

CPC**COOPERATIVE PATENT CLASSIFICATION****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](#))

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

[A01G 33/02](#) covered by [A01G 33/00](#)

A01G 1/00

Horticulture; Cultivation of vegetables (labels or name-plates [G09F 3/00](#), [G09F 7/00](#))

- A01G 1/001 . {Horticultural methods}
- A01G 1/002 . {Growing turf}
- A01G 1/004 .. {Pre-cultivated sod; Machines for laying it down}
- A01G 1/005 .. {Planted mats, e.g. for covering roofs}
- A01G 1/007 .. {Flat containers, e.g. for covering roofs}
- A01G 2001/008 . {Growing plants or turf in soil-like layered substrates using a foil}
- A01G 1/02 . Cultivation of asparagus
- A01G 1/04 . Cultivation of mushrooms (composts or fertilisers for cultivating mushrooms [C05](#))
- A01G 1/042 .. {Growing rooms with treatment apparatus; Cultivation racks or trays}
- A01G 1/044 .. {Apparatus for treating mushroom compost}
- A01G 1/046 .. {Cultivation bags or bottles}
- A01G 1/048 .. {Mycorrhiza}
- A01G 1/06 . Grafting (grafting-wax [A01N 3/04](#))
- A01G 2001/065 .. {Removing buds}
- A01G 1/08 . Edging for beds, lawns, or the like, e.g. using tiles
- A01G 1/12 . Tools for cultivating turf; Sweeping apparatus for lawns; Garden rollers (machines for treating meadows or lawns [A01B 45/00](#); lawn-mowers [A01D 34/00](#))
- A01G 1/125 .. {Machines for sweeping lawns and for collecting or disintegrating lawn debris}

A01G 3/00

Cutting implements specially adapted for horticultural purposes; Delimbing standing trees (felling trees [A01G 23/08](#); hand-held cutting tools suitable for other use [B26B](#))

- A01G 3/002 . {for comminuting plant waste (comminuting by cutting implements in general [B02C 18/00](#))}
- A01G 2003/005 . {Removing buds}
- A01G 2003/007 . {Using spray}
- A01G 3/02 . Secateurs; Flower or fruit shears

- A01G 3/021 .. {characterized by the arrangement of pivots}
- A01G 2003/023 .. {with means for grasping the cut object}
- A01G 3/025 .. having elongated or extended handles
- A01G 3/0251 ... {Loppers, i.e. branch cutters with two handles (hedge shears [A01G 3/0475](#))}
- A01G 3/0255 ... {Tree pruners, i.e. pruning shears carried at the end of a pole}
- A01G 3/033 .. having motor-driven blades
- A01G 3/0335 ... {having elongated or extended handles}
- A01G 3/037 ... the driving means being an electric motor
- A01G 3/04 . Apparatus for trimming hedges, e.g. hedge shears
- A01G 3/0408 .. {specially adapted for trellis work, e.g. machines for pruning vine or the like (preliminary pruning vines [A01G 17/023](#); defoliating machines [A01G 17/026](#))}
- A01G 3/0417 .. {Guiding frames for trimming hedges}
- A01G 3/0426 .. {Machines for pruning vegetation on embankments and road-sides}
- A01G 3/0435 .. {Machines specially adapted for shaping plants, e.g. topiaries}
- A01G 2003/0443 .. {with height-adjustable platforms}
- A01G 2003/0452 .. {with platforms for persons}
- A01G 2003/0461 .. {with reciprocating knives}
- A01G 3/047 .. portable
- A01G 3/0475 ... {Hedge shears}
- A01G 3/053 ... motor-driven
- A01G 3/0535 {with rotatable knives}
- A01G 3/06 . Hand-held edge trimmers or shears for lawns {(with a flexible rotating cutter [A01D 34/416](#))}
- A01G 3/062 .. {Motor-driven edge trimmers}
- A01G 3/065 .. {Hand operated shears for lawns}
- A01G 3/067 .. {Motor-driven shears for lawns}
- A01G 3/08 . Other tools for pruning, branching or delimbing standing trees
- A01G 3/081 .. {Manual cutting tools not otherwise provided for, e.g. pruning hooks}
- A01G 3/083 .. {Manual pruning saws (saws in general [B27B](#))}
- A01G 3/085 .. {Motor-driven saws for pruning or branching (saws in general [B27B](#))}
- A01G 3/086 ... {Chain saws (chain saws in general [B27B 17/00](#))}
- A01G 3/088 ... {Circular saws (circular saws in general [B27B 5/00](#))}

A01G 5/00**Floral handling**

- A01G 2005/005 . {Thorn removers}
- A01G 5/02 . Apparatus for binding bouquets or wreaths
- A01G 5/04 . Mountings for wreaths, or the like; Racks or holders for flowers
- A01G 5/06 . Devices for preserving flowers (chemical substances [A01N 3/02](#); flower vases [A47G 7/06](#))

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

- A01G 7/02 . Treatment of plants with carbon dioxide (greenhouses therefor [A01G 9/18](#))

- A01G 7/04 . Electric or magnetic treatment of plants for promoting growth
- A01G 7/045 . . {with electric lighting}
- A01G 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

- A01G 9/00** **Cultivation of flowers, vegetables or rice in receptacles, forcing-frames, or greenhouses** (cultivation without soil [A01G 31/00](#); {turbing of roofs [E04D 11/002](#)})
- A01G 2009/003 . {Plant pots consisting of two halves, allowing easy removal of the plant}
- A01G 9/006 . {Labels or label holders for flower pots}
- A01G 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
- A01G 9/021 . . {Pots formed in one piece; Materials used therefor}
- A01G 9/022 . . {Pots for vertical horticulture}
- A01G 9/023 . . . {Multi-tiered planters}
- A01G 9/024 . . . {Hanging flower pots and baskets}
- A01G 9/025 . . . {Containers and elements for greening walls (for covering roofs [A01G 1/007](#))}
- A01G 9/026 . . {Foldable pots}
- A01G 9/027 . . {Pots connected in horizontal rows}
- A01G 9/028 . . {Multi-compartmented pots}
- A01G 9/04 . Flower-pot saucers
- A01G 9/042 . . {Combinations of a saucer and a flower pot attached together}
- A01G 9/045 . . {Trays for receiving multiple pots}
- A01G 9/047 . . {Channels or gutters, e.g. for hydroponics}
- A01G 9/06 . Devices for cleaning flower-pots
- A01G 9/08 . Devices for filling-up flower-pots { or pots for seedlings}; Devices for setting plants { or seeds} in pots
- A01G 9/081 . . {Devices for filling-up pots}
- A01G 9/083 . . {Devices for setting plants in pots}
- A01G 9/085 . . {Devices for setting seeds in pots}
- A01G 9/086 . . {Devices for repotting}
- A01G 9/088 . . {Handling or transferring pots}
- A01G 9/10 . Pots {(or other receptacles)} for seedlings,{ saplings, cuttings or other young plants (foldable pots)}; Soil {(or like)} blocks for seedlings;{ Plant substrate bodies}; Means for forming soil-blocks
- A01G 9/1006 . . {Tools, machines and methods for forming soil blocks or compressed pots, e.g. from peat}
- A01G 9/1013 . . {soil blocks or compressed pots}
- A01G 9/102 . . {Planting receptacles specially adapted for remaining in the soil after planting}
- A01G 9/1026 . . {Seed or shoot receptacles}
- A01G 9/1033 . . {Sterile receptacles, e.g. for tissue culture}
- A01G 9/104 . . {Units comprising two or more connected receptacles}
- A01G 2009/1046 . . . {containing mineral wool}

A01G 2009/1053	...	{containing superabsorbents}
A01G 2009/106	...	{containing wood}
A01G 9/1066	..	{Grids for supporting several receptacles}
A01G 9/1073	..	{Receptacles specially adapted for air layering}
A01G 9/108	..	{Handling or transporting of soil blocks or seedlings}
A01G 9/1086	..	{Composition of plant substrate bodies (plant growth regulators A01N ; fertilizers C05 ; soil conditioning or soil stabilizing materials C09K 17/00)}
A01G 2009/1093	..	{for dwarf plants}
A01G 9/12	.	Supports for plants; Trellis for strawberries or the like ({trellis-work for vines A01G 17/06 }; stays for trees, props for vines A01G 17/14)
A01G 9/122	..	{Stakes}
A01G 9/124	...	{Means for holding stakes upright in, on, or beside pots}
A01G 9/126	..	{Wirespool supports}
A01G 9/128	..	{Fixing of plants to supports, e.g. by means of clips}
A01G 9/14	.	Greenhouses (cloches A01G 13/04 ; {glazing bars, glazing clips therefor E04D 3/06 })
A01G 9/1407	..	{of flexible synthetic material}
A01G 9/1415	...	{with double or multiple walls}
A01G 9/1423	..	{Greenhouse bench structures}
A01G 9/143	..	{Equipment for handling produce in greenhouses}
A01G 9/1438	..	{Covering materials therefor; Materials for protective coverings used for soil and plants, e.g. films, canopies, tunnels or cloches}
A01G 2009/1446	...	{with perforations}
A01G 2009/1453	...	{containing textile products}
A01G 2009/1461	...	{containing woven structures}
A01G 9/1469	..	{with double or multiple walls}
A01G 9/1476	..	{Greenhouse gutters (gutters in general E04D 13/064)}
A01G 2009/1484	..	{Glazing apparatus}
A01G 2009/1492	..	{Cleaning apparatus}
A01G 9/16	..	Dismountable or portable greenhouses; {Greenhouses with sliding roofs}
A01G 9/18	.	Greenhouses for treating plants with carbon dioxide or the like
A01G 9/20	.	Forcing-frames; Lights
A01G 9/22	.	Shades or blinds for greenhouses, or the like ({canopies A01G 13/0206 })
A01G 9/222	..	{Lamellar or like blinds (in general E06B 9/26)}
A01G 9/225	..	{Inflatable structures}
A01G 9/227	..	{rolled up during non-use (in general E06B 9/08)}
A01G 9/24	.	Devices {or systems} for heating, ventilating, regulating temperature, or watering, in greenhouses, forcing-frames, or the like
A01G 9/241	..	{Arrangement of opening or closing systems for windows and ventilation panels}
A01G 9/242	...	{for greenhouses with flexible coverings}
A01G 9/243	..	{Collecting solar energy (in general F24J)}

A01G 9/245	.. {Conduits for heating by means of liquids, e.g. used as frame members or for soil heating}
A01G 9/246	.. {Air-conditioning systems}
A01G 9/247	.. {Watering arrangements}
A01G 2009/248	.. {with distillation of water}
A01G 9/26	.. Electric devices
A01G 11/00	Sterilising soil by steam (soil-conditioning or soil-stabilising materials C09K 17/00)
A01G 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 ; {coverings around trees forming part of a road E01C 9/005 })
A01G 2013/002	. {Wind breakers}
A01G 2013/004	. {Liquid mulch}
A01G 2013/006	. {with perforations}
A01G 2013/008	. {using straw}
A01G 13/02	. Protective coverings for plants; { Coverings for the ground; } Devices for laying-out { or removing } coverings {(covering materials A01G 9/1438)}
A01G 13/0206	.. {Canopies, i.e. devices providing a roof above the plants}
A01G 13/0212	... {for individual plants, e.g. for plants in pots}
A01G 2013/0218	.. {for removing}
A01G 13/0225	.. {Wind breakers, i.e. devices providing lateral protection of the plants}
A01G 13/0231	.. {Tunnels, i.e. protective full coverings for rows of plants (dismountable or portable greenhouses A01G 9/16)}
A01G 13/0237	.. {Devices for protecting a specific part of a plant, e.g. roots, trunk or fruits}
A01G 13/0243	.. {Protective shelters for young plants, e.g. tubular sleeves}
A01G 13/025	.. {Devices for laying-out or removing plant coverings (for ground coverings A01G 13/0287)}
A01G 13/0256	.. {Ground coverings}
A01G 13/0262	... {Mulches, i.e. covering material not-pre-formed in mats or sheets (A01G 13/0281 takes precedence; composition of mulches C09K 17/52)}
A01G 13/0268	... {Mats or sheets, e.g. nets or fabrics (A01G 13/0281 takes precedence)}
A01G 13/0275 {Films}
A01G 13/0281	... {Protective ground coverings for individual plants, e.g. for plants in pots (coverings around trees forming part of a road E01C 9/005)}
A01G 13/0287	... {Devices for laying-out or removing ground coverings}
A01G 13/0293	... {Anchoring means for ground coverings}
A01G 13/04	.. Cloches { i.e. protective full coverings for individual plants (dismountable or portable greenhouses A01G 9/16 ; individual canopies A01G 13/0212)}
A01G 13/043	... {with flexible coverings}
A01G 2013/046	... {foldable}

- A01G 13/06
 - . Devices for generating heat, smoke, or fog in gardens, orchards, or forests, e.g. to prevent damage by frost ([bee-smokers A01K 55/00](#); fumigators for destroying insects [A01M 13/006](#); for destroying rats [A01M 17/004](#)); chemical aspects of generating smoke or mist [C06D 3/00](#); heating devices in general, see the appropriate classes, e.g. [F24](#))
- A01G 13/065
 - .. {Frost protection by generating fog or by spraying}
- A01G 13/08
 - . Mechanical apparatus for circulating the air
- A01G 13/10
 - . Devices for affording protection against animals, birds, or other pests {(protective shelters for young plants [A01G 13/0243](#))}(traps [A01M 23/00](#){ scaring or repelling devices [A01M 29/00](#)}; pesticides [A01N](#))
- A01G 13/105
 - .. {Protective devices against slugs, snails, crawling insects or other climbing animals}
- A01G 15/00**
Devices or methods for influencing weather conditions (dispersing fog in general [E01H 13/00](#))
- A01G 16/00**
Cultivation of rice ([A01G 9/00](#) takes precedence)
- A01G 17/00**
Cultivation of hops, vines, fruit trees, or like trees
- A01G 17/005
 - . {Cultivation methods}
- A01G 17/02
 - . Cultivation of hops or vines
- A01G 17/023
 - .. {Machines for priming and/or preliminary pruning of vines, i.e. removing shoots and/or buds (trimming apparatus for trellis work [A01G 3/0408](#))}
- A01G 17/026
 - .. {Machines for removing leaves of vines}
- A01G 17/04
 - . Supports for hops, vines, or trees
- A01G 17/06
 - .. Trellis-work
- A01G 2017/065
 - ... {Trellis-work for supporting vines having wire-tensioning devices}
- A01G 17/08
 - ... Tools for attaching hops, vines, or boughs to trellis-work; Tying devices
- A01G 17/085
 - {Tying instruments; Espalier machines}
- A01G 17/10
 - .. Holders for boughs or branches
- A01G 17/12
 - .. Tree-bands
- A01G 17/14
 - .. Props; Stays
- A01G 17/16
 - ... Devices for driving-in or pulling-out props
- A01G 17/18
 - . Means for filling-up wounds in trees
- A01G 21/00**
Devices for hanging-up harvested fruit
- A01G 23/00**
Forestry
- A01G 23/003
 - . {Collecting felled trees}
- A01G 23/006
 - .. {Log skidders}
- A01G 23/02
 - . Transplanting, uprooting, felling or delimbing trees ([delimbing standing trees A01G 3/00](#))

NOTE

A01G 23/02

(continued)

Tree feeding devices are covered by group [B27B 25/00](#)

A01G 23/04

- .. Transplanting trees; Devices for grasping the root ball, e.g. stump forceps; Wrappings or packages for transporting trees

A01G 23/043

- ... {Transplanting devices for grasping, undercutting or transporting the root ball ([A01G 23/046](#) takes precedence)}

A01G 23/046

- ... {Transplanting devices using elements to be driven into the ground for making a container around the root ball}

A01G 23/06

- .. Uprooting or pulling up trees; Extracting or eliminating stumps

A01G 23/062

- ... {Pulling up trees or stumps}

A01G 23/065

- {in a substantially vertical plane}

A01G 23/067

- ... {by comminuting the tree stumps}

A01G 23/08

- .. Felling trees ([axes B26B 23/00](#); [saws, sawing machines B27B](#))

A01G 23/081

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

A01G 23/083

- ... Feller-delimbers

A01G 23/085

- having the shearing head mounted on a first boom and the delimbing head mounted on a second boom

A01G 23/087

- ... Shearing apparatus or the like specially adapted for felling trees ([A01G 23/081](#), [A01G 23/083](#), [A01G 23/093](#) take precedence)

A01G 23/089

- having two or more shears

A01G 23/09

- of the percussion type

A01G 23/091

- ... Sawing apparatus specially adapted for felling trees ([A01G 23/081](#), [A01G 23/083](#), [A01G 23/093](#) take precedence)

A01G 23/093

- ... Combinations of shearing, sawing or milling apparatus specially adapted for felling trees

A01G 23/095

- .. Delimbers ([A01G 23/083](#) takes precedence; manufacture of wood shavings, chips, powder, or the like, per se [B27L 11/00](#))

A01G 23/0955

- ... {Self-propelled along standing trees}

A01G 23/097

- ... having a fixed delimbing head

A01G 23/099

- .. Auxiliary devices, e.g. felling wedges

A01G 23/10

- . Tapping of tree-juices, e.g. caoutchouc, gum

A01G 23/12

- .. Knives or axes for tapping

A01G 23/14

- .. Tapping-spouts; Receptacles for juices

A01G 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](#))

A01G 2025/003

- . {with an impermeable layer in the ground}

A01G 2025/006

- . {Tubular drip irrigation dispensers mounted coaxially within water feeding tubes}

A01G 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](#))

A01G 25/023

- .. {Dispensing fittings for drip irrigation, e.g. drippers}

A01G 25/026	.. {Machines and methods for fixing the drippers in the pipe}
A01G 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)
A01G 25/09	. Watering arrangements making use of movable installations on wheels or the like
A01G 25/092	.. {movable around a pivot centre}
A01G 25/095	.. {winch-driven (A01G 25/097 takes precedence)}
A01G 25/097	.. {guided or propelled along a water supply line with supply line traversing means}
A01G 25/14	. Hand watering devices, e.g. watering cans
A01G 25/145	.. {with pumps}
A01G 25/16	. Control of watering (controlling of spraying devices B05B)
A01G 25/162	.. {Sequential operation}
A01G 25/165	.. {Cyclic operations, timing systems, timing valves, impulse operations}
A01G 25/167	.. {Control by humidity of the soil itself or of devices simulating soil or of the atmosphere; Soil humidity sensors}
A01G 27/00	Self-acting watering devices, e.g. for flower-pots
A01G 27/001	. {with intermittent watering means}
A01G 27/003	. {Controls for self-acting watering devices}
A01G 27/005	. {Reservoirs connected to flower-pots through conduits}
A01G 27/006	. {Reservoirs, separate from plant-pots, dispensing directly into rooting medium}
A01G 27/008	. {Component parts, e.g. dispensing fittings, level indicators}
A01G 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)
A01G 27/04	. using wicks or the like
A01G 27/06	.. having a water reservoir, the main part thereof being located wholly around or directly beside the growth substrate
A01G 29/00	Root feeders; Injecting fertilisers into the roots
A01G 31/00	Hydroponics; Cultivation without soil (A01G 33/00 takes precedence)
A01G 31/001	. {Soilless culture substrates}
A01G 2031/002	. {Substrates with a flexible envelope}
A01G 2031/003	. {with foam substrates}
A01G 2031/005	. {with mineral wool substrates}
A01G 2031/006	. {with means for recycling the nutritive solution}
A01G 2031/007	. {with superabsorbents}
A01G 2031/008	. {with wood}
A01G 31/02	. Special apparatus therefor (apparatus for cultivation in receptacles or greenhouses in general A01G 9/00 ; self-acting watering devices A01G 27/00)
A01G 31/04	.. Hydroponic culture on conveyers
A01G 31/042	... {with containers travelling on a conveyor belt or the like}
A01G 31/045	... {with hanging containers travelling along a rail}
A01G 31/047	... {using a rotating drum or the like}

A01G 31/06

. . Hydroponic culture on racks or in stacked containers

A01G 33/00

Cultivation of seaweed {or algae}