

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)

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1/00 Hand tools (edge trimmers for lawns A01G 3/06) [1, 2006.01]	3/14 • • • Frame ploughs [1, 2006.01]
1/02 • Spades; Shovels [1, 2006.01]	3/16 • • Alternating ploughs, i.e. capable of making an adjacent furrow on return journey [1, 2006.01]
1/04 • • with teeth [1, 2006.01]	3/18 • • • Turn-wrest ploughs [1, 2006.01]
1/06 • Hoes; Hand cultivators [1, 2006.01]	3/20 • • • Balance ploughs [1, 2006.01]
1/08 • • with a single blade [1, 2006.01]	3/22 • • • with parallel plough units used alternately [1, 2006.01]
1/10 • • with two or more blades [1, 2006.01]	3/24 • Tractor-drawn ploughs (A01B 3/04 takes precedence) [1, 2006.01]
1/12 • • with blades provided with teeth [1, 2006.01]	3/26 • • without alternating possibility [1, 2006.01]
1/14 • • with teeth only [1, 2006.01]	3/28 • • Alternating ploughs [1, 2006.01]
1/16 • Tools for uprooting weeds [1, 2006.01]	3/30 • • • Turn-wrest ploughs [1, 2006.01]
1/18 • • Tong-like tools [1, 2006.01]	3/32 • • • Balance ploughs [1, 2006.01]
1/20 • Combinations of different kinds of hand tools [1, 2006.01]	3/34 • • • with parallel plough units used alternately [1, 2006.01]
1/22 • Attaching the blades or the like to handles (handles for tools, or their attachment, in general B25G); Interchangeable or adjustable blades [1, 2006.01]	3/36 • Ploughs mounted on tractors [1, 2006.01]
1/24 • for treating meadows or lawns [2, 2006.01]	3/38 • • without alternating possibility [1, 2006.01]
	3/40 • • Alternating ploughs [1, 2006.01]
	3/42 • • • Turn-wrest ploughs [1, 2006.01]
	3/421 • • • • with a headstock frame made in one piece [2, 2006.01]
	3/426 • • • • with a headstock frame made of two or more parts [2, 2006.01]
	3/44 • • • with parallel plough units used alternately [1, 2006.01]
	3/46 • Ploughs supported partly by tractor and partly by their own wheels [1, 2006.01]
	3/50 • Self-propelled ploughs [1, 2006.01]
	3/52 • • with three or more wheels, or endless tracks [1, 2006.01]

Ploughs

3/00 Ploughs with fixed plough-shares [1, 2006.01]
3/02 • Man-driven ploughs [1, 2006.01]
3/04 • Animal-drawn ploughs [1, 2006.01]
3/06 • • without alternating possibility, i.e. incapable of making an adjacent furrow on return journey [1, 2006.01]
3/08 • • • Swing ploughs [1, 2006.01]
3/10 • • • Trussed-beam ploughs; Single-wheel ploughs [1, 2006.01]
3/12 • • • Two-wheel beam ploughs [1, 2006.01]

- 3/54 • • • without alternating possibility [1, 2006.01]
- 3/56 • • • Alternating ploughs [1, 2006.01]
- 3/58 • • with two wheels [1, 2006.01]
- 3/60 • • • Alternating ploughs [1, 2006.01]
- 3/62 • • • • Balance ploughs [1, 2006.01]
- 3/64 • Cable ploughs; Indicating or signalling devices for cable plough systems [1, 2006.01]
- 3/66 • • with motor-driven winding apparatus mounted on the plough [1, 2006.01]
- 3/68 • • Cable systems with one or two engines [1, 2006.01]
- 3/70 • • • Systems with one engine for working uphill [1, 2006.01]
- 3/72 • • Means for anchoring the cables [1, 2006.01]
- 3/74 • Use of electric power for propelling ploughs (electric current collectors B60L 5/00) [1, 2006.01]

- 5/00 Ploughs with rolling non-driven tools, e.g. discs** (with rotary driven tools A01B 9/00) [1, 2006.01]
- 5/02 • drawn by animals [1, 2006.01]
- 5/04 • drawn by tractors [1, 2006.01]
- 5/06 • • without alternating possibility [1, 2006.01]
- 5/08 • • Alternating ploughs [1, 2006.01]
- 5/10 • mounted or partly-mounted on tractors [1, 2006.01]
- 5/12 • • without alternating possibility [1, 2006.01]
- 5/14 • • Alternating ploughs [1, 2006.01]
- 5/16 • Self-propelled disc or like ploughs [1, 2006.01]

- 7/00 Disc-like soil-working implements usable either as ploughs or as harrows, or the like** [1, 2006.01]

- 9/00 Ploughs with rotary driven tools** (tilling implements with rotary driven tools A01B 33/00) [1, 2006.01]

- 11/00 Ploughs with oscillating, digging or piercing tools** [1, 2006.01]

- 13/00 Ploughs or like machines for special purposes** (for drainage E02B 11/02) [1, 2006.01]

- 13/02 • for making or working ridges, e.g. with symmetrically arranged mouldboards [1, 2006.01]
- 13/04 • for working in vineyards, orchards, or the like [1, 2006.01]
- 13/06 • • Arrangements for preventing damage to the vines, or the like [1, 2006.01]
- 13/08 • for working subsoil [1, 2006.01]
- 13/10 • • Special implements for lifting subsoil layers [1, 2006.01]
- 13/12 • • • Means for distributing the layers on the surface [1, 2006.01]
- 13/14 • for working soil in two or more layers [1, 2006.01]
- 13/16 • Machines for combating erosion, e.g. basin-diggers, furrow-dammers [1, 2006.01]

- 15/00 Elements, tools, or details of ploughs** [1, 2006.01]

- 15/02 • Plough blades; Fixing the blades [1, 2006.01]
- 15/04 • • Shares [1, 2006.01]
- 15/06 • • • Interchangeable or adjustable shares [1, 2006.01]
- 15/08 • • Mouldboards [1, 2006.01]
- 15/10 • • • Interchangeable or adjustable mouldboards [1, 2006.01]
- 15/12 • Beams; Handles (handles for tools or their attachment in general B25G) [1, 2006.01]
- 15/14 • Frames (means or arrangements to facilitate transportation A01B 73/00) [1, 4, 2006.01]

- 15/16 • Discs (bearings therefor A01B 71/04); Scrapers for cleaning discs; Sharpening attachments (sharpening in general B24) [1, 2006.01]
- 15/18 • Coulters [1, 2006.01]
- 15/20 • Special adjusting means for tools of ploughs drawn by, or mounted on tractors working on hillsides or slopes [1, 2006.01]

- 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) [1, 2, 2006.01]

Harrows

- 19/00 Harrows with non-rotating tools** [1, 2006.01]

- 19/02 • with tools rigidly or elastically attached to a tool-frame [1, 2006.01]
- 19/04 • • with two or more tool-frames [1, 2006.01]
- 19/06 • • with tools or tool-frames moved to-and-fro mechanically [1, 2006.01]
- 19/08 • with link network supporting tooth-like tools [1, 2006.01]
- 19/10 • Lifting or cleaning apparatus [1, 2006.01]

- 21/00 Harrows with rotary non-driven tools** (tilling implements with rotary driven tools A01B 33/00) [1, 2006.01]

- 21/02 • with tooth-like tools [1, 2006.01]
- 21/04 • • on horizontally-arranged axles [1, 2006.01]
- 21/06 • • on vertically-arranged axles [1, 2006.01]
- 21/08 • with disc-like tools [1, 2006.01]

- 23/00 Elements, tools, or details of harrows** [1, 2006.01]

- 23/02 • Teeth; Fixing the teeth [1, 2006.01]
- 23/04 • Frames (means or arrangements to facilitate transportation A01B 73/00); Drawing-arrangements [1, 4, 2006.01]
- 23/06 • Discs (A01B 15/16 takes precedence; bearings therefor A01B 71/04); Scrapers for cleaning discs; Sharpening attachments (sharpening in general B24) [1, 2, 2006.01]

- 25/00 Harrows with special additional arrangements, e.g. means for distributing fertilisers; Harrows for special purposes** (A01B 39/00 takes precedence) [1, 2006.01]

Other machines for working soil

- 27/00 Clod-crushers** [1, 2006.01]

- 29/00 Rollers** [1, 2006.01]

- 29/02 • with smooth surface [1, 2006.01]
- 29/04 • with non-smooth surface formed of rotatably-mounted rings or discs or with projections or ribs on the roller body; Land packers [1, 2006.01]
- 29/06 • with special additional arrangements [1, 2006.01]

- 31/00 Drags** [1, 2006.01]

- 33/00 Tilling implements with rotary driven tools** [1, 2006.01]

- 33/02 • with tools on horizontal shaft transverse to direction of travel [1, 2006.01]
- 33/04 • with tools on horizontal shaft parallel to direction of travel [1, 2006.01]

- 33/06 • with tools on vertical or steeply-inclined shaft [1, 2006.01]
 - 33/08 • Tools; Details, e.g. adaptations of transmissions or gearings [1, 2006.01]
 - 33/10 • • Structural or functional features of the tools [1, 2006.01]
 - 33/12 • • Arrangement of the tools; Screening of the tools [1, 2006.01]
 - 33/14 • • Attaching the tools to the rotating shaft, e.g. resiliently-attached tools [1, 2006.01]
 - 33/16 • with special additional arrangements (A01B 49/00 takes precedence; for sowing or fertilising A01B 49/06) [1, 2, 2006.01]
 - 35/00 Other machines for working soil** (A01B 37/00, A01B 39/00, A01B 77/00 take precedence) [1, 2006.01]
 - 35/02 • with non-rotating tools [1, 2006.01]
 - 35/04 • • drawn by animal or tractor [1, 2006.01]
 - 35/06 • • • with spring tools [1, 2006.01]
 - 35/08 • • • with rigid tools [1, 2006.01]
 - 35/10 • • mounted on tractors [1, 2006.01]
 - 35/12 • • • with spring tools [1, 2006.01]
 - 35/14 • • • with rigid tools [1, 2006.01]
 - 35/16 • with rotating or circulating non-propelled tools [1, 2006.01]
 - 35/18 • with both rotating and non-rotating tools [1, 2006.01]
 - 35/20 • Tools; Details [1, 2006.01]
 - 35/22 • • Non-rotating tools; Mounting non-rotating tools [1, 2006.01]
 - 35/24 • • • Spring tools [1, 2006.01]
 - 35/26 • • • Rigid tools [1, 2006.01]
 - 35/28 • • Rotating tools; Mounting rotating tools [1, 2006.01]
 - 35/30 • • Undercarriages (A01B 23/04 takes precedence) [1, 2, 2006.01]
 - 35/32 • with special additional arrangements [1, 2006.01]
 - 37/00 Devices for loosening soil compacted by wheels or the like** [1, 2006.01]
 - 39/00 Other machines specially adapted for working soil on which crops are growing** [1, 2006.01]
 - 39/02 • with non-rotating tools [1, 2006.01]
 - 39/04 • • drawn by animal or tractor [1, 2006.01]
 - 39/06 • • Self-propelled machines [1, 2006.01]
 - 39/08 • with rotating tools [1, 2006.01]
 - 39/10 • with oscillating tools [1, 2006.01]
 - 39/12 • for special purposes [1, 2006.01]
 - 39/14 • • for working ridges [1, 2006.01]
 - 39/16 • • for working in vineyards, orchards, or the like [1, 2006.01]
 - 39/18 • • for weeding [1, 2006.01]
 - 39/19 • • • Rod weeders, i.e. weeder with rotary rods propelled beneath the soil surface [1, 2006.01]
 - 39/20 • Tools; Details [1, 2006.01]
 - 39/22 • • Tools; Mounting tools [1, 2006.01]
 - 39/24 • • Undercarriages (A01B 23/04 takes precedence) [1, 2, 2006.01]
 - 39/26 • • Arrangements for protecting plants [1, 2006.01]
 - 39/28 • with special additional arrangements (A01B 49/00 takes precedence) [1, 2, 2006.01]
 - 41/00 Thinning machines** [1, 2006.01]
 - 41/02 • with oscillating tools [1, 2006.01]
 - 41/04 • with rotating tools [1, 2006.01]
 - 41/06 • with electric, e.g. photo-electric control of thinning operations [1, 2006.01]
 - 43/00 Gatherers for removing stones, undesirable roots or the like from the soil, e.g. tractor-drawn rakes** [1, 4, 2006.01]
 - 45/00 Machines for treating meadows or lawns** [1, 2006.01]
 - 45/02 • for aerating [1, 2006.01]
 - 45/04 • for cutting sods or turf [1, 2006.01]
 - 47/00 Soil-working with electric potential applied between tools and soil** [1, 2006.01]
 - 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) [1, 2006.01]
 - 49/02 • with two or more soil-working tools of different kind [1, 2006.01]
 - 49/04 • Combinations of soil-working tools with non-soil-working tools, e.g. planting tools [1, 2006.01]
 - 49/06 • • for sowing or fertilising [1, 2006.01]
- 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) [1, 2006.01]
 - 51/02 • propelled by a motor [1, 2006.01]
 - 51/04 • drawn by animal or tractor [1, 2006.01]
 - 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) [1, 3, 2006.01]
 - 59/02 • for animal-drawn machines [1, 2006.01]
 - 59/04 • for machines pulled or pushed by a tractor [1, 2006.01]
 - 59/041 • • preventing or limiting side-play of implements (preventing overstrain A01B 61/00) [2, 2006.01]
 - 59/042 • • having pulling means arranged on the rear part of the tractor [1, 2006.01]
 - 59/043 • • • supported at three points, e.g. by quick-release couplings (A01B 59/06 takes precedence) [1, 2006.01]
 - 59/044 • • having pulling means arranged on the middle part of the tractor [1, 2006.01]
 - 59/046 • • having pulling or pushing means arranged on the side of the tractor [1, 2006.01]
 - 59/048 • • having pulling or pushing means arranged on the front part of the tractor [1, 2006.01]
 - 59/06 • for machines mounted on tractors [1, 2006.01]
 - 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) [1, 3, 2006.01]
 - 61/02 • of the coupling devices between tractor and machine [1, 2006.01]
 - 61/04 • of the connection between tools and carrier beam or frame [1, 2006.01]

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 <i>per se</i> B66F) [1, 3, 2006.01]	69/00	Steering of agricultural machines or implements; Guiding agricultural machines or implements on a desired track [1, 3, 2006.01]
63/02	• for implements mounted on tractors [1, 2006.01]	69/02	• Ridge-marking or like devices; Checkrow wires; Accessories therefor [1, 2006.01]
63/04	• • Hand devices; Hand devices with mechanical accumulators, e.g. springs [1, 2006.01]	69/04	• Special adaptations of automatic tractor steering, e.g. electric system for contour ploughing [1, 2006.01]
63/06	• • operated mechanically by tractor motor [1, 2006.01]	69/06	• Lateral steering of machines by an additional operator [1, 2006.01]
63/08	• • operated by the movement of the tractor [1, 2006.01]	69/08	• Lateral steering of machines derived from the lateral movement of tractor [1, 2006.01]
63/10	• • operated by hydraulic or pneumatic means [1, 2006.01]	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 [1, 2006.01]
63/102	• • • characterised by the location of the mounting on the tractor, e.g. on the rear part [1, 2006.01]	71/02	• Setting or adjusting mechanisms [1, 2006.01]
63/104	• • • • on the middle part, i.e. between front and rear wheels [1, 2006.01]	71/04	• Bearings of rotating parts, e.g. for soil-working discs (bearings in general F16C) [1, 2006.01]
63/106	• • • • on the side [1, 2006.01]	71/06	• Special adaptations of coupling means between power take-off and transmission shaft to the implement or machine (couplings for transmitting rotation F16D) [1, 2006.01]
63/108	• • • • on the front part [1, 2006.01]	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) [1, 2, 2006.01]
63/11	• • • for controlling weight transfer between implements and tractor wheels [1, 2, 2006.01]	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) [1, 4, 2006.01]
63/111	• • • regulating working depth of implements [1, 2006.01]	73/02	• Folding frames [4, 2006.01]
63/112	• • • • to control draught load, i.e. tractive force [1, 2, 2006.01]	73/04	• • foldable about a horizontal axis [4, 2006.01]
63/114	• • • • to achieve a constant working depth [1, 2, 2006.01]	73/06	• • foldable about a vertical axis [4, 2006.01]
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) [1, 2, 2006.01]	75/00	Carriers for supporting persons when working in the field, e.g. while thinning beet [1, 2006.01]
63/12	• • operated by an electric motor [1, 2006.01]	<hr/>	
63/14	• for implements drawn by animals or tractors [1, 2006.01]	76/00	Parts, details or accessories of agricultural machines or implements, not provided for in groups A01B 51/00-A01B 75/00 [2006.01]
63/16	• • with wheels adjustable relatively to the frame [1, 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) [1, 2006.01]
63/18	• • • with clutch between Z-type axle and wheel [1, 2006.01]	79/00	Methods for working soil (essentially requiring the use of particular machines, <i>see</i> the relevant groups for the machines) [1, 2006.01]
63/20	• • • with gear and rack [1, 2006.01]	79/02	• combined with other agricultural processing, e.g. fertilising, planting [1, 2006.01]
63/22	• • • operated by hydraulic or pneumatic means [1, 2006.01]		
63/24	• Tools or tool-holders adjustable relatively to the frame [1, 2006.01]		
63/26	• • • by man-power [1, 2006.01]		
63/28	• • • operated by the machine or implement [1, 2006.01]		
63/30	• • • operated by motor power through a mechanical transmission [1, 2006.01]		
63/32	• • • operated by hydraulic or pneumatic means [1, 2006.01]		
67/00	Devices for controlling the tractor motor by resistance of tools (preventing overstrain A01B 61/00) [1, 2006.01]		