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; {apparatus for spreading sand or salt E01C; sowing and fertilising
with aircraft B64D 1/16 - B64D 1/20})

WARNING
In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the
scheme.

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 {irradiation in general
B01J 19/08})
1/005 . [Potato seed cutters]
1/02 . Germinating apparatus; Determining germination
capacity of seeds or the like (germinating in
preparation of malt C12C 1/027)
1/025 . {Testing seeds for determining their viability or
germation capacity}
1/04 . Arranging seeds on carriers, e.g. on tapes, on cords
{Carrier compositions}
1/042 . . {Tapes, bands or cords}
1/044 . . {Sheets, multiple sheets or mats}
1/046 . . {Carrier compositions}
2001/048 . . {Machines}
1/06 . Coating or dressing seed {encapsulated embryos
or artificial seeds A01H 4/006; seed coating
compositions C09D}
1/08 . Immunising seed

3/00 Treating manure; Manuring {ploughs with
additional arrangements for putting manure under the
soil A01B 17/002}; dung forks A01D 9/00 (treatment
of waste water, sewage or sludge C02F); organic
fertilisers from waste or refuse C05F
3/02 . Storage places for manure, e.g. cisterns for liquid
manure; Installations for fermenting manure
{sewageage structures E03F 5/00; silos, bunkers
E04H 7/22}
3/021 . . {for composted manure}
3/023 . . {Digesters}
3/025 . . {with heat recuperation means}
3/026 . . {with mixing or agitating devices}
3/028 . . {Covers, roofs or other structures for covering
manure storage places (production of methane or
biogas C02F 11/04; coverings for swimming or
splash baths or pools E04H 4/10;)
3/04 . Manure loaders {loaders in general B65G}
3/06 . Manure distributors, e.g. dung distributors
3/063 . . {Side-spreaders}
3/066 . . . {Spreading by using worm or screw conveyors}
3/08 . . . for manure already laying on the soil
5/00 Making or covering furrows or holes for sowing,
planting or manuring
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
5/045 . . . {with piercing buckets (devices for laying-out
or removing protective coverings for plants
A01G 13/02)}
5/06 . Machines for making or covering drills or furrows
for sowing or planting {seeding machines
A01B 13/02; lifting devices for agricultural
machines A01B 63/00}
5/062 . . . {Devices for making drills or furrows}
5/064 . . . . {with rotating tools}
5/066 . . . . {Devices for covering drills or furrows}
5/068 . . . . . {Furrow packing devices, e.g. press wheels}
5/08 . Machines for both manuring and sowing or both
manuring and planting

7/00 Sowing {with centrifugal wheels A01C 17/00}.
arrangements for driving working parts A01C 19/00)
7/002 . . {Dibble seeders}
7/004 . . {using liquid seeding techniques}
7/006 . . {Minimum till seeding}
7/008 . . {Sod or grassland seeding (A01C 7/08 takes
precedence)}
7/02 . . . {Hand sowing implements} {fertiliser distributors
for hand use A01C 15/02; tools for cultivation
A01G 20/30, A01G 20/40}
7/04 . Single-grain seeders with or without suction devices
{regulation A01C 7/08; for quantities of seed
A01C 7/18}
7/042 . . . . {using pneumatic means}
7/044 . . . . {Pneumatic seed wheels}
7/046 . . . . . {with perforated seeding discs}
7/048 . . . . . {Seed tape planters}
7/06  . Seeders combined with fertilising apparatus 
   ((conducting and depositing seed A01C 7/20; 
   apparatus for two kinds of fertiliser A01C 15/00); 
   combinations with soil working tools A01B 49/04)
7/08  . Broadcast seeders; Seeders depositing seeds in 
   rows [(machines for making furrows A01C 5/06; 
   combination of seed machines with other soil- 
   working tools A01B 49/06; foldable apparatus 
   A01B 73/00)]
7/081 . . [Seeders depositing seeds in rows using 
   pneumatic means]
7/082 . . . [Ducts, distribution pipes or details thereof for 
   pneumatic seeders (non-pneumatic seed pipes 
   A01C 7/06)]
7/084 . . . [Pneumatic distribution heads for seeders]
7/085 . . [Broadcast seeders]
7/087 . . [Tromlining]
7/088 . . [Sectional seeding]
7/10 . . Devices for adjusting the seed-box (Regulation 
   of machines for depositing quantities at intervals)
7/102 . . . [Regulating or controlling the seed rate]
7/105 . . [Seed sensors]
7/107 . . [Calibration of the seed rate]
7/12 . . Seeders with feeding wheels
7/121 . . . [for sowing seeds of different sizes]
7/122 . . . . [using more than one feeding wheel; using 
   double-run feeding wheels]
7/123 . . . . [Housings for feed rollers or wheels]
7/124 . . . . [with top delivery of the seeds]
7/125 . . . . [with bottom delivery of the seeds]
7/126 . . . . [Stubbed rollers or wheels]
7/127 . . . . [Cell rollers, wheels, discs or belts]
7/128 . . . . [Cell discs]
7/14 . . . . Seeders with spoon or bucket wheels
7/16 . . . . Seeders with other distributing devices, e.g. 
   brushes, discs, screws, slides (with distributing 
   slots A01C 15/06; with slides A01C 15/124; 
   with chains A01C 15/18)
7/163 . . . [Gravity distributors]
7/166 . . . [Centrifugal distributors (pneumatic 
   distributors A01C 15/04)]
7/18 . . Machines for depositing quantities of seed at 
   intervals [(dibble seeders A01C 7/002; single-grain 
   seeders A01C 7/04; regulation A01C 7/102; ridge 
   marking A01B 69/02)]
7/185 . . . [Foot valves]
7/20 . . Parts of seeders for conducting and depositing seed 
   (combined with fertilising apparatus A01C 7/06)
7/201 . . . [Mounting of the seeding tools]
7/203 . . . [comprising depth regulation means]
7/205 . . . [comprising pressure regulation means]
7/206 . . . [Seed pipes]
7/208 . . . . [Chassis; Coupling means to a tractor or the like; 
   Lifting means; Side markers (hoppers for seeders 
   or spreaders A01C 15/006)]
9/00 Potato planters ((planting by hand A01C 7/02; 
   combinations with soil working tools A01B 49/04)
9/02 . . with conveyor belts
9/04 . . with bucket wheels ((with other distributing devices 
   A01C 9/08)
9/06 . . with piercing or grasping devices

9/08 . . with other distributing devices, e.g. flaps, screws, 
   horizontal turning plates ((with bucket wheels 
   A01C 9/04)
11/00 Transplanting machines ((hand sowing 
   A01C 7/02); carriers for supporting persons 
   A01B 75/00; transplanting devices for trees 
   A01G 23/02)
11/003 . . [for aquatic plants; for planting underwater, e.g. 
   rice]
11/006 . . [Other parts or details of transplanting machines]
11/02 . . for seedlings
11/025 . . . [Transplanting machines using seedling trays; 
   Devices for removing the seedlings from the 
   trays]
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
15/00 Fertiliser distributors (A01C 7/06 takes precedence; 
   {combined with seeders A01C 7/06); arrangements 
   for driving working parts A01C 19/00; {harrows 
   with special additional arrangements A01B 19/00); sand, 
   gravel or salt spreaders for roads E01C 19/20)
15/001 . . . [with slowly turning wheels]
15/002 . . [with oscillating distributing spouts]
15/003 . . [Bulk fertiliser or grain handling in the field or on 
   the farm]
15/005 . . . [Undercarriages, tanks, hoppers, stirrers specially 
   adapted for seeders or fertiliser distributors]
15/006 . . . [Hoppers]
15/007 . . . [with agitators in the hopper]
15/008 . . . [Aprons; Deflecting plates; Band-spreading 
   attachments]
15/02 . . for hand use ((hand sowing A01C 7/02)
15/04 . . using blowers
15/06 . . with distributing slots, {i.e. for dosing, e.g. 
   adjustable openings}
15/08 . . . with pushers or stirrers in the slots
15/10 . . . . with reciprocating pushers or stirrers in front 
   of the slots (with endless chains A01C 15/18)
15/12 . . . . with movable parts of the receptacle
15/122 . . . . . [with moving floor parts (with endless chains 
   A01C 15/18)]
15/124 . . . . [with adjustable shutters or slits]
15/126 . . . . . [with pushers or stirrers in the slits]
15/128 . . . . . [with pushers or stirrers in front of the slits 
   (with endless chains A01C 15/18)]
15/14 . . . with means for lifting out the fertiliser ((feeding 
   wheels, cell wheels, discs A01C 7/12; bucket 
   wheels A01C 7/14)]
15/16 . . with means for pushing out the fertiliser, e.g. by a 
   roller
15/18 . . with endless chains, {i.e. side transporting 
   elements, e.g. auger or screw conveyors, swash 
   plates}
Fertilisers or seeders with centrifugal wheels
({ hand-used implements A01C 7/02, A01C 15/02;
fertiliser distributors A01C 15/00; mechanical
throwing machines for articles or solid bulk materials,
in general B65G 31/00; sand, gravel or salt spreaders
E01C 19/20 })

{ Centrifugal throwing devices with a vertical axis }

{ Centrifugal throwing devices with a horizontal
axis }

{ Driving mechanisms for the throwing devices }

{ Regulating or dosing devices }

{ Devices controlling the quantity or the
distribution pattern }

Arrangements for driving working parts
of fertilisers or seeders
({ A01C 17/005 takes precedence })

by a motor

by a ground-engaging wheel

the drive coupling being controlled by lifting or
lowering of the seeding tools]

Methods of fertilizing, { sowing or planting }
(fertilisers C05; soil-conditioning or soil-stabilising
materials C09K 17/00)

{ Apparatus for sowing fertiliser; Fertiliser drill }

{ Following a specific plan, e.g. pattern (precision
agriculture in general A01B 79/005; steering or
guiding agricultural machines or implements
A01B 69/00 )}

{ Determining fertilization requirements }

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 )

{ Sludge spreaders, e.g. liquid manure spreaders }

{ provided with auxiliary arrangements, e.g.
pumps, agitators, cutters }

{ Distributing devices, e.g. for rotating, throwing }

{ Nozzles, valves, splash plates }

{ Distribution of liquid fertilisers by gravity flow
(distribution of liquid ammonia in or on the soil
A01C 23/024; under pressure A01C 23/04 )}

{ Metering or regulating systems }

{ Tanks, chassis or related parts }

Special arrangements for delivering the liquid
directly into the soil

{ Sludge injectors, i.e. liquid manure injectors }

{ Continuous injection tools (devices for
making drill or furrows A01C 5/066 )}

{ for liquid or gas fertilisers }

{ for ammonia }

{ Continuous injection tools }

{ Localised non-continuous injection tools, e.g.
pal injectors, spike wheels }

{ Other methods for delivering fertiliser into the
soil (sowing granular fertiliser A01C 21/002;
subirrigation A01G 25/06 )}

{ Contactless injection into the soil }

Distributing under pressure; Distributing mud;
Adaptation of watering systems for fertilising-
liquids

23/042 . . . { Adding fertiliser to watering systems (adding
insecticides or herbicides A01M 7/00 )}

23/045 . . . { Filling devices for liquid manure or slurry tanks
(arrangements for connecting hoses of the quick-
acting type F16L 37/00 )}

23/047 . . . { Spraying of liquid fertilisers (gravity flow
A01C 23/006; watering gardens, fields, sports
grounds or the like A01G 25/00 )}