

CPC COOPERATIVE PATENT CLASSIFICATION

A HUMAN NECESSITIES

AGRICULTURE

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

A01C PLANTING; SOWING; FERTILISING (parts, details or accessories of agricultural machines or implements, in general [A01B 51/00](#) - [A01B 75/00](#))

1/00	Apparatus, or methods of use thereof, for testing or treating seed, roots, or the like, prior to sowing or planting	5/08	• Machines for both manuring and sowing or both manuring and planting
1/005	• {Potato seed cutters}	7/00	Sowing
1/02	• Germinating apparatus; Determining germination capacity of seeds or the like	7/002	• {Dibble seeders}
1/025	• • {Testing seeds for determining their viability or germination capacity}	7/004	• {using liquid seeding techniques}
1/04	• Arranging seed on carriers, e.g. on tapes, on cords {; Carrier compositions}	7/006	• {Minimum till seeding}
1/042	• • {Tapes, bands or cords}	7/008	• {Sod or grassland seeding (A01C 7/08 takes precedence)}
1/044	• • {Sheets, multiple sheets or mats}	7/02	• Hand sowing implements
1/046	• • {Carrier compositions}	7/04	• Single-grain seeders with or without suction devices
2001/048	• • {Machines}	7/042	• • {using pneumatic means}
1/06	• Coating or dressing seed	WARNING	
1/08	• Immunising seed	Group A01C 7/042 is impacted by reclassification into groups A01C 7/0443 and A01C 7/0445 .	
3/00	Treating manure; Manuring	Groups A01C 7/042 , A01C 7/0443 and A01C 7/0445 should be considered in order to perform a complete search.	
3/02	• Storage places for manure, e.g. cisterns for liquid manure; Installations for fermenting manure		
3/021	• • {for composted manure}		
3/023	• • {Digesters}	7/044	• • • {Pneumatic seed wheels}
3/025	• • {with heat recuperation means}	WARNING	
3/026	• • {with mixing or agitating devices}	Group A01C 7/044 is impacted by reclassification into groups A01C 7/0445 and A01C 7/0443 .	
3/028	• • {Covers, roofs or other structures for covering manure storage places}	Groups A01C 7/044 , A01C 7/0445 and A01C 7/0443 should be considered in order to perform a complete search.	
3/04	• Manure loaders		
3/06	• Manure distributors, e.g. dung distributors		
3/063	• • {Side-spreaders}		
3/066	• • {Spreading by using worm or screw conveyors}	7/0443	• • • • {Seed singulators}
3/08	• • for manure already laying on the soil	WARNING	
5/00	Making or covering furrows or holes for sowing, planting or manuring (ploughs for making ridges A01B 13/02)	Group A01C 7/0443 is incomplete pending reclassification of documents from groups A01C 7/042 , A01C 7/044 and A01C 7/046 .	
5/02	• Hand tools for making holes for sowing, planting or manuring	All groups listed in this Warning should be considered in order to perform a complete search.	
5/04	• Machines for making or covering holes for sowing or planting		
5/045	• • {with piercing buckets}		
5/06	• Machines for making or covering drills or furrows for sowing or planting		
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}		

7/0445 {Seed ejectors}

WARNING

Group [A01C 7/0445](#) is incomplete pending reclassification of documents from groups [A01C 7/042](#), [A01C 7/044](#) and [A01C 7/046](#).

All groups listed in this Warning should be considered in order to perform a complete search.

7/046 {with perforated seeding discs}

WARNING

Group [A01C 7/046](#) is impacted by reclassification into groups [A01C 7/0445](#) and [A01C 7/0443](#).

Groups [A01C 7/046](#), [A01C 7/0445](#) and [A01C 7/0443](#) should be considered in order to perform a complete search.

7/048 . . {Seed tape planters}
 7/06 . Seeders combined with fertilising apparatus
 7/08 . Broadcast seeders; Seeders depositing seeds in rows
 7/081 . . {Seeders depositing seeds in rows using pneumatic means}
 7/082 . . . {Ducts, distribution pipes or details thereof for pneumatic seeders}
 7/084 . . . {Pneumatic distribution heads for seeders}
 7/085 . . {Broadcast seeders}
 7/087 . . {Tramlining}
 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 or slides
 7/163 . . . {Gravity distributors}
 7/166 . . . {Centrifugal distributors}
 (Frozen)

WARNING

Group [A01C 7/166](#) is no longer used for the classification of documents as of May 1, 2023.

The content of this group is being reclassified into groups [A01C 17/00](#), [A01C 17/001](#), [A01C 17/003](#), [A01C 17/005](#), [A01C 17/006](#) and [A01C 17/008](#).

All groups listed in this Warning should be considered in order to perform a complete search.

7/18 . Machines for depositing quantities of seed at intervals
 7/185 . . {Foot valves}
 7/20 . Parts of seeders for conducting and depositing seed
 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}

9/00 Potato planters

9/02 . with conveyor 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

11/003 . {for aquatic plants; for planting underwater, e.g. rice}
 11/006 . {Other parts or details of planting 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 ({combined with seeders} [A01C 7/06](#))

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
 15/04 . using blowers
 15/06 . with distributing slots {, e.g. adjustable openings for dosing}
 15/08 . . with pushers or stirrers in the slots
 15/10 . . . with reciprocating pushers {or stirrers in front of the slots}
 15/12 . with movable parts of the receptacle
 15/122 . . {with moving floor parts}
 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
 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}

17/00 Fertilisers or seeders with centrifugal wheels**WARNING**

Groups [A01C 17/00](#) - [A01C 17/008](#) are incomplete pending reclassification of documents from group [A01C 7/166](#).

All groups listed in this Warning should be considered in order to perform a complete search.

- 17/001 . {Centrifugal throwing devices with a vertical axis}
- 17/003 . {Centrifugal throwing devices with a horizontal axis}
- 17/005 . {Driving mechanisms for the throwing devices}
- 17/006 . {Regulating or dosing devices}
- 17/008 . . {Devices controlling the quantity or the distribution pattern}

19/00 Arrangements for driving working parts of fertilisers or seeders {(A01C 17/005 takes precedence)}

- 19/02 . by a motor
- 19/04 . by a ground-engaging wheel
- 19/045 . . {the drive coupling being controlled by lifting or lowering of the seeding tools}

21/00 Methods of fertilising {, sowing or planting}

- 21/002 . {Apparatus for sowing fertiliser; Fertiliser drill}
- 21/005 . {Following a specific plan, e.g. pattern}
- 21/007 . {Determining fertilization requirements}

23/00 Distributing devices specially adapted for liquid manure or other fertilising liquid, including ammonia, e.g. transport tanks or sprinkling wagons

- 23/001 . {Sludge spreaders, e.g. liquid manure spreaders}
- 23/002 . . {provided with auxiliary arrangements, e.g. pumps, agitators, cutters}
- 23/003 . . {Distributing devices, e.g. for rotating, throwing}
- 23/005 . . . {Nozzles, valves, splash plates}
- 23/006 . {Distribution of liquid fertilisers by gravity flow}
- 23/007 . {Metering or regulating systems}
- 23/008 . {Tanks, chassis or related parts}
- 23/02 . Special arrangements for delivering the liquid directly into the soil
- 23/021 . . {Sludge injectors, i.e. liquid manure injectors}
- 23/022 . . . {Continuous injection tools}
- 23/023 . . {for liquid or gas fertilisers}
- 23/024 . . . {for ammonia}
- 23/025 . . . {Continuous injection tools}
- 23/026 . . . {Localised non-continuous injection tools, e.g. pal injectors, spike wheels}
- 23/027 . . {Other methods for delivering fertiliser into the soil}
- 23/028 . . . {Contactless injection into the soil}
- 23/04 . Distributing under pressure; Distributing mud; Adaptation of watering systems for fertilising-liquids
- 23/042 . . {Adding fertiliser to watering systems}
- 23/045 . . {Filling devices for liquid manure or slurry tanks}
- 23/047 . . {Spraying of liquid fertilisers}