A01G

HORTICULTURE; CULTIVATION OF VEGETABLES, FLOWERS, RICE, FRUIT, VINES, HOPS OR SEAWEED; FORESTRY; WATERING (picking of fruits, vegetables, hops or the like <u>A01D 46/00</u>; propagating unicellular algae C12N 1/12)

References

Limiting references

This place does not cover:

picking of fruits, vegetables, hops, or the like	A01D 46/00
propagating unicellular algae	C12N 1/12

Informative references

Attention is drawn to the following places, which may be of interest for search:

plant reproduction by tissue culture techniques	A01H 4/00
Flowering plants characterised by their plant parts	A01H 5/00
Flowering plants characterised by their botanic taxonomy	A01H 6/00
devices for topping or skinning onions or flower bulbs	A23N 15/08
plant cell culture	C12N 5/00

A01G 2/00

Vegetative propagation (plant reproduction by tissue culture techniques A01H 4/00)

Definition statement

This place covers:

Methods of asexual reproduction of plants, i.e. NOT involving seeds.

Methods of vegetative propagation involving specialized plant organs such as:

- Stolons or runners, used for example by strawberries,
- Rhizomes, used for example by ginger, lilies and irises,
- Bulbs, used for example by shallots, lilies and tulips,
- Root or stem tubers, used for example by (sweet) potatoes, yams and dahlias,
- Corms, used for example by gladiolus and taro,
- Suckers, used for example by apple and banana trees.

Methods of vegetative propagation involving suckering, i.e. transplanting suckers.

Specific apparatus therefor not otherwise provided for.

References

Limiting references

This place does not cover:

Plant reproduction by tissue culture techniques	A01H 4/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Cultivation of cereals	A01G 22/20
Cultivation of root crops	A01G 22/25
Cultivation of bulbs	<u>A01G 22/35</u>
Cultivation of sugar cane	A01G 22/55

Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

- vegetative reproduction,
- · vegetative multiplication,
- · vegetative cloning

A01G 2/10

by means of cuttings

Definition statement

This place covers:

Methods of vegetative propagation wherein a part of the plant, usually a stem or a leaf, is cut off and planted in a growth substrate (illustration in Fig.1).

Specific apparatus therefor not otherwise provided for.

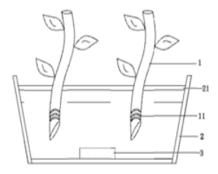


Fig.1: Propagation method of rhododendron

A01G 2/20

Layering

Definition statement

This place covers:

Ground layering methods, i.e. bending of plant branches or stems so that they touch the ground and are covered with soil to induce the development of roots (illustration in Fig.1).

Air layering, or marcotting, methods, i.e. wounding a target region of the plant and surrounding the wound with a lump of moisture-retaining medium to induce the development of roots (illustration in Fig.2).

Specific apparatus therefor not otherwise provided for.

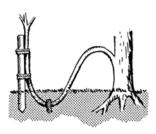


Fig.1: Ground-layering

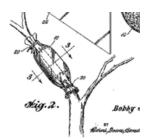


Fig.2: Air-layering

A01G 2/30

Grafting (grafting-wax A01N 3/04)

Definition statement

This place covers:

Grafting methods, i.e. a part of the plant, called scion, usually a stem or a leaf, is cut off and attached to the stem of another plant called stock or rootstock that remains rooted in the growth substrate (illustration in Fig.1).

Inarching methods, wherein the scion is still attached to its own root system at the time of grafting (illustration in Fig.2).

Specific apparatus therefor not otherwise provided for.

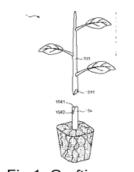


Fig.1: Grafting

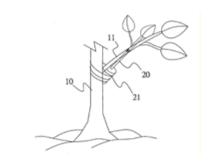


Fig.2: Inarching

References

Limiting references

This place does not cover:

ı	Grafting-wax	A01N 3/04
	· · · · · · · · · · · · · · · · · · ·	

Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

budding

A01G 2/32

Automatic apparatus therefor

Definition statement

This place covers:

Apparatus for mechanically grafting plants, operating partly or totally automatically.

Devices for mechanically cutting, inserting or ligating the scion and/or the stock, operating partly or totally automatically (illustration in Fig.1).

Seedling grafting robots (illustration in Fig.2).

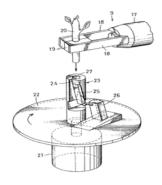


Fig.1: Scion cutting assembly

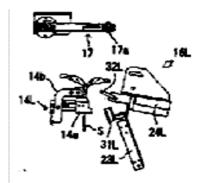


Fig.2: Parts of a grafting robot

A01G 2/35

Cutting; Inserting

Definition statement

This place covers:

Apparatus for manually (illustration in Fig.1) or automatically (illustration in Fig.2) cutting the scion and/ or stock.

Apparatus for manually or automatically inserting the scion into the stock for joining them into a graft joint.

Definition statement

Methods therefor.

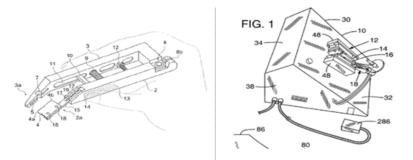


Fig.1: Cutter for grafting seedling

Fig.2: System for cutting the ends of scions or rootstock

A01G 2/38

Holding; Ligating

Definition statement

This place covers:

Apparatus for manually or automatically holding the graft joint in position through ligating or clamping means, e.g. with clamps, clips, etc. (illustrations in Fig.1 and Fig.2);

Methods therefor.

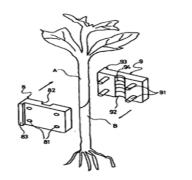


Fig.1: Joining of scion and stock

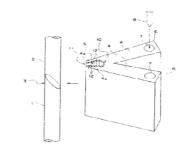


Fig.2: Grafting joint clip

A01G 3/00

Cutting implements specially adapted for horticultural purposes; Delimbing standing trees (forestry delimbers <u>A01G 23/095</u>)

Definition statement

This place covers:

Tools and machines for cutting plants with the purpose of pruning, trimming, shaping, etc.

Also shredders for plant waste.

References

Limiting references

This place does not cover:

Forestry delimbers	A01G 23/095

Informative references

Attention is drawn to the following places, which may be of interest for search:

Mowers having rotating flexible line cutters	A01D 34/416
Special adaptation of mowers for carrying by the operator	A01D 34/90

A01G 3/025

having elongated or extended handles

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Motor-driven blades	A01G 3/0335
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A01G 5/00

Floral handling

Definition statement

This place covers:

Handling and processing of cut flowers, tools and machines for making bouquets and wreaths, devices and methods for preserving cut flowers

A01G 5/06

Devices for preserving flowers

Definition statement

This place covers:

Devices to help preserve cut flowers.

References

Informative references

Chemical substances for preserving flowers	A01N 3/02
Flower vases	A47G 7/06

A01G 7/00

Botany in general

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Soilless Cultivation	A01G 31/00
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A01G 7/02

Treatment of plants with carbon dioxide

References

Application-oriented references

Examples of places where the subject matter of this place is covered when specially adapted, used for a particular purpose, or incorporated in a larger system:

Greenhouses therefor	<u>A01G 9/18</u>
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A01G 7/045

{with electric lighting}

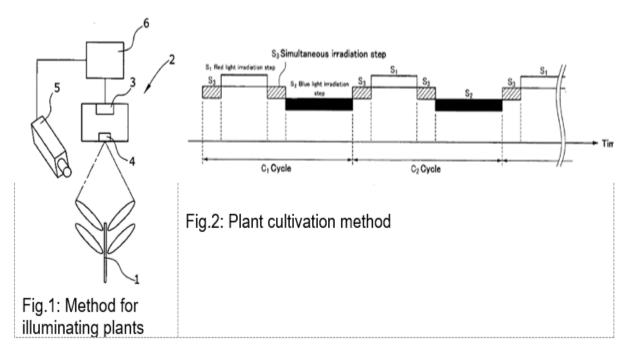
Definition statement

This place covers:

- Illumination means for controlling plant photomorphogenesis, i.e. plant morphology, photoperiodism, or phototropism; for example: illumination means for inducing or delaying flowering, fruiting, bolting, etc.;
- Illumination means for varying the light properties other than the propagation direction, depending on the plant cultivated; for example: illumination means with variable wavelength spectrum, intensity, polarization;

Illumination systems where illumination is controlled by measurements taken in the plant's direct environment, e.g. by cameras, light sensors, etc. (illustration in Fig.1);

Illumination methods for plants, e.g. lighting recipes (illustration in Fig.2).



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Lighting systems for greenhouses A01G 9/249

A01G 9/00

Cultivation in receptacles, forcing-frames or greenhouses (of mushrooms A01G 18/00; soilless cultivation A01G 31/00); Edging for beds, lawn or the like

References

Limiting references

This place does not cover:

Cultivation rooms for mushrooms; Equipment therefor	A01G 18/60
Soilless cultivation	A01G 31/00

Informative references

Constructional aspect of greening roofs	E04D 11/002
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A01G 9/033

Flat containers for turf, lawn or the like, e.g. for covering roofs

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Constructional aspect of greening roofs	
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E04D 11/002

A01G 9/14

Greenhouses (cloches A01G 13/04)

References

Limiting references

This place does not cover:

Cloches for protecting plants

A01G 13/04

Informative references

Attention is drawn to the following places, which may be of interest for search:

Glazing	bars	alazina	clins
Oluzing	Dai J,	giuziiig	Olipo

E04D 3/06

A01G 9/20

Forcing-frames; Lights {, i.e. glass panels covering the forcing-frames}

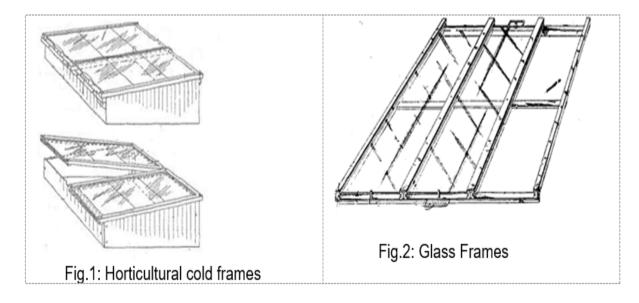
Definition statement

This place covers:

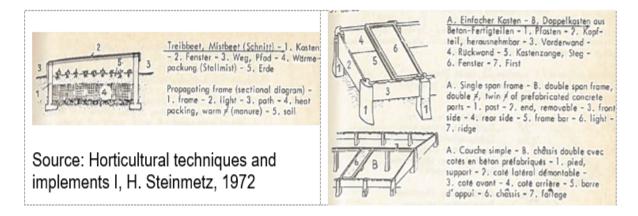
Low gardening beds, with covering frames like glass panes, for forcing or propagating young plants (illustration in Fig.1).

Definition statement

Covering frames for use in forcing-frames, e.g. glass frames, etc. (illustration in Fig.2).



Important note: the term "light" is an outdated term referring to said glass frames and has nothing to do with artificial lighting (see the Figures below: the "lights" with reference signs 2 and 6).



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Lighting treatment of plants	<u>A01G 7/045</u>
Greenhouses	A01G 9/14
Lighting systems for greenhouses	A01G 9/249
Raised beds; Planting beds	A01G 9/28
Tunnels	A01G 13/0231

Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

• "forcing frames", "horticultural frames", "garden frames", "cold frames", propagating frames", "hotbeds"

A01G 9/22

Shades or blinds for greenhouses, or the like

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Canopies for protecting plants

A01G 13/0206

A01G 9/24

Devices {or systems} for heating, ventilating, regulating temperature {, illuminating}, or watering, in greenhouses, forcing-frames, or the like

Definition statement

This place covers:

Systems or devices for managing the environment in greenhouses, forcing-frames or the like, such as:

Ventilating systems for greenhouses or the like.

Heating systems.

Air-conditioning systems.

Illumination arrangements other than for a lighting treatment of the plant.

Watering arrangements of plants cultivated in greenhouses or the like.

A01G 9/249

{Lighting means (with special arrangements for promoting growth A01G 7/045)}

Definition statement

This place covers:

Spatial arrangements of lamps for controlling the light propagation direction towards the plants, e.g. to increase photosynthetic activity, such as:

Vertical lamp arrays (illustration in Fig.1),

Lighting means for illuminating the bottom leaves,

Movable illumination means, etc.

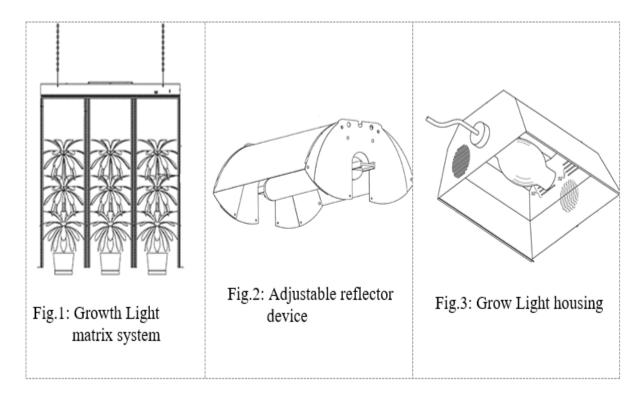
Illumination systems with structural features for controlling the light propagation direction towards the plants, such as:

Screens, shades in association with horticultural lamps;

Horticultural lamps with lenses;

Horticultural lamps with reflectors (illustration in Fig.2), etc.

Horticultural illumination systems with cooling means (illustration in Fig.3).



References

Limiting references

This place does not cover:

Lighting treatment of plants	A01G 7/045
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Reflectors for light sources	F21V 7/00
Cooling arrangements for lighting devices	F21V 29/50

A01G 9/26

Electric devices {(A01G 9/249 takes precedence)}

References

Limiting references

This place does not cover:

Lighting means	A01G 9/249

A01G 11/00

Sterilising soil by steam

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

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)

References

Limiting references

This place does not cover:

Destruction of pests and weeds	<u>A01M</u>
Phytosanitary compositions	<u>A01N</u>

Informative references

Attention is drawn to the following places, which may be of interest for search:

Coverings around trees forming part of a road	E01C 9/005
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A01G 13/02

Protective coverings for plants; {Coverings for the ground;} Devices for layingout {or removing}coverings

References

Informative references

Protective materials for covering soil and plants	A01G 9/1438

A01G 13/04

Cloches{, i.e. protective full coverings for individual plants (individual canopies A01G 13/0212)}

References

Limiting references

This place does not cover:

Individual canopies for protecting plants	A01G 13/0212
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Informative references

Attention is drawn to the following places, which may be of interest for search:

Dismountable or portable greenhouses	A01G 9/16
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A01G 13/06

Devices for generating heat, smoke or fog in gardens, orchards or forests, e.g. to prevent damage by frost

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Chemical aspects of generating smoke or mist	C06D 3/00
Heating devices in general, see the appropriate classes	<u>F24</u>

A01G 13/10

Devices for affording protection against animals, birds or other pests ({A01G 13/0243 takes precedence;} scaring or repelling devices A01M 29/00)

References

Limiting references

This place does not cover:

Protective shelters for young plants	A01G 13/0243
Scaring or repelling devices	A01M 29/00

Informative references

Traps	A01M 23/00

A01G 15/00

Devices or methods for influencing weather conditions

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Dispersing fog in general	E01H 13/00
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A01G 17/00

Cultivation of hops, vines, fruit trees, or like trees

References

Limiting references

This place does not cover:

Forestry	A01G 23/00
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A01G 18/00

Cultivation of mushrooms

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Harvesting of standing crops	A01D 45/00
Organic fertilisers containing added bacterial cultures, mycelia or the like	C05F 11/08
Fungi	C12N 1/14

A01G 18/61

Growth guides for fruiting bodies, e.g. paper rolls

Definition statement

This place covers:

Devices for guiding the fruiting body, or carpophore, of a mushroom during growth, e.g. to obtain a desired form (illustration in Fig.1).

Paper rolls, paper wraps, wrapping papers, etc. for guiding the carpophores (illustration in Fig.2).

Apparatus for attaching the growth guides to the cultivation containers.

Definition statement

Methods therefor.

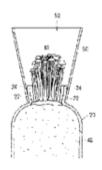


Fig.1: Growth guide attached to a cultivation bottle

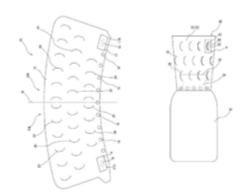


Fig.2: Wrapping paper, unrolled (left) and rolled on a bottle (right)

A01G 20/00

Cultivation of turf, lawn or the like; Apparatus or methods therefor (hand-held edge trimmers or shears for lawn A01G 3/06; edging for lawn A01G 9/28; lawn-mowers A01D 34/00)

References

Limiting references

This place does not cover:

Hand-held edge trimmers or shears for lawn	A01G 3/06
Edging for lawn	A01G 9/28
Lawn-mowers	A01D 34/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Flat containers for turf, lawn or the like	A01G 9/033
Growth substrates in mat form	A01G 24/44
Hand tools for treating meadows or lawns	A01B 1/24
Machines for treating meadows or lawns	A01B 45/00
Rollers for consolidating or finishing laid-down unset materials	E01C 19/23
Removing undesirable matter from roads or like surfaces	E01H 1/00

Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

• Turf, Sod, Grass, Lawn, Meadows

A01G 20/12

Apparatus for cutting sods or turfs

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

ı	Machines	for lifting	and treating	na soil
	Machines	IOI IIIUIIC	ı anu neam	iu soii

A01B 77/00

A01G 22/20

Cereals

Definition statement

This place covers:

This subgroup covers all cereal crops but also covers grasses other than cereals, e.g. grasses for biooil production.

A01G 23/00

Forestry

References

Limiting references

This place does not cover:

	-
Cultivation of fruit trees or the like	A01G 17/00

A01G 23/02

Transplanting, uprooting, felling or delimbing trees (delimbing standing trees A01G 3/00)

References

Limiting references

This place does not cover:

Delimbing standing trees	A01G 3/00

Informative references

Tree feeding devices	B27B 25/00

A01G 23/08

Felling trees

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Axes	B26B 23/00
Saws or sawing machines	<u>B27B</u>

A01G 23/095

Delimbers (A01G 23/083 takes precedence)

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

	1
Manufacture of wood shavings, chips, powder or the like	B27L 11/00

A01G 24/00

Growth substrates; Culture media; Apparatus or methods therefor (for mushrooms A01G 18/20)

References

Limiting references

This place does not cover:

Growth substrates or culture media for mushrooms	A01G 18/20
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Informative references

Planted mats for growing turf	A01G 20/20
Fertilisers; Manufacture thereof	<u>C05F</u>
Soil-conditioning or soil-stabilising materials	C09K 17/00

A01G 24/44

in block, mat or sheet form

Definition statement

This place covers:

Compressed growth substrates, e.g. compressed pots, blocks, slabs, bricks, plugs, pellets, wafers, mats, boards (illustrations in Fig.1).

Growth substrates with a coherent shape, e.g. cured with a binder.

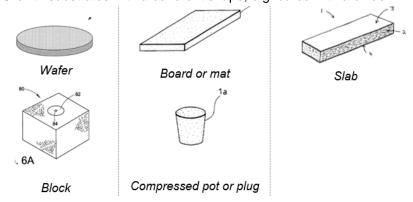


Fig.1: Compressed growth substrates

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Grass cultivation on mats	A01G 20/20
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A01G 25/00

Watering gardens, fields, sports grounds or the like (special apparatus or adaptations for fertilising-liquids <u>A01C 23/00</u>; nozzles or outlets, spraying apparatus <u>B05B</u>)

References

Limiting references

This place does not cover:

Adding fertilizers in irrigation	A01C 23/00
Spraying	<u>B05B</u>

Special rules of classification

Looping references between <u>A01G 25/00</u> and <u>A01C 23/00</u> have been identified. Until this inconsistency is resolved, the current classification practice in CPC is as follows: <u>A01C 23/00</u> is limiting in <u>A01G 25/00</u> and <u>A01G 25/00</u> is informative in <u>A01C 23/00</u>.

A01G 25/06

Watering arrangements making use of perforated pipe-lines located in the soil

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Similar arrangements for drainage

E02B 11/00

A01G 27/00

Self-acting watering devices, e.g. for flower-pots

Definition statement

This place covers:

In addition to self-acting watering devices also plant containers having a water reservoir.

A01G 27/04

using wicks or the like

Definition statement

This place covers:

Self-acting watering devices with wicks (or the like) and possibly further including a water reservoir underneath.

Relationships with other classification places

If the water reservoir is wholly around or beside the container, classification should be made in group A01G 27/06.

A01G 27/06

having a water reservoir, the main part thereof being located wholly around or directly beside the growth substrate

Definition statement

This place covers:

Self-acting watering devices with wicks (or the like) and a water reservoir, the latter being wholly around or beside the container.

Relationships with other classification places

If the reservoir is only underneath the device, classification should be made in group A01G 27/04.

A01G 29/00

Root feeders; Injecting fertilisers into the roots

Definition statement

This place covers:

In addition to root feeders and injecting fertilisers into the roots also irrigating or fertilising very close to the roots.

A01G 31/00

Soilless cultivation, e.g. hydroponics (growth substrates therefor <u>A01G 24/00</u>; cultivation of seaweed <u>A01G 33/00</u>)

References

Limiting references

This place does not cover:

Growth substrates for soilless cultivation	A01G 24/00
Cultivation of seaweed or algae	A01G 33/00

A01G 31/02

Special apparatus therefor (self-acting watering devices A01G 27/00)

References

Limiting references

This place does not cover:

Self-acting watering devices	A01G 27/00

Informative references

Apparatus for cultivation in receptacles or greenhouses in general	A01G 9/00