; Distributing mud; Adaptation of watering systems for fertilising-liquids

A01D HARVESTING; MOWING

Note(s)

This subclass covers the shredding or pulverising of stubble, e.g. for the purpose of producing mulch, but does not cover other mechanical destruction of unwanted vegetation, which is covered by group A01M 21/02.

Subclass index

HAND IMPLEMENTS
Cutting implements, rakes, forks, others....1/00, 7/00, 9/00, 11/00
Accessories....3/00, 5/00
MACHINES FOR HARVESTING ROOT CROPS
Diggers....13/00-19/00, 27/00
Topping....23/00, 27/00
For specific products....13/00, 21/00, 25/00, 29/00
Other machines....31/00
Accessories....33/00
HARVESTING OR MOWING CEREALS OR GRASS
Harvesters or mowers....34/00, 37/00, 41/00, 42/00, 43/00
Binders....37/00, 39/00
Headers....47/00
For specific products....44/00, 45/00
Components....57/00-69/00
Accessories....75/00, 85/00
HAYMAKERS....76/00-84/00
HARVESTING OTHER CROPS
Underwater plants....44/00
Standing crops....45/00

Picking or gathering fruits, vegetables, or the like.....46/00, 51/00
GATHERING, LOADING, TRANSPORT.....51/00, 85/00-90/00
GENERAL METHODS.....91/00

Hand implements

1/00 Hand-cutting implements for harvesting (devices for picking apples or like fruits A01D 46/24; hedge trimming means A01G 3/04)
1/02 • Scythes
1/04 • Sickles
1/06 • Knives
1/08 • Attaching means for blades
1/10 • • with fastening by means of eccentric levers
1/12 • • with blades adjustable in several ways
1/14 • Handles; Accessories, e.g. scythe baskets, safety devices

3/00 Non-abrasive sharpening devices for scythes, sickles, or the like
3/02 • with percussive tools
3/04 • with pressing jaws
3/06 • with pressing rollers or pressing discs
3/08 • Details, e.g. scythe anvils, scythe guides

5/00 Containers for whetstones for use during harvesting

7/00 Rakes (mowers convertible to rakes or capable of raking A01D 42/02; mowers combined with rakes A01D 43/02)
7/02 • with tines rigidly connected to the rake-bar
7/04 • with adjustable rake-bar
7/06 • with tines specially shaped or attached
7/08 • with exchangeable tines
7/10 • combined with strippers, grippers, or the like

9/00 Forks
9/02 • with tines rigidly connected to the handle
9/04 • with exchangeable tines
9/06 • combined with strippers, grippers, or the like

11/00 Other hand implements (devices for picking apples or like fruits A01D 46/24)
11/02 • for lifting or cropping beet, potatoes, or other root crops
11/04 • for handling root crops, e.g. shovels, fork-like shovels
11/06 • Combined implements, e.g. fork and rake

Machines for harvesting root crops

13/00 Diggers, e.g. potato ploughs

15/00 Digging machines with sieve graters but without conveying mechanisms
15/02 • with rigid grates
15/04 • with moving or vibrating grates

17/00 Digging machines with sieving and conveying mechanisms
17/02 • with conveyers arranged above the sieving device
17/04 • with conveyers arranged below the sieving device
17/06 • with rollers or disc screens
17/08 • with shaker type screens
17/10 • with smooth conveyer belts, lath bands, or rake bands
17/12 • with bucket conveyers
17/14 • with cylindrical screens
17/16 • • with a conveyer spiral
17/18 • • without a conveyer spiral
17/20 • • with several co-operating screens
17/22 • • with several co-operating sifter bands

19/00 Digging machines with centrifugal wheels, drums, or spinners
19/02 • with working tools rotating around a horizontal axis arranged transverse to the direction of travel
19/04 • with working tools rotating around a horizontal axis arranged parallel to the direction of travel
19/06 • • with scoop wheels or drums
19/08 • • with scoop tine chains
19/10 • • with receiving screens; Implements for depositing the root crops
19/12 • with working tools arranged on an approximately vertical axis
19/14 • • with one screening wheel
19/16 • • with several screening wheels
19/18 • • with screen tine chains

21/00 Digging machines with potato-picking implements
21/02 • with picking tools moved up-and-down
21/04 • with rotating picking tools

23/00 Topping machines
23/02 • cutting the tops before being lifted
23/04 • cutting the tops after being lifted
23/06 • with collecting and depositing devices for the tops; Devices for protecting the tops against damage

25/00 Lifters for beet or like crops
25/02 • Machines with rigid tools
25/04 • Machines with moving or rotating tools

27/00 Machines with both topping and lifting mechanisms
27/02 • with rigid tools
27/04 • with moving or rotating tools

29/00 Harvesters for peanuts

31/00 Other digging harvesters
31/02 • combined with other agricultural machines, e.g. drilling, planting, hay-harvesting machines

33/00 Accessories for digging harvesters
33/02 • Foliage-separating mechanisms
33/04 • Stone-separating mechanisms
33/06 • Haulm-cutting mechanisms
33/08 • Special sorting and cleaning mechanisms
33/10 • Crop collecting devices, with or without weighing apparatus
33/12 • Driving mechanisms, with or without motor
33/14 • Lifting or lowering mechanisms for the tools

Harvesters or mowers for grass, cereals or other crops

34/00 **Mowers** (combined with apparatus performing additional operations while mowing A01D 37/00-A01D 41/00, A01D 43/00; convertible to apparatus for purposes other than mowing or capable of performing operations other than mowing A01D 42/00)**; Mowing apparatus of harvesters [4]**

Note(s) [2006.01]

In this group, it is desirable to add the indexing code of group A01D 101/00, relating to the use of mowers.

34/01 • characterised by features relating to the type of cutting apparatus **[7]**
34/02 • • having reciprocating cutters **[4, 7]**
34/03 • • • mounted on a vehicle, e.g. a tractor, or drawn by an animal or a vehicle **[4]**
34/04 • • • • with cutters at the front **[4]**
34/06 • • • • with cutters at the side **[4]**
34/07 • • • • with cutters at the back **[4]**
34/08 • • • hand-guided by a walking operator **[4, 7]**
34/10 • • • • with motor driven cutters or wheels **[4]**
34/125 • • • with means for discharging mown material (A01D 57/26-A01D 57/30 take precedence; combined with means for gathering or loading mown material A01D 43/06) **[7]**
34/13 • • • Cutting apparatus **[4]**
34/135 • • • • having oppositely movable cooperating knife-bars **[7]**
34/14 • • • • Knife-bars **[4]**
34/16 • • • • Guides for the knife-bar in the ledger-plate **[4]**
34/17 • • • • Holding-down devices for the knife **[4]**
34/18 • • • • Guard fingers; Ledger-plates **[4]**
34/20 • • • • Ledger-plate bars **[4]**
34/22 • • • • • Shoes therefor **[4]**
34/23 • • • • with additional vertical cutter-bar **[4]**
34/24 • • • Lifting devices for the cutter-bar **[4]**
34/26 • • • • manually actuated **[4]**
34/27 • • • • Devices for disengaging the knife-driving mechanisms during the lifting of the cutter-bar **[4]**
34/28 • • • Adjusting devices for the cutter-bar **[4]**
34/30 • • • Driving mechanisms for the cutters **[4]**
34/32 • • • • Connecting-rods for knife-driving mechanisms **[4]**
34/33 • • • • • Devices for connecting the rod to the knife-bar **[4]**
34/34 • • • • • Devices for connecting the rod to the crank-pin of the driving mechanism **[4]**
34/36 • • • • actuated by advance of the machine **[4]**
34/37 • • • • electric **[4]**
34/38 • • • • fluid **[4]**
34/40 • • • Other details **[4]**
34/404 • • having cutters driven to oscillate in a horizontal plane **[7]**
34/408 • • • and cooperating with counter-cutters **[7]**
34/412 • • having rotating cutters **[7]**
34/416 • • • Flexible line cutters **[7]**
34/42 • • • having cutters rotating about a horizontal axis, e.g. cutting-cylinders **[4, 7]**
34/43 • • • • mounted on a vehicle, e.g. a tractor, or drawn by an animal or a vehicle **[4]**
34/44 • • • • • with two or more cutters **[4]**
34/46 • • • • hand-guided by a walking operator **[4, 7]**
34/47 • • • • • with motor driven cutters or wheels **[4]**
34/49 • • • • with means for discharging mown material (A01D 57/26-A01D 57/30 take precedence; combined with means for gathering or loading mown material A01D 43/06) **[7]**
34/52 • • • • Cutting apparatus **[4]**
34/53 • • • • • Helically shaped cutting members **[4]**
34/535 • • • • • with cutting members pivotally attached to the rotating axle, e.g. flails **[7]**
34/54 • • • • Cutting-height adjustment **[4]**
34/56 • • • • Driving mechanisms for the cutters **[4]**
34/57 • • • • • actuated by advance of the machine **[4]**
34/58 • • • • • electric **[4]**
34/60 • • • • • fluid **[4]**
34/62 • • • • Other details **[4]**
34/63 • • • having cutters rotating about a vertical axis **[4, 7]**
34/64 • • • • mounted on a vehicle, e.g. a tractor, or drawn by an animal or a vehicle (A01D 34/695 takes precedence) **[4, 7]**
34/66 • • • • • with two or more cutters **[4]**
34/67 • • • • hand-guided by a walking operator **[4, 7]**
34/68 • • • • • with motor driven cutters or wheels **[4]**
34/685 • • • • • • with two or more cutters **[7]**
34/69 • • • • • • with motor driven wheels **[7]**
34/695 • • • • supported by an air cushion **[7]**
34/71 • • • • with means for discharging mown material (A01D 57/26-A01D 57/30 take precedence; combined with means for gathering or loading mown material A01D 43/06) **[7]**
34/73 • • • • Cutting apparatus **[4]**
34/74 • • • • Cutting-height adjustment **[4]**
34/76 • • • • Driving mechanisms for the cutters **[4]**
34/77 • • • • • actuated by advance of the machine **[4]**
34/78 • • • • • electric **[4]**
34/80 • • • • • fluid **[4]**
34/81 • • • • Casings; Housings (A01D 34/71 takes precedence) **[7]**
34/82 • • • • Other details **[4]**
34/83 • • having cutting members on endless belts or sprocket chains **[4]**
34/835 • specially adapted for particular purposes **[7]**
34/84 • • for edges of lawns or fields, e.g. for mowing close to trees or walls (edge trimmers A01G 3/00) **[4]**
34/86 • • for use on sloping ground, e.g. on embankments (undercarriages or frames specially adapted for harvesters or mowers A01D 67/00; control mechanisms for harvesters or mowers when moving on slopes A01D 75/28) **[4, 7]**
34/90 • • for carrying by the operator **[7]**

37/00 **Reaper-binders** (equipment thereon for binding harvested or mown produce, e.g. knotters, A01D 59/00)
37/02 • with receiving platform and binding apparatus but without elevating canvases
37/04 • conveying the stalks in vertical position
37/06 • binding with stalks or straw bands

39/00 **Independent binders, e.g. for hay; Binders attachable to mowers** (equipment thereon for binding harvested or mown produce, e.g. knotters, A01D 59/00; stationary apparatus or hand tools for forming or binding straw or hay into bundles A01F 1/00)

41/00 **Combines, i.e. harvesters or mowers combined with threshing devices**
41/02 • Self-propelled combines

41/04 • Tractor-driven combines
41/06 • Combines with headers
41/08 • Combines which thresh before the stalk is cut
41/10 • Field threshers with windrow pick-up apparatus
41/12 • Details of combines
41/127 • • Control or measuring arrangements specially adapted for combines **[7]**
41/133 • • Drying devices **[7]**
41/14 • • Mowing tables **[2]**
41/16 • • • Devices for coupling mowing tables to conveyers **[7]**

42/00 Mowers convertible to apparatus for purposes other than mowing; Mowers capable of performing operations other than mowing (mowers combined with apparatus performing additional operations while mowing A01D 43/00) **[7]**
42/02 • Raking **[7]**
42/04 • Soil working **[7]**
42/06 • Sweeping or cleaning lawns or other surfaces **[7]**
42/08 • • Sweeping snow **[7]**

43/00 Mowers combined with apparatus performing additional operations while mowing (A01D 37/00, A01D 39/00, A01D 41/00 take precedence) **[3]**
43/02 • with rakes
43/04 • with haymakers, e.g. tedders
43/06 • with means for collecting, gathering or loading mown material **[1, 7]**
43/063 • • in or into a container carried by the mower; Containers therefor (A01D 43/077 takes precedence) **[7]**
43/07 • • in or into a trailer (A01D 43/077 takes precedence) **[7]**
43/073 • • • with controllable discharge spout **[7]**
43/077 • • with auxiliary means, e.g. fans, for transporting the mown crop **[7]**
43/08 • with means for cutting up the mown crop
43/10 • with means for crushing or bruising the mown crop
43/12 • with soil-working implements, e.g. ploughs
43/14 • with dispensing apparatus, e.g. for fertilisers, herbicides or preservatives **[7]**
43/16 • with lawn edgers **[7]**

44/00 Harvesting of underwater plants, e.g. harvesting of seaweed [2]
44/02 • of laver **[2]**

45/00 Harvesting of standing crops (A01D 44/00 takes precedence; threshing machines adapted for special crops, threshing devices for combines adapted for special crops A01F 11/00) **[2]**
45/02 • of maize
45/04 • of rice
45/06 • of flax
45/10 • of sugar cane
45/16 • of tobacco
45/22 • of beans
45/24 • of peas
45/26 • of cabbage or lettuce **[2]**
45/28 • of spinach
45/30 • of grass-seeds or like seeds

46/00 Picking of fruits, vegetables, hops, or the like; Devices for shaking trees or shrubs [2, 3]

Note(s)

Group A01D 46/30 takes precedence over groups A01D 46/02-A01D 46/28

46/02 • of hops **[2]**
46/04 • of tea **[2]**
46/06 • of coffee **[2]**
46/08 • of cotton **[2]**
46/10 • • pneumatically **[2]**
46/12 • • using boll-from-plant strippers **[2]**
46/14 • • using lint-from-plant pickers **[2]**
46/16 • • • using rotary or oscillating spindles **[2]**
46/18 • • • • mounted on rotary carrier **[2]**
46/20 • Platforms with lifting and lowering devices **[2]**
46/22 • Baskets or bags attachable to the picker **[2]**
46/24 • Devices for picking apples or like fruit (A01D 46/26 takes precedence) **[2, 7]**
46/247 • • Manually operated fruit-picking tools (A01D 46/253 takes precedence) **[7]**
46/253 • • Portable motorised fruit pickers **[7]**
46/26 • Devices for shaking trees or shrubs; Fruit catching devices to be used therewith (A01D 46/28 takes precedence) **[3, 7]**
46/28 • Vintaging machines, i.e. grape harvesting machines **[3]**
46/30 • Robotic devices for individually picking crops **[7]**

47/00 Headers

51/00 Apparatus for gathering together crops spread on the soil, e.g. apples, beets, nuts, potatoes

Components of harvesters or mowers for grass or cereals [7]

57/00 Delivering mechanisms for harvesters or mowers
57/01 • Devices for leading crops to the mowing apparatus **[7]**
57/02 • • using reels
57/03 • • • with supplementary controlled movement of the crop-engaging members, e.g. of the tines **[3]**
57/04 • • • Arrangements for changing the position of the reels
57/05 • • • Detachable reels for converting a mower into a harvester **[7]**
57/06 • • using endless conveyers
57/08 • • using swinging rakes
57/10 • • using fans
57/12 • Rotating rakes
57/14 • Single-platform rakes
57/16 • Tilting tables
57/18 • Bunching devices, e.g. with tipping bars
57/20 • with conveyer belts
57/22 • for standing stalks
57/24 • Grass-boards
57/26 • Plates arranged behind the cutter-bar for guiding the cut grass or straw
57/28 • Windrower attachments with tines
57/30 • Rotating attachments for forming windrows

59/00 Equipment for binding harvested or mown produce (specially adapted for baling presses A01F 15/14)
59/02 • Packers
59/04 • Knotters
59/06 • Needles
59/08 • Discharge arms
59/10 • Devices for separating cohering sheaves

59/12 • Containers for the twine
59/14 • Sheaf counters

61/00 Elevators or conveyers for binders or combines
61/02 • Endless belts
61/04 • Chains

63/00 Outside dividers
63/02 • Rotating dividers
63/04 • Non-rotating dividers

65/00 Grain-crop lifters
65/02 • Lifting fingers
65/04 • with revolving staffs
65/06 • Lifting devices arranged on the inner side of the cutter-bar
65/08 • Guard attachments for the wheels

67/00 Undercarriages or frames specially adapted for harvesters or mowers (coupling arrangements between animal or tractor and harvester or mower A01B 59/00)**; Mechanisms for adjusting the frame** (adjusting devices for the cutter-bar A01D 34/28)**; Platforms [3]**
67/02 • Protection against weather
67/04 • Seats

69/00 Driving mechanisms or parts thereof for harvesters or mowers (driving mechanisms for the cutters of mowers or harvesters A01D 34/00)
69/02 • electric
69/03 • fluid **[4]**
69/06 • Gearings
69/08 • Clutches
69/10 • Brakes
69/12 • Lubrication

75/00 Accessories for harvesters or mowers
75/02 • Implements for collecting grain crop
75/04 • Sheaf carriers
75/06 • Sheaf shockers or stookers
75/08 • Sharpening apparatus fixed to the harvester or mower
75/10 • Devices for reconditioning the knife-bar, e.g. removing the knife from its backing
75/12 • Instruments for removing the knife-bar from the cutter
75/16 • Implements for laying-out bands for sheaves
75/18 • Safety devices for parts of the machines
75/20 • Devices for protecting men or animals
75/24 • Special devices for harvesters or mowers drawn by animals
75/26 • Front trucks; Axle-pivot steering of front trucks
75/28 • Control mechanisms for harvesters or mowers when moving on slopes; Devices preventing lateral pull
75/30 • Arrangements for trailing two or more harvesters or mowers

Haymakers; Crop conditioners [3]

Note(s)

In groups A01D 76/00-A01D 87/00, the following terms are used with the meanings indicated:

- "hay" includes all mown forage crop in a dry or partially dry state;
- "haymakers" covers all apparatus working on mown forage crop lying on the ground with the intention to make hay, with the exception of "rakes" which are covered by group A01D 7/00.

76/00 Haymakers with tines that are stationary with respect to the machine during operation but that may be liftable for dumping (haymakers combined with mowers A01D 43/04) **[3]**

78/00 Haymakers with tines moving with respect to the machine (haymakers combined with mowers A01D 43/04) **[3]**
78/02 • with tine-carrying bars or equivalent members which interconnect heads rotating about horizontal axes, e.g. of rotary-drum type **[3]**
78/04 • • the tine-carrying members moving obliquely or at right angles to the direction of travel of the machine **[3]**
78/06 • with tine-carrying endless chains or belts **[3]**
78/08 • with tine-carrying rotary heads or wheels **[3]**
78/10 • • the tines rotating about a substantially vertical axis **[3]**
78/12 • • • the tines having an additional movement superimposed upon their rotary movement **[3]**
78/14 • • the tines rotating about a substantially horizontal axis **[3]**
78/16 • • • with positive drive of the heads or wheels **[3]**
78/18 • of the reciprocating tine type **[3]**
78/20 • • the tines reciprocating in a direction parallel to the direction of travel of the machine **[3]**

80/00 Parts or details of haymakers (parts or details specific for one type of machine, see the relevant groups for these machines) **[3]**
80/02 • Tines; Attachment of tines **[3]**

82/00 Crop conditioners, i.e. machines for crushing or bruising stalks (mowers combined with means for crushing or bruising the mown crop A01D 43/10) **[3]**
82/02 • Rollers for crop conditioners **[6]**

84/00 Haymakers not provided for in a single one of groups A01D 76/00-A01D 82/00 (haymakers combined with mowers A01D 43/04)
84/02 • with flexible tools **[6]**

85/00 Arrangements for making or setting stacks

87/00 Loaders for hay or like field crops (combined with mowers A01D 43/06)
87/02 • with conveyer belts
87/04 • • with rakes feeding the crop to the conveyer
87/06 • with oscillating or reciprocating rake-bars
87/08 • with sweep rakes
87/10 • with blowers
87/12 • Loaders for sheaves, stacks, or bales

89/00 Pick-ups for loaders, chaff-cutters, balers, field-threshers, or the like

90/00 Vehicles for carrying harvested crops with means for selfloading or unloading (combined with mowers A01D 43/06) **[2]**
90/02 • Loading means **[2]**
90/04 • • with additional cutting means **[2]**

90/06 • • • with chaff-cutters used as loading and cutting means (A01D 43/08 takes precedence) **[2]**
90/08 • • with bale-forming means additionally used for loading; with means for picking-up bales and transporting them into the vehicle **[2]**
90/10 • Unloading means **[2]**
90/12 • with additional devices or implements (arrangements of coupling devices, A01B 59/00) **[2]**
90/14 • Adaptations of gearing for driving, loading or unloading means **[2]**
90/16 • self-propelled **[2]**

91/00 Methods for harvesting agricultural products (essentially requiring the use of particular machines, see the relevant groups for the machines)
91/02 • Products growing in the soil
91/04 • Products growing above the soil (fruit, hops A01D 46/00)

93/00 Harvesting apparatus not provided for in other groups of this subclass [2009.01]

Indexing scheme associated with group A01D 34/00, relating to the use of mowers. [6]

101/00 Lawn-mowers [6]

A01F THRESHING (combines A01D 41/00)**; BALING OF STRAW, HAY OR THE LIKE; STATIONARY APPARATUS OR HAND TOOLS FOR FORMING OR BINDING STRAW, HAY OR THE LIKE INTO BUNDLES; CUTTING OF STRAW, HAY OR THE LIKE; STORING AGRICULTURAL OR HORTICULTURAL PRODUCE** (arrangements for making or setting stacks in connection with harvesting A01D 85/00)

Subclass index

THRESHING
Functional types of apparatus.....5/00, 7/00
Special applications.....11/00
Details.....12/00
BALING OF STRAW, HAY OR THE LIKE.....1/00, 13/00, 15/00
ACCESSORIES FOR THRESHING MACHINES OR BALING PRESSES.....17/00, 19/00, 21/00
STORING AGRICULTURAL OR HORTICULTURAL PRODUCE.....25/00
MACHINES OR IMPLEMENTS FOR CUTTING STRAW, HAY OR THE LIKE.....3/00, 29/00

1/00 Stationary apparatus or hand tools for forming or binding straw, hay or the like into bundles (baling apparatus or presses A01F 13/00, A01F 15/00; mobile binders for use in the field A01D 37/00, A01D 39/00) **[3]**

1/02 • Hand-operated tools
1/04 • Fastening or tying devices
1/06 • Ties for bundles

3/00 Hand-operated implements for cutting-up straw, hay or the like (mechanically-driven straw cutters A01F 29/00)

Threshing

5/00 Hand-operated implements for threshing

7/00 Threshing apparatus
7/02 • with rotating tools (threshing cylinders or concaves A01F 12/18)
7/04 • • with axles transverse to the feeding direction
7/06 • • with axles in line with the feeding direction
7/70 • with flails **[2010.01]**

11/00 Threshing apparatus specially adapted for maize; Threshing apparatus specially adapted for particular crops other than cereals
11/02 • for flax
11/04 • for clover or like seeds, e.g. lucern
11/06 • for maize, e.g. removing kernels from cobs
11/08 • for palm fruit, e.g. releasing the fruit from the stalk

12/00 Parts or details of threshing apparatus (devices, other than safety devices for feeders, for protecting human beings A01D 75/20, A01F 21/00)
12/10 • Feeders
12/12 • • without band-cutters
12/14 • • with band-cutters
12/16 • • Safety devices
12/18 • Threshing devices
12/20 • • Threshing cylinders with ribs
12/22 • • Threshing cylinders with teeth
12/24 • • One-part threshing concaves
12/26 • • Multi-part threshing concaves
12/28 • • Devices for adjusting the concaves
12/30 • Straw separators
12/32 • • with shaker screens or sieves
12/34 • • • Sieve elements; Linings for shakers
12/36 • • • • Sieve elements specially adapted for handling short straw
12/38 • • with juxtaposed and independently-moved shaker bars or the like
12/385 • • with endless straw-conveying surface **[5]**
12/39 • • with straw carriers in the form of rotors or drums **[5]**
12/395 • • Conical or cylindrical straw separators with internal working surface **[5]**
12/40 • Arrangements of straw crushers or cutters
12/42 • Apparatus for removing awns from the grain
12/44 • Grain cleaners; Grain separators
12/46 • Mechanical grain conveyers
12/48 • Air conduits or blowers for grain
12/50 • Sack-filling devices; Counting or weighing devices

12/52 • Arrangements for returning unthreshed grain to the threshing device
12/54 • Arrangements for collecting or removing dust
12/56 • Driving mechanisms for the threshing parts
12/58 • Control devices; Brakes; Bearings
12/60 • Grain tanks

Baling of straw, hay or the like

13/00 Hand-operated baling apparatus

15/00 Baling presses for straw, hay or the like [3]
15/02 • with press-boxes
15/04 • Plunger presses
15/06 • • with double-action plunger
15/07 • Rotobalers, i.e. machines for forming cylindrical bales by winding and pressing **[5]**
15/08 • Details
15/10 • • Feeding devices for the crop material **[3]**
15/12 • • Feeding devices for the ties
15/14 • • Tying devices specially adapted for baling presses
15/16 • • Division blocks
15/18 • • Endless belts, rolls, or the like

Accessories for threshing machines or baling presses

17/00 Straw conveyers for threshing machines or baling presses
17/02 • Mechanical conveyers
17/04 • Pneumatic conveyers

19/00 Devices for securing threshing machines or baling presses to the ground, e.g. for compensating for unevenness of the ground

21/00 Devices for protecting human beings for threshing machines or baling presses (in combines A01D 75/20; for feeders for threshing apparatus A01F 12/16)

25/00 Storing agricultural or horticultural produce; Hanging-up harvested fruit (maturing fruit A23N 15/06; arrangements in barns for preparatory treatment of tobacco A24B 1/02; packing or storing hops C12C 3/04) **[3]**
25/02 • Clamps; Pits
25/04 • Stacks, ricks, or the like
25/08 • • Ventilating means
25/10 • • Shelters
25/12 • Racks for drying purposes
25/13 • Coverings (A01F 25/14 takes precedence) **[3]**
25/14 • Containers specially adapted for storing **[3]**
25/16 • Arrangements in forage silos
25/18 • • Loading or distributing arrangements **[2]**
25/20 • • Unloading arrangements **[2]**
25/22 • • Ventilating arrangements **[2]**

29/00 Cutting apparatus specially adapted for cutting hay, straw or the like (mowers combined with means for cutting up the mown crop A01D 43/08) **[3]**
29/01 • specially adapted for being mounted on or drawn by a tractor, e.g. field choppers **[7]**
29/02 • having rotating knives with their cutting edges in a plane perpendicular to their rotational axis **[3]**
29/04 • • with feeding direction transverse to axis **[3]**
29/06 • having rotating knives with their cutting edges on a cylinder surface, e.g. of the helical-type **[3]**
29/08 • having reciprocating knives **[3]**
29/09 • Details **[2010.01]**
29/10 • • Feeding devices **[3]**
29/12 • • Discharge means (loaders for hay or like field crop having blowers A01D 87/10) **[3]**
29/14 • • Drives **[3]**
29/16 • • Safety devices, e.g. emergency brake arrangements **[3]**
29/18 • • • for protecting human beings **[3]**
29/22 • • Arrangement of knife sharpening devices **[3]**

A01G HORTICULTURE; CULTIVATION OF VEGETABLES, FLOWERS, RICE, FRUIT, VINES, HOPS, OR SEAWEED; FORESTRY; WATERING (picking of fruits, vegetables, hops, or the like A01D 46/00; plant reproduction by tissue culture techniques A01H 4/00; devices for topping or skinning onions or flower bulbs A23N 15/08; propagating unicellular algae C12N 1/12; plant cell culture C12N 5/00)

Subclass index

CULTIVATION IN GENERAL.....1/00, 3/00, 7/00, 9/00, 16/00, 17/00
HYDROPONICS, CULTIVATION WITHOUT SOIL.....31/00
CULTIVATION OF SEAWEED.....33/00
PROTECTING PLANTS.....11/00, 13/00, 15/00
PICKING OR HANDLING FLOWERS, HANDLING FRUIT.....3/00, 5/00
FORESTRY.....23/00
WATERING.....25/00, 27/00, 29/00

1/00 Horticulture; Cultivation of vegetables (labels or name-plates G09F 3/00, G09F 7/00)
1/02 • Cultivation of asparagus
1/04 • Cultivation of mushrooms (composts or fertilisers for cultivating mushrooms C05)
1/06 • Grafting (grafting-wax A01N 3/04)
1/08 • Edging for beds, lawns, or the like, e.g. using tiles
1/12 • Tools for cultivating turf; Sweeping apparatus for lawns; Gardens rollers (machines for treating meadows or lawns A01B 45/00; lawn-mowers A01D 34/00)

3/00 **Cutting implements specially adapted for horticultural purposes; Delimbing standing trees** (felling trees A01G 23/08; mowers having rotating flexible line cutters A01D 34/416; special adaptation of mowers for carrying by the operator A01D 34/90; hand-held cutting tools suitable for other use B26B) **[5]**

3/02 • Secateurs; Flower or fruit shears

3/025 • • having elongated or extended handles **[6]**

3/033 • • having motor-driven blades **[6]**

3/037 • • • the driving means being an electric motor **[6]**

3/04 • Apparatus for trimming hedges, e.g. hedge shears **[6]**

3/047 • • portable **[6]**

3/053 • • • motor-driven **[6]**

3/06 • Hand-held edge trimmers or shears for lawns (mowers combined with lawn edgers A01D 43/16)

3/08 • Other tools for pruning, branching or delimbing standing trees **[2, 5]**

5/00 **Floral handling**

5/02 • Apparatus for binding bouquets or wreaths

5/04 • Mountings for wreaths, or the like; Racks or holders for flowers

5/06 • Devices for preserving flowers (chemical substances A01N 3/02; flower vases A47G 7/06)

7/00 **Botany in general** (cultivation without soil A01G 31/00)

7/02 • Treatment of plants with carbon dioxide (greenhouses therefor A01G 9/18)

7/04 • Electric or magnetic treatment of plants for promoting growth

7/06 • Treatment of growing trees or plants, e.g. for preventing decay of wood, for tingeing flowers or wood, for prolonging the life of plants

9/00 **Cultivation of flowers, vegetables or rice in receptacles, forcing-frames or greenhouses** (cultivation without soil A01G 31/00)

9/02 • Receptacles, e.g. flower-pots or boxes (hanging flower baskets, holders or containers for flower-pots A47G 7/00); Glasses for cultivating flowers

9/04 • Flower-pot saucers

9/06 • Devices for cleaning flower-pots

9/08 • Devices for filling-up flower-pots; Devices for setting plants in pots

9/10 • Pots for seedlings; Soil-blocks for seedlings; Means for forming soil-blocks

9/12 • Supports for plants; Trellis for strawberries or the like (stays for trees, props for vines A01G 17/14)

9/14 • Greenhouses (cloches A01G 13/04)

9/16 • • Dismountable or portable greenhouses

9/18 • Greenhouses for treating plants with carbon dioxide or the like

9/20 • Forcing-frames; Lights

9/22 • Shades or blinds for greenhouses, or the like

9/24 • Devices for heating, ventilating, regulating temperature, or watering, in greenhouses, forcing-frames, or the like

9/26 • • Electric devices

11/00 **Sterilising soil by steam** (soil-conditioning or soil-stabilising materials C09K 17/00)

13/00 **Protecting plants** (apparatus for the destruction of vermin or noxious animals A01M; use of chemical materials therefor, composition of protective materials, e.g. grafting wax, A01N)

13/02 • Protective coverings for plants; Devices for laying-out coverings

13/04 • • Cloches

13/06 • Devices for generating heat, smoke, or fog in gardens, orchards, or forests, e.g. to prevent damage by frost (chemical aspects of generating smoke or mist C06D 3/00; heating devices in general, see the appropriate classes, e.g. F24)

13/08 • Mechanical apparatus for circulating the air

13/10 • Devices for affording protection against animals, birds, or other pests (A01M 29/00 takes precedence; traps A01M 23/00; pesticides A01N) **[2]**

15/00 **Devices or methods for influencing weather conditions** (dispersing fog in general E01H 13/00)

16/00 **Cultivation of rice** (A01G 9/00 takes precedence) **[3]**

17/00 **Cultivation of hops, vines, fruit trees, or like trees**

17/02 • Cultivation of hops or vines

17/04 • Supports for hops, vines, or trees

17/06 • • Trellis-work

17/08 • • • Tools for attaching hops, vines, or boughs to trellis-work; Tying devices

17/10 • • Holders for boughs or branches

17/12 • • Tree-bands

17/14 • • Props; Stays

17/16 • • • Devices for driving-in or pulling-out props

17/18 • Means for filling-up wounds in trees

23/00 **Forestry**

23/02 • Transplanting, uprooting, felling or delimbing trees (delimbing standing trees A01G 3/00) **[5]**

Note(s)

Tree feeding devices are covered by group B27B 25/00.

23/04 • • Transplanting trees; Devices for grasping the root ball, e.g. stump forceps; Wrappings or packages for transporting trees

23/06 • • Uprooting or pulling up trees; Extracting or eliminating stumps **[5]**

23/08 • • Felling trees (axes B26B 23/00; saws, sawing machines B27B)

23/081 • • • Feller-bunchers, i.e. with bunching by felling head (A01G 23/083 takes precedence) **[5]**

23/083 • • • Feller-delimbers **[5]**

23/085 • • • • having the shearing head mounted on a first boom and the delimbing head mounted on a second boom **[5]**

23/087 • • • Shearing apparatus or the like specially adapted for felling trees (A01G 23/081, A01G 23/083, A01G 23/093 take precedence) **[5]**

23/089 • • • • having two or more shears **[5]**

23/09 • • • • of the percussion type **[5]**

23/091 • • • Sawing apparatus specially adapted for felling trees (A01G 23/081, A01G 23/083, A01G 23/093 take precedence) **[5]**

23/093 • • • Combinations of shearing, sawing or milling apparatus specially adapted for felling trees **[5]**

23/095 • • Delimbers (A01G 23/083 takes precedence; manufacture of wood shavings, chips, powder, or the like B27L 11/00) **[5]**

23/097 • • • having a fixed delimbing head **[5]**

23/099 • • Auxiliary devices, e.g. felling wedges **[5]**

23/10 • Tapping of tree-juices, e.g. caoutchouc, gum

23/12 • • Knives or axes for tapping

23/14 • • Tapping-spouts; Receptacles for juices

25/00 **Watering gardens, fields, sports grounds, or the like** (special apparatus or adaptations for fertilising-liquids A01C 23/00; nozzles or outlets, spraying apparatus B05B; gravity flow, open channel irrigation ditch systems E02B 13/00)

25/02 • Watering arrangements located above the soil which make use of perforated pipe-lines or pipe-lines with dispensing fittings, e.g. for drip irrigation (perforated pipes per se B05B 1/20) **[4]**

25/06 • Watering arrangements making use of perforated pipe-lines located in the soil (perforated pipes per se B05B 1/20; similar arrangements for drainage E02B 11/00)

25/09 • Watering arrangements making use of movable installations on wheels or the like **[2]**

25/14 • Hand watering devices, e.g. watering cans

25/16 • Control of watering (controlling spraying devices B05B) **[2]**

27/00 **Self-acting watering devices, e.g. for flower-pots**

27/02 • having a water reservoir, the main part thereof being located wholly around or directly beside the growth substrate (A01G 27/06 takes precedence) **[6]**

27/04 • using wicks or the like **[6]**

27/06 • • having a water reservoir, the main part thereof being located wholly around or directly beside the growth substrate **[6]**

29/00 **Root feeders; Injecting fertilisers into the roots**

31/00 **Hydroponics; Cultivation without soil** (A01G 33/00 takes precedence) **[2]**

31/02 • Special apparatus therefor (apparatus for cultivation in receptacles or greenhouses in general A01G 9/00; self-acting watering devices A01G 27/00)

31/04 • • Hydroponic culture on conveyers **[6]**

31/06 • • Hydroponic culture on racks or in stacked containers **[6]**

33/00 **Cultivation of seaweed [2]**

33/02 • of laver **[2]**

A01H **NEW PLANTS OR PROCESSES FOR OBTAINING THEM; PLANT REPRODUCTION BY TISSUE CULTURE TECHNIQUES [5]**

Subclass index

PROCESSES.....1/00, 3/00
REPRODUCTION.....4/00
FLOWERING PLANTS; GYMNOSPERMS.....5/00, 7/00
OTHER PRODUCTS.....9/00-17/00

Processes

1/00 **Processes for modifying genotypes** (A01H 4/00 takes precedence) **[5]**

1/02 • Methods or apparatus for hybridisation; Artificial pollination

1/04 • Processes of selection

1/06 • Processes for producing mutations, e.g. treatment with chemicals or with radiation (specific mutations prepared by genetic engineering on plant cell or plant tissues C12N 15/00) **[5]**

1/08 • • Methods or apparatus for producing changes in chromosome number

3/00 **Processes for modifying phenotypes** (A01H 4/00 takes precedence) **[5]**

3/02 • by controlling duration, wavelength, intensity, or periodicity of illumination

3/04 • by treatment with chemicals

4/00 **Plant reproduction by tissue culture techniques [5]**

Products

5/00 **Flowering plants, i.e. angiosperms**

5/02 • Flowers

5/04 • Stems

5/06 • Roots

5/08 • Fruits

5/10 • Seeds

5/12 • Leaves

7/00 **Gymnosperms, e.g. conifers**

9/00 **Pteridophytes, e.g. ferns, club-mosses, horse-tails**

11/00 **Bryophytes, e.g. mosses, liverworts**

13/00 **Algae** (unicellular algae C12N 1/12)

15/00 **Fungi; Lichens** (fungal micro-organisms C12N 1/14)

17/00 **Symbiotic or parasitic combinations including one or more new plants, e.g. mycorrhiza** (lichens A01H 15/00)

A01J **MANUFACTURE OF DAIRY PRODUCTS** (preservation, pasteurisation, sterilisation of milk products A23; for chemical matters, see subclass A23C)

Subclass index

MILKING.....1/00-9/00
TREATMENT OF MILK OR CREAM.....11/00, 13/00
MANUFACTURING BUTTER.....15/00

KNEADING OR FORMING BUTTER, MARGARINE OR BUTTER SUBSTITUTES.....17/00-23/00
CHEESE-MAKING.....25/00, 27/00
SUBJECT MATTER NOT PROVIDED FOR IN OTHER GROUPS OF THIS SUBCLASS.....99/00

Milking

1/00 **Devices or accessories for milking by hand** (milking stools A47C 9/04)

3/00 **Milking with catheters**

5/00 **Milking machines or devices** (A01J 1/00, A01J 3/00 take precedence; milking stations A01K 1/12)
5/003 • Movable milking machines **[6]**
5/007 • Monitoring milking processes; Control or regulation of milking machines **[6]**
5/01 • • Milkmeters; Milk flow sensing devices **[6]**
5/013 • On-site detection of mastitis in milk **[6]**
5/017 • Automatic attaching or detaching of clusters **[6]**
5/02 • with mechanical manipulation of teats
5/04 • with pneumatic manipulation of teats
5/06 • • Teat-cups with one chamber
5/08 • • Teat-cups with two chambers
5/10 • • Pulsators arranged otherwise than on teat-cups
5/12 • • • with membranes
5/14 • • • electromagnetically controlled
5/16 • • Teat-cups with pulsating devices

7/00 **Accessories for milking machines or devices** (milking stations A01K 1/12) **[5, 6]**
7/02 • for cleaning or sanitising milking machines or devices (cleaning the internal surfaces of pipes or tubes of milking machines B08B 9/027) **[6]**
7/04 • for treatment of udders or teats, e.g. for cleaning **[6]**

9/00 **Milk receptacles** (containers in general B65D; devices for tilting and emptying of containers B65G 65/23)
9/02 • with straining or filtering devices
9/04 • with cooling arrangements
9/06 • with self-closing valve
9/08 • Holding or supporting devices for milking receptacles
9/10 • Milking pails connected with milking stools

Treatment of milk or cream

11/00 **Apparatus for treating milk** (preserving or sterilising A23C)
11/02 • Appliances for preventing or destroying foam (preventing boiling-over of milk in kitchen cooking vessels A47J 27/56; preventing foaming in boiling apparatus B01B 1/02)
11/04 • Appliances for aerating or de-aerating milk (milk centrifuges B04B)
11/06 • Strainers or filters for milk (filtering materials B01D)
11/08 • • Holders for strainers or cloth filters
11/10 • Separating milk from cream (milk centrifuges B04B)
11/12 • • Appliances for removing cream
11/14 • • • by raising the level of the milk
11/16 • Homogenising milk (homogenising in general B01F)

13/00 **Tanks for treating cream**

15/00 **Manufacturing butter**
15/02 • Stationary churns with beating equipment
15/04 • Rotating or oscillating churns
15/06 • • with beating equipment which is movable in respect of the churn wall
15/08 • • without beating equipment which is movable in respect of the churn wall
15/10 • Devices for manufacturing butter other than by churns
15/12 • • with arrangements for making butter in a continuous process
15/14 • Churns with arrangements for making butter by blowing-in air
15/16 • Details; Accessories
15/18 • • Devices for de-aerating
15/20 • • Incorporation of revolution counters; Incorporation of alarm devices
15/22 • • Lids or covers for butter churns
15/24 • • Beaters for butter churns
15/25 • • Means for removing butter from churns or the like (pumps therefor F04)
15/26 • Combined appliances for separating, churning and kneading
15/28 • Driving mechanisms

Kneading or forming butter; Kneading or forming margarine or butter substitutes

17/00 **Kneading machines for butter, or the like** (mixing or kneading machines for the preparation of dough A21C 1/00)

19/00 **Hand devices for forming slabs of butter, or the like**

21/00 **Machines for forming slabs of butter, or the like**
21/02 • with extruding arrangements and cutting devices, with or without packing devices

23/00 **Devices for dividing bulk butter, or the like**

Cheese-making

25/00 **Cheese-making** (coating the cheese A01J 27/02)
25/02 • Cheese basins
25/04 • • Devices for cleaning cheese basins
25/06 • Devices for dividing curdled milk
25/08 • Devices for removing cheese from basins
25/10 • Devices for removing whey from basins
25/11 • Separating whey from curds; Washing the curds
25/12 • Forming the cheese
25/13 • • Moulds therefor
25/15 • • Presses therefor
25/16 • Devices for treating cheese during ripening

27/00 **After-treatment of cheese; Coating the cheese**
27/02 • Coating the cheese, e.g. with paraffin wax (applying liquids or other fluent materials to surfaces in general B05)

27/04 • Milling or recasting cheese

99/00 Subject matter not provided for in other groups of this subclass [2006.01]

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

Note(s)

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, devices in connection with harnesses B68B;
- methods of breeding animals or new animal breeds.

Subclass index

ANIMAL HUSBANDRY IN GENERAL, ESPECIALLY CATTLE RAISING
Housing, feeding or watering devices....1/00-9/00
Taming; muzzles, leads....15/00, 25/00, 27/00
Marking; devices for grooming....11/00, 13/00
Removing the fleece....14/00
Other apparatus....17/00-23/00, 29/00
AVICULTURE; EGGS
Housing, feeding or drinking appliances....31/00, 39/00
Marking....35/00
Other apparatus....33/00, 37/00, 41/00, 43/00, 45/00
APICULTURE
Housing, feeding or drinking appliances....47/00, 53/00
Other devices....49/00, 51/00, 55/00, 57/00, 59/00
PISCICULTURE....61/00, 63/00
OTHER REARING OR BREEDING, NEW BREEDS....67/00
FISHING WITH NETS....69/00-75/00
ANGLING
Rods; reels....87/00, 89/00
Lines; accessories therefor....91/00, 83/00, 85/00, 93/00, 95/00
Accessories....97/00
OTHER FISHING....69/00, 77/00-81/00, 99/00

Animal husbandry in general, especially cattle-raising

1/00 Housing animals; Equipment therefor (building construction, features of buildings E04; ventilating buildings F24F)

1/01 • Removal of dung or urine (A01K 1/015 takes precedence) **[2]**

1/015 • Floor coverings, e.g. bedding-down sheets **[2]**

1/02 • Pigsties; Dog-kennels; Rabbit-hutches or the like

1/03 • • Housing for domestic or laboratory animals **[2]**

1/035 • • Devices for use in keeping domestic animals, e.g. fittings in housings, dog beds **[2]**

1/04 • Tethering-poles or the like

1/06 • Devices for fastening animals, e.g. halters, toggles, neck-bars, chain fastenings

1/062 • • Neck-bars **[2]**

1/064 • • Chain fastenings **[2]**

1/08 • Arrangements for simultaneously releasing several animals

1/10 • Feed racks (devices for impeding movement of animals A01K 15/04)

1/12 • Milking stations **[2]**

3/00 Pasturing equipment, e.g. tethering devices; Grids for preventing cattle from straying; Electrified wire fencing (construction of fencing in general E04H 17/00; electric circuits for fences H05C)

5/00 Feeding devices for stock or game (A01K 1/10 takes precedence; for poultry A01K 39/00) **[2]**

5/01 • Feed troughs; Feed pails **[2]**

5/015 • Licking-stone holders (salt blocks A23K 1/16) **[2]**

5/02 • Automatic devices

7/00 Watering equipment for stock or game

7/02 • Automatic devices (construction of valves F16K)

7/04 • • actuated by float **[2]**

7/06 • • actuated by the animal **[2]**

9/00 Sucking apparatus for young stock

11/00 Marking of animals (of poultry A01K 35/00; lead-sealing pliers B25B)

13/00 Devices for grooming or caring of animals, e.g. curry-combs (scissors B26B)**; Fetlock rings** (bandages, poultices A61D)**; Tail-holders** (as part of the harness B68B 5/04)**; Devices for preventing crib-biting; Washing devices** (milking machine accessories for treatment of udders or teats A01J 7/04; for medical purposes A61D 11/00)**; Protection against weather conditions or insects**

14/00 Removing the fleece from live sheep or similar animals (hand-held cutting tools B26B) **[5]**

15/00 **Devices for taming animals, e.g. nose-rings or hobbles; Devices for overturning animals in general; Training or exercising equipment; Covering boxes** (devices for veterinary purposes A61D 3/00)
15/02 • Training or exercising equipment, e.g. mazes or labyrinths for animals (A01K 15/04 takes precedence) **[2]**
15/04 • Devices for impeding movement; Devices for impeding passage through fencing **[2]**

17/00 **Dehorners; Horn trainers**

19/00 **Weaning apparatus**

21/00 **Devices for assisting or preventing mating** (covering boxes A01K 15/00)

23/00 **Manure or urine pouches**

25/00 **Muzzles**

27/00 **Leads or collars, e.g. for dogs** (devices specially adapted or mounted for storing and repeatedly paying-out and re-storing lengths of material B65H 75/34)

29/00 **Other apparatus for animal husbandry**

Aviculture; Testing, cleaning, stamping, or grading eggs

31/00 **Housing birds**
31/02 • Door appliances; Automatic door-openers (counters for specific applications G07C 9/00)
31/04 • Dropping-boards; Devices for removing excrement
31/06 • Cages
31/07 • • Transportable cages (A01K 31/08 takes precedence) **[2]**
31/08 • • Collapsible cages
31/10 • Doors; Trap-doors
31/12 • Perches
31/14 • Nest-boxes
31/16 • • Laying nests for poultry; Egg collecting **[2]**
31/17 • • • Laying batteries **[2]**
31/18 • Chicken coops or houses; Brooders
31/19 • • Brooders **[2]**
31/20 • • Heating arrangements
31/22 • Poultry runs
31/24 • Dovecots; Pigeonlofts **[2]**

33/00 **Nest-eggs**

35/00 **Marking poultry or other birds**

37/00 **Constraining birds, e.g. wing clamps**

39/00 **Feeding or drinking appliances for poultry or other birds [2]**
39/01 • Feeding devices (A01K 39/04 takes precedence) **[2]**
39/012 • • filling automatically **[2]**
39/014 • • Feed troughs; Feed throwers **[2]**
39/02 • Drinking appliances (A01K 39/04 takes precedence; construction of valves F16K) **[2]**
39/022 • • with weight-controlled supply **[2]**
39/024 • • with float-controlled supply **[2]**
39/026 • • kept filled to constant level from incorporated storage **[2]**
39/04 • Combined feeding and drinking appliances
39/06 • Cramming appliances

41/00 **Incubators for poultry**
41/02 • Heating arrangements
41/04 • Controlling humidity in incubators
41/06 • Egg-turning appliances for incubators

43/00 **Testing, sorting, or cleaning eggs** (investigating or analysing eggs, e.g. by candling, G01N 33/08)
43/04 • Grading eggs
43/06 • • according to size
43/08 • • according to weight (sorting according to weight in general B07C 5/16)
43/10 • • Grading and stamping

45/00 **Other aviculture appliances, e.g. devices for determining whether a bird is about to lay**

Apiculture

47/00 **Beehives**
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, bee escapes

49/00 **Rearing-boxes; Queen transporting or introducing cages**

51/00 **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** (smoking pipes A24F)

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
59/06 • Devices for extracting wax

Pisciculture; Aquaria; Terraria

61/00 **Culture of fish, mussels, crayfish, lobsters, sponges, pearls, or the like** (harvesting oysters, mussels, sponges or the like A01K 80/00)
61/02 • Feeding devices for fish

63/00 **Receptacles for live fish, e.g. aquaria** (keepnets or other containers for keeping captured fish A01K 97/20)**; Terraria [5]**
63/02 • Receptacles specially adapted for transporting live fish
63/04 • Arrangements for treating water specially adapted to receptacles for live fish (filters in general B01D; water treatment in general C02F) **[3]**
63/06 • Arrangements for heating or lighting in, or attached to, receptacles for live fish (heating or lighting apparatus per se F21, H01, H05B) **[3]**

65/00 **Fish stringers**

67/00 **Rearing or breeding animals, not otherwise provided for; New breeds of animals** (methods for reproduction or fertilisation A61D 19/00; medicinal preparations containing sperm A61K 35/52; tissue- or animal-cell cultivation apparatus C12M 3/00; cultivation or maintenance of tissue or animal cells C12N 5/00; mutation or genetic engineering C12N 15/00)

Note(s)

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 (covering boxes A01K 15/00; devices for assisting or preventing mating A01K 21/00)
67/027 • New breeds of vertebrates **[5]**
67/033 • Rearing or breeding invertebrates; New breeds of invertebrates (non-chemical sterilisation of invertebrates A01M) **[5]**
67/04 • • Silkworms **[5]**

Fishing

69/00 **Stationary catching devices for fishing**
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 fishing nets**

73/00 **Drawn fishing nets**
73/02 • Trawling nets
73/04 • • Devices for spreading or positioning, e.g. control thereof **[2]**
73/045 • • • for lateral sheering, e.g. trawl boards **[2]**
73/05 • • • for vertical sheering **[2]**
73/053 • • • Ground-line rollers **[4]**
73/06 • • Hauling devices for the headlines
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 for fishing [2]**

75/00 **Accessories for fishing nets; Details of fishing nets, e.g. structure [4]**
75/02 • Illuminating devices for nets
75/04 • Floats (for angling A01K 93/00) **[4]**
75/06 • Sinkers (for angling A01K 95/00) **[4]**

77/00 **Landing-nets for fishing; Landing-spoons for fishing**

79/00 **Methods or means of catching fish in bulk not provided for in groups A01K 69/00-A01K 77/00**
79/02 • by electrocution (electric circuits therefor H05C)

80/00 **Harvesting oysters, mussels, sponges or the like** (fishing nets A01K 73/00, A01K 74/00; dredgers E02F) **[3]**

81/00 **Fishing with projectiles** (weapons, projectiles other than fish-spears F41, 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**
83/02 • Expanding fish-hook assembly
83/04 • with special gripping arms
83/06 • Devices for holding bait on hooks

85/00 **Artificial bait for fishing**
85/01 • with light emission, sound emission, scent dispersal or the like **[2, 5]**
85/02 • with means for concealing or protecting hooks, e.g. to prevent entanglement with weeds **[5]**
85/08 • Artificial flies (fly tying devices A01K 97/26) **[5]**
85/10 • with at least one flat rotating body having its axis of rotation substantially non-coincident with the longitudinal axis of the body **[5]**
85/12 • comprising a body rotating around its longitudinal axis, e.g. devons **[5]**
85/14 • with flat, or substantially flat, undulating bodies, e.g. spoons **[5]**
85/16 • with other than flat, or substantially flat, undulating bodies, e.g. plugs **[5]**
85/18 • • in two or more pieces **[5]**

87/00 **Fishing rods**
87/02 • Connecting devices for parts of the rods
87/04 • Fishing-line guides on rods
87/06 • Devices for fixing reels on rods
87/08 • Handgrips **[5]**

89/00 **Fishing reels**
89/01 • with pick-up, i.e. with the guiding member rotating and the spool being stationary during normal retrieval of the line (A01K 89/027 takes precedence) **[2, 5]**
89/012 • • motor-driven **[2]**
89/015 • with rotary drum (A01K 89/033 takes precedence) **[2, 5]**
89/0155 • • Antibacklash devices **[5]**
89/016 • • Fly reels **[5]**
89/0165 • • for trolling **[5]**
89/017 • • motor-driven **[2]**
89/02 • Brake devices for reels
89/027 • • with pick-up **[5]**
89/033 • • with rotary drum **[5]**
89/06 • Reversible reels **[5]**
89/08 • Pole-less fishing apparatus, i.e. hand-held reels **[5]**

91/00 **Fishing lines**
91/02 • Devices for casting lines
91/03 • Connecting devices (devices for fixing on or removing sinkers from lines A01K 95/02) **[5]**
91/04 • • for connecting lines to hooks or lures **[5]**
91/047 • • for connecting lines to lines **[5]**
91/053 • • Fishing booms, i.e. connecting devices spreading out the leaders, e.g. to avoid tangling thereof **[5]**
91/06 • Apparatus on lines not otherwise provided for, e.g. automatic hookers (floats A01K 93/00) **[2, 5]**
91/08 • • Trolling devices **[5]**
91/10 • • for automatic hook setting **[5]**
91/12 • Fly lines **[5]**
91/14 • Leaders **[5]**
91/16 • • for fly fishing **[5]**
91/18 • Trotlines, longlines; Accessories therefor, e.g. baiting devices, lifters, setting reelers **[5]**
91/20 • Line length or depth measuring devices **[5]**

93/00 Floats for angling, with or without signalling devices [4, 5]
93/02 • with signalling devices **[5]**

95/00 Sinkers for angling [4]
95/02 • Devices for fixing on or removing sinkers from lines **[5]**

97/00 Accessories for angling (fish stringers A01K 65/00; landing-nets or landing-spoons for fishing A01K 77/00)
97/01 • for ice-fishing **[2]**
97/02 • Devices for laying ground-bait, e.g. chum dispensers
97/04 • Containers for bait; Preparation of bait (feeding-stuffs for particular animals A23K 1/18) **[2]**
97/05 • • Containers for live bait kept in water, e.g. for minnows, shrimps **[5]**
97/06 • Containers or holders for hooks, lines, sinkers, flies or the like **[5]**
97/08 • Containers for rods
97/10 • Supports for rods
97/11 • • with automatic hooking devices **[5]**
97/12 • Signalling devices, e.g. tip-up devices (A01K 91/06 takes precedence) **[2]**
97/14 • Gaffs
97/16 • Devices for drying fishing lines
97/18 • for removing fish-hooks from the fish **[5]**
97/20 • Keepnets or other containers for keeping captured fish (A01K 97/05 takes precedence) **[5]**
97/22 • Platforms or seat-boxes specially adapted for angling, e.g. tackle boxes for use as seats **[5]**
97/24 • Arrangements for disengaging fish-hooks from obstacles **[5]**
97/26 • Fly tying devices **[5]**
97/28 • • Vices specially adapted therefor **[5]**

99/00 Methods or apparatus for fishing not provided for in groups A01K 69/00-A01K 97/00 [2006.01]

A01L SHOEING OF ANIMALS

Subclass index

SHOES.....1/00, 3/00, 5/00, 9/00
EQUIPMENT AND ACCESSORIES.....7/00, 11/00, 13/00, 15/00

1/00 Shoes for horses or other solipeds fastened with nails (A01L 3/00 takes precedence)
1/02 • Solid horseshoes consisting of one part
1/04 • Solid horseshoes consisting of multiple parts

3/00 Horseshoes fastened by means other than nails, with or without additional fastening by nailing
3/02 • Horseshoes consisting of one part
3/04 • Horseshoes consisting of two or more parts connected by hinged joints
3/06 • Shoe-like appliances enabling draught animals to walk on bogs or the like

5/00 Horseshoes made of elastic materials

7/00 Accessories for shoeing animals
7/02 • Elastic inserts or soles for horseshoes
7/04 • Solid calks or studs
7/06 • Elastic calks or studs
7/08 • Ice-spurs for horseshoes
7/10 • Horseshoe nails

9/00 Shoes for other animals, e.g. oxen

11/00 Farriers' tools or appliances (making horseshoes by rolling B21H 7/12, by forging B21K 15/02)

13/00 Pens for animals while being shod

15/00 Apparatus or use of substances for the care of hoofs

A01M CATCHING, TRAPPING OR SCARING OF ANIMALS (apiculture A01K 47/00-A01K 59/00; fishing A01K 69/00-A01K 97/00; pesticides A01N); APPARATUS FOR THE DESTRUCTION OF NOXIOUS ANIMALS OR NOXIOUS PLANTS (equipment fitted in or to aircraft for dropping or releasing powdered, liquid or gaseous matter, e.g. pesticides, herbicides, B64D 1/16)

Note(s)

In this subclass, terms "killing" and "destruction" cover "non-chemical sterilisation" of invertebrates.

Subclass index

SPRAYERS; FUMIGATORS; FLAME-THROWERS.....7/00-11/00, 13/00, 15/00
CATCHING OR KILLING INSECTS.....1/00-5/00, 17/00
CATCHING OR KILLING ANIMALS OTHER THAN INSECTS.....19/00, 23/00, 25/00, 27/00
SCARING DEVICES; HUNTING APPLIANCES.....29/00, 31/00
DESTRUCTION OF UNWANTED VEGETATION.....21/00
SUBJECT MATTER NOT PROVIDED FOR IN OTHER GROUPS OF THIS SUBCLASS.....99/00

1/00 Stationary means for catching or killing insects
1/02 • with devices attracting the insects
1/04 • • using illumination
1/06 • using a suction effect
1/08 • using combined illumination and suction effects
1/10 • Traps
1/12 • • automatically reset
1/14 • Catching by adhesive surfaces
1/16 • • Fly papers or ribbons
1/18 • • Adhesive bands or coatings for trees
1/20 • Poisoning, narcotising, or burning insects
1/22 • by electric means (electric circuits therefor H05C)
1/24 • Arrangements connected with buildings, doors, windows, or the like

3/00 Manual implements, other than sprayers or powder distributors, for catching or killing insects, e.g. butterfly nets
3/02 • Fly-swatters
3/04 • with adhesive surfaces

5/00 Catching insects in fields, gardens, or forests by movable appliances
5/02 • Portable appliances
5/04 • Wheeled machines, with means for stripping-off or brushing-off insects
5/06 • • with adhesive surfaces
5/08 • • with fans

7/00 Special adaptations or arrangements of liquid-spraying apparatus for purposes covered by this subclass (spraying apparatus in general B05B)

9/00 Special adaptations or arrangements of powder-spraying apparatus for purposes covered by this subclass (spraying apparatus in general B05B)

11/00 Special adaptations or arrangements of combined liquid- and powder-spraying apparatus for purposes covered by this subclass (spraying apparatus in general B05B)

13/00 Fumigators; Apparatus for distributing gases

15/00 Flame-throwers specially adapted for purposes covered by this subclass (flame-throwers in general F41H 9/02)

17/00 Apparatus for the destruction of vermin in soil or in foodstuffs

19/00 Apparatus for the destruction of noxious animals, other than insects, by hot water, steam, hot air, or electricity (electric circuits therefor H05C)

21/00 Apparatus for the destruction of unwanted vegetation, e.g. weeds (biocides, plant growth regulators A01N 25/00-A01N 65/00; spraying or atomising apparatus in general B05B; soil-conditioning or soil-stabilising materials C09K 17/00; control of undesirable vegetation on roads or permanent ways of railways E01H 11/00)
21/02 • Apparatus for mechanical destruction
21/04 • Apparatus for destruction by steam, chemicals, burning, or electricity

23/00 Traps for animals
23/02 • Collecting-traps
23/04 • • with tipping platforms
23/06 • • • with locking mechanism for the tipping platform
23/08 • • with approaches permitting entry only
23/10 • • with rotating cylinders or turnstiles
23/12 • • with devices for throwing the animal to a collecting chamber
23/14 • • Other traps automatically reset
23/16 • Box traps
23/18 • • with pivoted closure flaps
23/20 • • with dropping doors or slides
23/22 • • with dropping covers
23/24 • Jaw or like spring traps
23/26 • • of the double-jaw or pincer type
23/28 • • • Jaw trap setting-devices
23/30 • • Break-back traps
23/32 • • Racket net traps
23/34 • • with snares
23/36 • • with arrangements for piercing the victim
23/38 • Electric traps

25/00 Devices for dispensing poison for animals (A01M 27/00 takes precedence; for insects A01M 1/20) **[3]**

27/00 Apparatus having projectiles or killing implements projected to kill the animal, e.g. pierce or shoot, and triggered thereby [3]

29/00 Scaring or repelling devices, e.g. bird-scaring apparatus [1, 2011.01]
29/06 • using visual means, e.g. scarecrows, moving elements, specific shapes, patterns or the like **[2011.01]**
29/08 • • using reflection, colours or films with specific transparency or reflectivity **[2011.01]**
29/10 • • using light sources, e.g. lasers or flashing lights **[2011.01]**
29/12 • using odoriferous substances, e.g. aromas, pheromones or chemical agents **[2011.01]**
29/14 • using thermal effects **[2011.01]**
29/16 • using sound waves **[2011.01]**
29/18 • • using ultrasonic signals **[2011.01]**
29/20 • • with generation of periodically explosive reports **[2011.01]**
29/22 • using vibrations (A01M 29/16 takes precedence) **[2011.01]**
29/24 • using electric or magnetic effects, e.g. electric shocks, magnetic fields or microwaves **[2011.01]**
29/26 • • specially adapted for birds, e.g. electrified rods, cords or strips **[2011.01]**
29/28 • • specially adapted for insects **[2011.01]**
29/30 • preventing or obstructing access or passage, e.g. by means of barriers, spikes, cords, obstacles or sprinkled water **[2011.01]**
29/32 • • specially adapted for birds, e.g. spikes **[2011.01]**
29/34 • • specially adapted for insects **[2011.01]**

31/00 Hunting appliances
31/02 • Shooting stands (folding seats A47C)
31/04 • Beater rattles
31/06 • Decoys

99/00 Subject matter not provided for in other groups of this subclass [2006.01]

A01N **PRESERVATION OF BODIES OF HUMANS OR ANIMALS OR PLANTS OR PARTS THEREOF** (preservation of food or foodstuff A23)**; BIOCIDES, e.g. AS DISINFECTANTS, AS PESTICIDES OR AS HERBICIDES** (preparations for medical, dental or toilet purposes which kill or prevent the growth or proliferation of unwanted organisms A61K)**; PEST REPELLANTS OR ATTRACTANTS; PLANT GROWTH REGULATORS** (mixtures of pesticides with fertilisers C05G)

Note(s)

1. This subclass covers:
   - compositions, physical forms, methods of application of specific materials or the use of single compounds or compositions;
   - chemosterilants for the sexual sterilisation of invertebrates, e.g. insects (sex sterilants for other purposes A61K).
2. This subclass does not cover materials which affect the growth of a plant solely by supplying nutrients, i.e. plant food, ordinarily required for growth or materials which are used to prevent or cure mineral deficiencies in plants, e.g. addition of iron chelates to cure iron chlorosis, which materials are covered by class C05.
3. In this subclass, the following expression is used with the meaning indicated:
   - "plant growth regulators" are those materials which alter the plant through a chemical modification of the plant metabolism, such as auxins.
4. Biocidal, pest repellant, pest attractant or plant growth regulatory activity of compounds or preparations is further classified in subclass A01P.

Subclass index

PRESERVATION OF CORPSES OF HUMANS OR ANIMALS, OR OF PLANTS.....1/00, 3/00
BIOCIDES, PEST REPELLANTS OR ATTRACTANTS, PLANT GROWTH REGULATORS
Physical form or method of application.....25/00
containing organic compounds.....27/00-57/00, 61/00
containing inorganic compounds.....59/00
containing micro-organisms, enzymes, extracts of animals or plants.....63/00, 65/00

Preservation of bodies of humans or animals, or plants, or parts thereof

1/00 **Preservation of bodies of humans or animals, or parts thereof**

1/02 • Preservation of living parts

3/00 **Preservation of plants or parts thereof, e.g. inhibiting evaporation, improvement of the appearance of leaves** (preservation or chemical ripening of harvested fruit or vegetables A23B 7/00)**; Grafting wax**

3/02 • Keeping cut flowers fresh chemically (apparatus therefor A01G 5/06)

3/04 • Grafting wax

Biocides; Pest repellants or attractants; Plant growth regulators [3]

Note(s)

1. Attention is drawn to the definitions of groups of chemical elements following the title of section C.
2. In groups A01N 27/00-A01N 65/00, in the absence of an indication to the contrary, an active ingredient is classified in the last appropriate place.
3. A composition, i.e. a mixture of two or more active ingredients is classified in the last of groups A01N 27/00-A01N 65/00 that provides for at least one of these active ingredients.
4. Any part of a composition which is not identified by the classification according to Note (3), and which itself is determined to be novel and non-obvious, must also be classified in the last appropriate place in groups A01N 27/00-A01N 65/00. The part can be either a single ingredient or a composition in itself.
5. Any part of a composition which is not identified by the classification according to Note (3) or (4), and which is considered to represent information of interest for search, may also be classified in the last appropriate place in groups A01N 27/00-A01N 65/00. This can, for example, be the case when it is considered of interest to enable searching of compositions using a combination of classification symbols. Such non-obligatory classification should be given as "additional information".
6. Where a compound is described as existing in tautomeric forms, it is classified as if existing in the form which is classified last in the system.
7. Compounds covered by different main groups according to alternatively specified parts of their formulae are classified in every one of the relevant main groups.
8. Salts formed between two or more organic compounds are classified as the compound providing the essential ion and it is also classified as the compound providing the other ion.
9. Salts or metal chelates of an organic compound are classified as that compound.
10. In this subclass, a foodstuff is not considered as an active ingredient.
11. Different materials applied in sequence, at different times, are considered as a mixture of all materials employed.
12. Synergistic or potentiated compositions are classified as if the synergist or potentiator were an active ingredient.
13. In groups A01N 25/00-A01N 65/00, the symbol X means nitrogen, oxygen, sulfur or a halogen; Y means nitrogen, oxygen or sulfur. A dotted line between atoms indicates an optional bond, e.g. ... indicates one or two single bonds or a double bond.

25/00 Biocides, pest repellants or attractants, or plant growth regulators, characterised by their forms, or by their non-active ingredients or by their methods of application (fungicidal, bactericidal, insecticidal, disinfecting or antiseptic paper D21H)**; Substances for reducing the noxious effect of the active ingredients to organisms other than pests [3]**

25/02 • containing liquids as carriers, diluents or solvents **[3]**
25/04 • • Dispersions or gels (foams A01N 25/16) **[3]**
25/06 • • • Aerosols **[3]**
25/08 • containing solids as carriers or diluents **[3]**
25/10 • • Macromolecular compounds **[3]**
25/12 • Powders or granules (A01N 25/26 takes precedence) **[3]**
25/14 • • wettable **[3]**
25/16 • Foams **[3]**
25/18 • Vapour or smoke emitting compositions with delayed or sustained release **[3]**
25/20 • Combustible or heat-generating compositions **[3]**
25/22 • containing ingredients stabilising the active ingredients **[3]**
25/24 • containing ingredients to enhance the sticking of the active ingredients **[3]**
25/26 • in coated particulate form **[3]**
25/28 • • Microcapsules **[3]**
25/30 • characterised by the surfactants **[3]**
25/32 • Ingredients for reducing the noxious effect of the active substances to organisms other than pests, e.g. toxicity reducing compositions, self-destructing compositions **[3]**
25/34 • Shaped forms, e.g. sheets, not provided for in any other group of this main group **[3]**

27/00 Biocides, pest repellants or attractants, or plant growth regulators containing hydrocarbons [3]

29/00 Biocides, pest repellants or attractants, or plant growth regulators containing halogenated hydrocarbons [3]

29/02 • Acyclic compounds or compounds containing halogen attached to an aliphatic side chain of a cycloaliphatic ring system **[3]**
29/04 • Halogen directly attached to a carbocyclic ring system **[3]**
29/06 • • Hexachlorocyclohexane **[3]**
29/08 • • Halogen directly attached to a polycyclic ring system **[3]**
29/10 • Halogen attached to an aliphatic side chain of an aromatic ring system **[3]**
29/12 • • 1,1-Di- or 1,1,1-tri-halo-2-aryl-ethane or -ethene or derivatives thereof, e.g. DDT **[3]**

31/00 Biocides, pest repellants or attractants, or plant growth regulators containing organic oxygen or sulfur compounds [3]

31/02 • Acyclic compounds **[3]**
31/04 • Oxygen or sulfur attached to an aliphatic side chain of a carbocyclic ring system **[3]**
31/06 • Oxygen or sulfur directly attached to a cycloaliphatic ring system **[3]**
31/08 • Oxygen or sulfur directly attached to an aromatic ring system **[3]**
31/10 • • Pentachlorophenol **[3]**
31/12 • • Bis-chlorophenols **[3]**
31/14 • • Ethers **[3]**
31/16 • • with two or more oxygen or sulfur atoms directly attached to the same aromatic ring system **[3]**

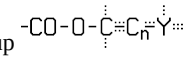
33/00 Biocides, pest repellants or attractants, or plant growth regulators containing organic nitrogen compounds [3]

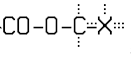
33/02 • Amines; Quaternary ammonium compounds **[3]**
33/04 • • Nitrogen directly attached to aliphatic or cycloaliphatic carbon atoms **[3]**
33/06 • • Nitrogen directly attached to an aromatic ring system **[3]**
33/08 • • containing oxygen or sulfur **[3]**
33/10 • • • having at least one oxygen or sulfur atom directly attached to an aromatic ring system **[3]**
33/12 • • Quaternary ammonium compounds **[3]**
33/14 • containing nitrogen-to-halogen bonds **[3]**
33/16 • containing nitrogen-to-oxygen bonds **[3]**
33/18 • • Nitro compounds **[3]**
33/20 • • • containing oxygen or sulfur attached to the carbon skeleton containing the nitro group **[3]**
33/22 • • • • having at least one oxygen or sulfur atom and at least one nitro group directly attached to the same aromatic ring system **[3]**
33/24 • • only one oxygen atom attached to the nitrogen atom **[3]**
33/26 • containing nitrogen-to-nitrogen bonds, e.g. azides, diazo-amino compounds, diazonium compounds, hydrazine derivatives **[3]**

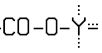
35/00 Biocides, pest repellants or attractants, or plant growth regulators containing organic compounds containing a carbon atom having two bonds to hetero atoms with at the most one bond to halogen, e.g. aldehyde radical [3]

35/02 • containing aliphatically bound aldehyde or keto groups, or thio-analogues thereof; Derivatives thereof, e.g. acetals **[3]**
35/04 • containing aldehyde or keto groups, or thio-analogues thereof, directly attached to an aromatic ring system, e.g. acetophenone; Derivatives thereof, e.g. acetals **[3]**
35/06 • containing keto or thioketo groups as part of a ring, e.g. cyclohexanone, quinone; Derivatives thereof, e.g. ketals **[3]**
35/08 • at least one of the bonds to hetero atoms is to nitrogen **[3]**
35/10 • • containing a carbon-to-nitrogen double bond **[3]**

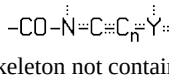
37/00 Biocides, pest repellants or attractants, or plant growth regulators containing organic compounds containing a carbon atom having three bonds to hetero atoms with at the most two bonds to halogen, e.g. carboxylic acids (containing cyclopropane carboxylic acids or derivatives thereof, e.g. cyclopropane carboxylic acid nitriles, A01N 53/00) **[3]**

37/02 • Saturated carboxylic acids or thio-analogues thereof; Derivatives thereof **[3]**
37/04 • • polybasic **[3]**
37/06 • Unsaturated carboxylic acids or thio-analogues thereof; Derivatives thereof **[3]**
37/08 • containing carboxylic groups or thio-analogues thereof, directly attached by the carbon atom to a cycloaliphatic ring; Derivatives thereof **[3]**
37/10 • Aromatic or araliphatic carboxylic acids, or thio-analogues thereof; Derivatives thereof **[3]**
37/12 • containing the group  , wherein C_n means a carbon skeleton not containing a ring; Thio-analogues thereof **[3]**

37/14 • containing the group  ; Thio-analogues thereof **[3]**

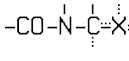
37/16 • containing the group  ; Thio-analogues thereof **[3]**

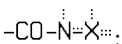
37/18 • containing the group —CO—N<, e.g. carboxylic acid amides or imides; Thio-analogues thereof **[3]**

37/20 • • containing the group  , wherein C_n means a carbon skeleton not containing a ring; Thio-analogues thereof **[3]**

37/22 • • the nitrogen atom being directly attached to an aromatic ring system, e.g. anilides **[3]**

37/24 • • • containing at least one oxygen or sulfur atom being directly attached to the same aromatic ring system **[3]**

37/26 • • containing the group  ; Thio-analogues thereof **[3]**

37/28 • • containing the group  ; Thio-analogues thereof **[3]**

37/30 • • containing the groups —CO—N< and both being directly attached by their carbon atoms to the same carbon skeleton, e.g. H_2N—NH—CO—C_6H_4—$COOCH_3$; Thio-analogues thereof **[3]**

37/32 • • Cyclic imides of polybasic carboxylic acids or thio-analogues thereof **[3]**

37/34 • Nitriles **[3]**

37/36 • containing at least one carboxylic group or a thio-analogue, or a derivative thereof, and a singly bound oxygen or sulfur atom attached to the same carbon skeleton, this oxygen or sulfur atom not being a member of a carboxylic group or of a thio-analogue, or of a derivative thereof, e.g. hydroxy-carboxylic acids **[3]**

37/38 • • having at least one oxygen or sulfur atom attached to an aromatic ring system **[3]**

37/40 • • • having at least one carboxylic group or a thio-analogue, or a derivative thereof, and one oxygen or sulfur atom attached to the same aromatic ring system **[3]**

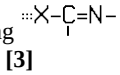
37/42 • containing within the same carbon skeleton a carboxylic group or a thio-analogue, or a derivative thereof, and a carbon atom having only two bonds to hetero atoms with at the most one bond to halogen, e.g. keto-carboxylic acids **[3]**

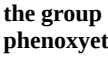
37/44 • containing at least one carboxylic group or a thio-analogue, or a derivative thereof, and a nitrogen atom attached to the same carbon skeleton by a single or double bond, this nitrogen atom not being a member of a derivative or of a thio-analogue of a carboxylic group, e.g. amino-carboxylic acids **[3]**

37/46 • • N-acyl derivatives **[3]**

37/48 • • Nitro-carboxylic acids; Derivatives thereof **[3]**

37/50 • • the nitrogen atom being doubly bound to the carbon skeleton **[3]**

37/52 • containing  groups, e.g. carboxylic acid amidines **[3]**

39/00 Biocides, pest repellants or attractants, or plant growth regulators containing aryloxy- or arylthio-aliphatic or cycloaliphatic compounds, containing the group  **or** **, e.g. phenoxyethylamine, phenylthio-acetonitrile, phenoxyacetone [3]**

Note(s)

In this group, the symbol C_n means a carbon skeleton, not containing an aromatic ring system wherein n≥2.

39/02 • Aryloxy-carboxylic acids; Derivatives thereof **[3]**

39/04 • • Aryloxy-acetic acids; Derivatives thereof **[3]**

41/00 Biocides, pest repellants or attractants, or plant growth regulators containing organic compounds containing a sulfur atom bound to a hetero atom [3]

41/02 • containing a sulfur-to-oxygen double bond **[3]**

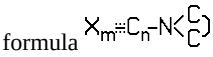
41/04 • • Sulfonic acids; Derivatives thereof **[3]**

41/06 • • • Sulfonic acid amides **[3]**

41/08 • • • Sulfonic acid halides; alpha-Hydroxy-sulfonic acids; Amino-sulfonic acids; Thiosulfonic acids; Derivatives thereof **[3]**

41/10 • • Sulfones; Sulfoxides **[3]**

41/12 • not containing sulfur-to-oxygen bonds, e.g. polysulfides **[3]**

43/00 Biocides, pest repellants or attractants, or plant growth regulators containing heterocyclic compounds (containing cyclic anhydrides, cyclic imides A01N 37/00; containing compounds of the formula  , containing only one heterocyclic ring, wherein m≥1 and n≥0 and is unsubstituted or alkylsubstituted pyrrolidine, piperidine, morpholine, thiomorpholine, piperazine or a polymethyleneimine with four or more CH_2 groups A01N 33/00-A01N 41/12; containing cyclopropane carboxylic acids or derivatives thereof, e.g. esters having heterocyclic rings, A01N 53/00) **[3]**

Note(s)

1. In this group, the following terms or expressions are used with the meanings indicated:
   - "hetero ring" is a ring having at least one halogen, nitrogen, oxygen or sulfur atom as a ring member;
   - "bridged" means the presence of at least one fusion other than ortho, peri and spiro;
   - two rings are "condensed" if they share at least one ring member, i.e. "spiro" and "bridged" are considered as condensed;
   - "condensed ring system" is a ring system in which all rings are condensed among themselves.
2. In this group, the number of rings in a condensed ring system equals the number of scissions necessary to convert the ring system into one acyclic chain. The relevant rings in a condensed system are chosen according to the following criteria consecutively:
   i. lowest number of ring members,
   ii. highest number of hetero atoms as ring members.

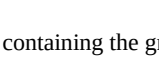
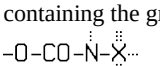
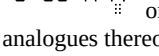
Ring members shared by two or more rings are regarded as being a member of each of these rings.

43/02 • having rings with one or more oxygen or sulfur atoms as the only ring hetero atom **[3]**

43/04 • • with one hetero atom **[3]**

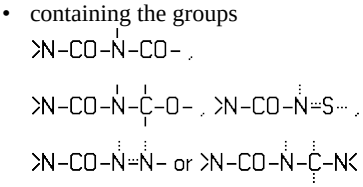
43/06 • • • five-membered rings **[3]**
43/08 • • • • with oxygen as the ring hetero atom **[3]**
43/10 • • • • with sulfur as the ring hetero atom **[3]**
43/12 • • • • condensed with a carbocyclic ring **[3]**
43/14 • • • six-membered rings **[3]**
43/16 • • • • with oxygen as the ring hetero atom **[3]**
43/18 • • • • with sulfur as the ring hetero atom **[3]**
43/20 • • • three- or four-membered rings **[3]**
43/22 • • • rings with more than six members **[3]**
43/24 • • with two or more hetero atoms **[3]**
43/26 • • • five-membered rings **[3]**
43/28 • • • • with two hetero atoms in positions 1,3 **[3]**
43/30 • • • • • with two oxygen atoms in positions 1,3, condensed with a carbocyclic ring **[3]**
43/32 • • • six-membered rings **[3]**
43/34 • having rings with one nitrogen atom as the only ring hetero atom **[3]**
43/36 • • five-membered rings **[3]**
43/38 • • • condensed with carbocyclic rings **[3]**
43/40 • • six-membered rings **[3]**
43/42 • • • condensed with carbocyclic rings **[3]**
43/44 • • three- or four-membered rings **[3]**
43/46 • • rings with more than six members **[3]**
43/48 • having rings with two nitrogen atoms as the only ring hetero atoms **[3]**
43/50 • • 1,3-Diazoles; Hydrogenated 1,3-diazoles **[3]**
43/52 • • • condensed with carbocyclic rings, e.g. benzimidazoles **[3]**
43/54 • • 1,3-Diazines; Hydrogenated 1,3-diazines **[3]**
43/56 • • 1,2-Diazoles; Hydrogenated 1,2-diazoles **[3]**
43/58 • • 1,2-Diazines; Hydrogenated 1,2-diazines **[3]**
43/60 • • 1,4-Diazines; Hydrogenated 1,4-diazines **[3]**
43/62 • • three- or four-membered rings or rings with more than six members **[3]**
43/64 • having rings with three nitrogen atoms as the only ring hetero atoms **[3, 4]**
43/647 • • Triazoles; Hydrogenated triazoles **[4]**
43/653 • • • 1,2,4-Triazoles; Hydrogenated 1,2,4-triazoles **[4]**
43/66 • • 1,3,5-Triazines, not hydrogenated and not substituted at the ring nitrogen atoms **[3]**
43/68 • • • with two or three nitrogen atoms directly attached to ring carbon atoms **[3]**
43/70 • • • • Diamino-1,3,5-triazines with only one oxygen, sulfur or halogen atom or only one cyano, thiocyano (—SCN), cyanato (—OCN) or azido (—N_3) group directly attached to a ring carbon atom **[3]**
43/707 • • 1,2,3- or 1,2,4-Triazines; Hydrogenated 1,2,3- or 1,2,4-triazines **[4]**
43/713 • having rings with four or more nitrogen atoms as the only ring hetero atoms **[4]**
43/72 • having rings with nitrogen atoms and oxygen or sulfur atoms, as ring hetero atoms **[3]**
43/74 • • five-membered rings with one nitrogen atom and either one oxygen atom or one sulfur atom in positions 1,3 **[3]**
43/76 • • • 1,3-Oxazoles; Hydrogenated 1,3-oxazoles **[3]**
43/78 • • • 1,3-Thiazoles; Hydrogenated 1,3-thiazoles **[3]**
43/80 • • five-membered rings with one nitrogen atom and either one oxygen atom or one sulfur atom in positions 1,2 **[3]**
43/82 • • five-membered rings with three hetero atoms **[3]**
43/824 • • • 1,3,4-Oxa(thia)diazoles; Hydrogenated 1,3,4-oxa(thia)diazoles **[6]**
43/828 • • • 1,2,3-Oxa(thia)diazoles; Hydrogenated 1,2,3-oxa(thia)diazoles **[6]**
43/832 • • • 1,2,5-Oxa(thia)diazoles; Hydrogenated 1,2,5-oxa(thia)diazoles **[6]**
43/836 • • • 1,2,4-Oxa(thia)diazoles; Hydrogenated 1,2,4-oxa(thia)diazoles **[6]**
43/84 • • six-membered rings with one nitrogen atom and either one oxygen atom or one sulfur atom in positions 1,4 **[3]**
43/86 • • six-membered rings with one nitrogen atom and either one oxygen atom or one sulfur atom in positions 1,3 **[3]**
43/88 • • six-membered rings with three ring hetero atoms **[3]**
43/90 • having two or more relevant hetero rings, condensed among themselves or with a common carbocyclic ring system **[3]**
43/92 • having rings with one or more halogen atoms as ring hetero atoms **[3]**

45/00 Biocides, pest repellants or attractants, or plant growth regulators containing compounds having three or more carbocyclic rings condensed among themselves, at least one ring not being a six-membered ring (halogenated hydrocarbons A01N 29/08; condensed with heterocyclic rings A01N 43/00) **[3]**
45/02 • having three carbocyclic rings **[3]**

47/00 Biocides, pest repellants or attractants, or plant growth regulators containing organic compounds containing a carbon atom not being member of a ring and having no bond to a carbon or hydrogen atom, e.g. derivatives of carbonic acid (carbon tetrahalides A01N 29/02) **[3]**
47/02 • the carbon atom having no bond to a nitrogen atom **[3]**
47/04 • • containing ›N—S—C≡Hal_3 groups **[3]**
47/06 • • containing —O—CO—O— groups; Thio-analogues thereof **[3]**
47/08 • the carbon atom having one or more single bonds to nitrogen atoms **[3]**
47/10 • • Carbamic acid derivatives, i.e. containing the group —O—CO—N‹; Thio-analogues thereof **[3]**
47/12 • • • containing a —O—CO—N‹ group, or a thio-analogue thereof, neither directly attached to a ring nor the nitrogen atom being a member of a heterocyclic ring **[3]**
47/14 • • • • Di-thio-analogues thereof **[3]**
47/16 • • • the nitrogen atom being part of a heterocyclic ring **[3]**
47/18 • • • containing a —O—CO—N‹ group, or a thio-analogue thereof, directly attached to a heterocyclic or cycloaliphatic ring **[3]**
47/20 • • • N-Aryl derivatives thereof **[3]**
47/22 • • • O-Aryl or S-Aryl esters thereof **[3]**
47/24 • • • containing the groups  ,  or  ; Thio-analogues thereof **[3]**
47/26 • • • Oxidation products of dithiocarbamic acid derivatives, e.g. thiuram sulfides **[3]**
47/28 • • Ureas or thioureas containing the groups ›N—CO—N‹ or ›N—CS—N‹ (isoureas, isothioureas A01N 47/42) **[3]**
47/30 • • • Derivatives containing the group ›N—CO—N—aryl or ›N—CS—N—aryl **[3]**

47/32 • • • containing >N—CO—N< or >N—CS—N< groups directly attached to a cycloaliphatic ring **[3]**

47/34 • • • containing the groups



, e.g. biuret; Thio-analogues thereof; Urea-aldehyde condensation products **[3]**

47/36 • • • containing the group >N—CO—N< directly attached to at least one heterocyclic ring; Thio-analogues thereof **[3]**

47/38 • • • containing the group >N—CO—N< where at least one nitrogen atom is part of a heterocyclic ring; Thio-analogues thereof **[3]**

47/40 • the carbon atom having a double or triple bond to nitrogen, e.g. cyanates, cyanamides (inorganic cyanamides A01N 59/24) **[3]**

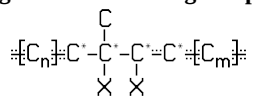
47/42 • • containing —N=CX_2 groups, e.g. isothiourea **[3]**

47/44 • • • Guanidine; Derivatives thereof **[3]**

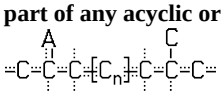
47/46 • • containing —N=C=S groups **[3]**

47/48 • • containing —S—C≡N groups (A01N 43/00-A01N 47/38 take precedence) **[3]**

49/00 Biocides, pest repellants or attractants, or plant growth regulators containing compounds containing



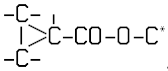
the group wherein m+n≥1, both X together may also mean —Y— or a direct carbon-to-carbon bond, and the carbon atoms marked with an asterisk are not part of any ring system other than that which may be formed by the atoms X, the carbon atoms in square brackets being part of any acyclic or cyclic structure, or the group



wherein A means a carbon atom or Y, n ≥ 0, and not more than one of these carbon atoms being a member of the same ring system, e.g. juvenile insect hormones or mimics thereof (containing hydrocarbons A01N 27/00) **[3]**

51/00 Biocides, pest repellants or attractants, or plant growth regulators containing organic compounds having the sequences of atoms O—N—S, X—O—S, N—N—S, O—N—N or O-halogen, regardless of the number of bonds each atom has and with no atom of these sequences forming part of a heterocyclic ring [3]

53/00 Biocides, pest repellants or attractants, or plant growth regulators containing cyclopropane carboxylic acids or derivatives thereof [3]

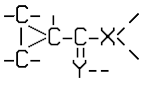
53/02 • Esters containing the group  , wherein the carbon atom marked with an asterisk is acyclic or part of a ring or ring system; Thio-analogues thereof **[6]**

53/04 • • having heterocyclic rings **[6]**

53/06 • • the carbon atom marked with an asterisk being acyclic and directly bound to a carbon atom of a six-membered aromatic ring, e.g. benzyl esters; Thio-analogues thereof **[6]**

53/08 • • • with aryloxy groups bound to the six-membered aromatic ring, e.g. phenoxybenzyl esters; Thio-analogues thereof **[6]**

53/10 • • Esters not provided for in groups A01N 53/04 or A01N 53/06 **[6]**

53/12 • Compounds containing the group  , X or Y being a nitrogen atom, e.g. cyclopropane carboxylic acid amides **[6]**

53/14 • Cyclopropane carboxylic acid nitriles **[6]**

55/00 Biocides, pest repellants or attractants, or plant growth regulators containing organic compounds containing elements other than carbon, hydrogen, halogen, oxygen, nitrogen and sulfur (containing organo-phosphorus compounds A01N 57/00) **[3]**

55/02 • containing metal atoms **[3]**

55/04 • • Tin **[3]**

55/06 • • Mercury **[3]**

55/08 • containing boron **[3]**

55/10 • containing silicon **[6]**

57/00 Biocides, pest repellants or attractants, or plant growth regulators containing organic phosphorus compounds [3]

57/02 • having alternatively specified atoms bound to the phosphorus atom and not covered by a single one of groups A01N 57/10, A01N 57/18, A01N 57/26, A01N 57/34 **[3]**

57/04 • • containing acyclic or cycloaliphatic radicals **[3]**

57/06 • • containing aromatic radicals **[3]**

57/08 • • containing heterocyclic radicals **[3]**

57/10 • having phosphorus-to-oxygen bonds or phosphorus-to-sulfur bonds (A01N 57/02 takes precedence) **[3]**

57/12 • • containing acyclic or cycloaliphatic radicals **[3]**

57/14 • • containing aromatic radicals **[3]**

57/16 • • containing heterocyclic radicals **[3]**

57/18 • having phosphorus-to-carbon bonds (A01N 57/02 takes precedence) **[3]**

57/20 • • containing acyclic or cycloaliphatic radicals **[3]**

57/22 • • containing aromatic radicals **[3]**

57/24 • • containing heterocyclic radicals **[3]**

57/26 • having phosphorus-to-nitrogen bonds (A01N 57/02 takes precedence) **[3]**

57/28 • • containing acyclic or cycloaliphatic radicals **[3]**

57/30 • • containing aromatic radicals **[3]**

57/32 • • containing heterocyclic radicals **[3]**

57/34 • having phosphorus-to-halogen bonds; Phosphonium salts **[3]**

57/36 • having phosphorus as a ring member **[3]**

59/00 Biocides, pest repellants or attractants, or plant growth regulators containing elements or inorganic compounds [3]

59/02 • Sulfur; Selenium; Tellurium; Compounds thereof **[3]**

59/04 • Carbon disulfide; Carbon monoxide; Carbon dioxide (treatment of plants with carbon dioxide A01G 7/02) **[3]**

59/06 • Aluminium; Calcium; Magnesium; Compounds thereof **[3]**

59/08 • Alkali metal chlorides; Alkaline earth metal chlorides **[3]**

59/10 • Fluorides **[3]**

59/12 • Iodine, e.g. iodophors; Compounds thereof **[3]**

59/14 • Boron; Compounds thereof **[3]**

59/16 • Heavy metals; Compounds thereof **[3]**

59/18 • • Mercury **[3]**

59/20 • • Copper **[3]**

59/22 • • Arsenic **[3]**
59/24 • Cyanogen or compounds thereof, e.g. hydrogen cyanide, cyanic acid, cyanamide, thiocyanic acid **[3]**
59/26 • Phosphorus; Compounds thereof **[3]**

61/00 Biocides, pest repellants or attractants, or plant growth regulators containing substances of unknown or undetermined composition, e.g. substances characterised only by the mode of action [3]
61/02 • Mineral oils; Tar oils; Tar; Distillates, extracts or conversion products thereof (containing single chemical compounds isolated from these materials A01N 27/00-A01N 59/00) **[3]**

63/00 Biocides, pest repellants or attractants, or plant growth regulators containing micro-organisms, viruses, microbial fungi, animals, e.g. nematodes, or substances produced by, or obtained from micro-organisms, viruses, microbial fungi or animals, e.g. enzymes or fermentates (containing compounds of determined constitution A01N 27/00-A01N 59/00) **[3]**
63/02 • Substances produced by, or obtained from, micro-organisms or animals **[3]**
63/04 • Microbial fungi; Substances produced thereby or obtained therefrom **[3]**

65/00 Biocides, pest repellants or attractants, or plant growth regulators containing material from algae, lichens, bryophyta, multi-cellular fungi or plants, or extracts thereof (containing compounds of determined constitution A01N 27/00-A01N 59/00) **[3, 2009.01]**
65/03 • Algae **[2009.01]**
65/04 • Pteridophyta [fern allies]; Filicophyta [ferns] **[2009.01]**
65/06 • Coniferophyta [gymnosperms], e.g. cypress **[2009.01]**
65/08 • Magnoliopsida [dicotyledons] **[2009.01]**
65/10 • • Apiaceae or Umbelliferae [Carrot family], e.g. parsley, caraway, dill, lovage, fennel or snakebed **[2009.01]**
65/12 • • Asteraceae or Compositae [Aster or Sunflower family], e.g. daisy, pyrethrum, artichoke, lettuce, sunflower, wormwood or tarragon **[2009.01]**
65/14 • • Celastraceae [Staff-tree or Bittersweet family], e.g. spindle tree, bittersweet or thunder god vine **[2009.01]**
65/16 • • Ericaceae [Heath or Blueberry family], e.g. rhododendron, arbutus, pieris, cranberry or bilberry **[2009.01]**
65/18 • • Euphorbiaceae [Spurge family], e.g. ricinus [castorbean] **[2009.01]**
65/20 • • Fabaceae or Leguminosae [Pea or Legume family], e.g. pea, lentil, soybean, clover, acacia, honey locust, derris or millettia **[2009.01]**
65/22 • • Lamiaceae or Labiatae [Mint family], e.g. thyme, rosemary, skullcap, selfheal, lavender, perilla, pennyroyal, peppermint or spearmint **[2009.01]**
65/24 • • Lauraceae [Laurel family], e.g. laurel, avocado, sassafras, cinnamon or camphor **[2009.01]**
65/26 • • Meliaceae [Chinaberry or Mahogany family], e.g. mahogany, langsat or neem **[2009.01]**
65/28 • • Myrtaceae [Myrtle family], e.g. teatree or clove **[2009.01]**
65/30 • • Polygonaceae [Buckwheat family], e.g. red-knees or rhubarb **[2009.01]**
65/32 • • Ranunculaceae [Buttercup family], e.g. hepatica, hydrastis or goldenseal **[2009.01]**
65/34 • • Rosaceae [Rose family], e.g. strawberry, hawthorn, plum, cherry, peach, apricot or almond **[2009.01]**
65/36 • • Rutaceae [Rue family], e.g. lime, orange, lemon, corktree or pricklyash **[2009.01]**
65/38 • • Solanaceae [Potato family], e.g. nightshade, tomato, tobacco or chilli pepper **[2009.01]**
65/40 • Liliopsida [monocotyledons] **[2009.01]**
65/42 • • Aloeaceae [Aloe family] or Liliaceae [Lily family], e.g. aloe, veratrum, onion, garlic or chives **[2009.01]**
65/44 • • Poaceae or Gramineae [Grass family], e.g. bamboo, lemon grass or citronella grass **[2009.01]**
65/46 • • Stemonaceae [Stemona family], e.g. croomia **[2009.01]**
65/48 • • Zingiberaceae [Ginger family], e.g. ginger or galangal **[2009.01]**

A01P BIOCIDAL, PEST REPELLANT, PEST ATTRACTANT OR PLANT GROWTH REGULATORY ACTIVITY OF CHEMICAL COMPOUNDS OR PREPARATIONS [2006.01]

Note(s) [2006.01]

1. This subclass covers biocidal, pest repellant, pest attractant or plant growth regulatory activity of chemical compounds or preparations already classified as such in subclasses A01N or C12N, or in classes C01, C07 or C08.
2. Attention is drawn to the notes following the title of subclass A01N, which are also applicable to this subclass.
3. In this subclass, activity is classified in all appropriate places.
4. Attention is drawn to cases where the subject of the invention concerns only biocidal, pest repellant, pest attractant or plant growth regulatory activity of chemical compounds or preparations, and the chemical structure, compound, mixture or composition of this subject of the invention is known. In such cases, classification is made in both subclass A01N and subclass A01P as invention information. In addition, if the chemical structure, compound, mixture or composition or any individual ingredient of a mixture or composition is considered to represent information of interest for search, it may also be classified as additional information.
5. The classification symbols of this subclass are not listed first when assigned to patent documents.

1/00 Disinfectants; Antimicrobial compounds or mixtures thereof [2006.01]

3/00 Fungicides [2006.01]

5/00 Nematocides [2006.01]

7/00 Arthropodicides [2006.01]
7/02 • Acaricides **[2006.01]**
7/04 • Insecticides **[2006.01]**

9/00 Molluscicides [2006.01]

11/00 Rodenticides [2006.01]

13/00 Herbicides; Algicides [2006.01]

13/02 • selective **[2006.01]**

15/00 Biocides for specific purposes not provided for in groups A01P 1/00-A01P 13/00 [2006.01]

17/00 Pest repellants [2006.01]

19/00 Pest attractants [2006.01]

21/00 Plant growth regulators [2006.01]

23/00 Chemosterilants [2006.01]