COOPERATIVE PATENT CLASSIFICATION

A HUMAN NECESSITIES

AGRICULTURE

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

A01D HARVESTING; MOWING {(parts, details or accessories of agricultural machines or implements in general A01B 51/00 - A01B 75/00)}

NOTES
1. This subclass covers the shredding or pulverising of stubble, e.g. for the purpose of producing mulch, but does not cover other mechanical destruction of unwanted vegetation, which is covered by group A01M 21/02
2. In this subclass, in groups A01D 34/00, A01D 42/00, A01D 43/00, A01D 57/00, A01D 67/00, A01D 69/00 and A01D 75/00, it is desirable to add the indexing code of group A01D 2101/00

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.

Hand implements (devices for picking apples or like fruit A01D 46/24; soil-working implements not specially adapted for harvesting A01B 1/00)

1/00 Hand-cutting implements for harvesting (hedge trimming means A01G 3/04; (hand-cutting in general B26; making from sheet metal B21D 53/72; making by rolling B21H 7/101))

1/02 . Scythes
1/04 . Sickles
1/06 . Knives
1/08 . Attaching means for blades
1/10 . . with fastening by means of eccentric levers
1/12 . . with blades adjustable in several ways
1/14 . Handles; Accessories, e.g. scythe baskets, safety devices

3/00 Non-abrasive sharpening devices for scythes, sickles or the like (abrasive or similar sharpening devices B24D 15/06)

3/02 . with percussive tools
3/04 . with pressing jaws
3/06 . with pressing rollers or pressing discs
3/08 . Details, e.g. scythe anvils, scythe guides

5/00 Containers for whetstones for use during harvesting (whetting implements B24D 15/00)

7/00 Rakes (mowers convertible to rakes or capable of raking A01D 42/02; mowers combined with rakes A01D 43/02; haymakers, crop conditioners A01D 76/00 - A01D 84/00; (making rakes from sheet metal B21D 53/68; making rakes by rolling B21H 7/08))

7/02 . with tines rigidly connected to the rake-bar
7/04 . with adjustable rake-bar
7/06 . with tines specially shaped or attached
7/08 . with exchangeable tines
7/10 . combined with strippers, grippers or the like

9/00 Forks (making forks from sheet metal B21D 53/68; making forks by rolling B21H 7/08))

9/02 . with tines rigidly connected to the handle
9/04 . with exchangeable tines
9/06 . combined with strippers, grippers or the like

11/00 Other hand implements [(for maize A01D 45/026, for cotton A01D 46/087)]

11/02 . for lifting or cropping beet, potatoes or other root crops
11/025 . [Knives for topping beets]
11/04 . for handling root crops, e.g. shovels, fork-like shovels
11/06 . Combined implements, e.g. fork and rake

Machines for harvesting root crops

13/00 Diggers, e.g. potato ploughs

15/00 Digging machines with sieve graters but without conveying mechanisms

15/02 . with rigid grates
15/04 . with moving or vibrating grates

17/00 Digging machines with sieving and conveying mechanisms

17/02 . with conveyors arranged above the sieving device
17/04 . with conveyors arranged below the sieving device
17/06 . with rollers or disc screens
17/08 . with shaker type screens
17/10 . with smooth conveyor belts, lath bands or rake bands
17/101 . [with two superposed conveyor belts]
17/103 . [Constructional details of conveyor belts]
2017/105 . [Driving means for the belt]
2017/106 . [Belts with fingers mounted on them]
2017/108 . [Belts with paddles mounted on them]
17/12 . with bucket conveyors
17/14 . with cylindrical screens
Machines for harvesting root crops

17/16 . . with a conveyor spiral
17/18 . . without a conveyor spiral
17/20 . . with several co-operating screens
17/22 . . with several co-operating sifter bands

19/00 Digging machines with centrifugal wheels, drums or spinners
19/02 . . with working tools rotating around a horizontal axis arranged transverse to the direction of travel
19/04 . . with working tools rotating around a horizontal axis arranged parallel to the direction of travel
19/06 . . with scoop wheels or drums
19/08 . . with scoop tine chains
19/10 . . with receiving screens; Implements for depositing the root crops
19/12 . . with working tools arranged on an approximately vertical axis
19/14 . . with one screening wheel
19/16 . . with several screening wheels
19/18 . . with screen tine chains

21/00 Digging machines with potato-picking implements
21/02 . . with picking tools moved up-and-down
21/04 . . with rotating picking tools

23/00 Topping machines
23/02 . . cutting the tops before being lifted
23/02/22 . . (Rotatable cleaning devices, e.g. brushes, for removing the rests of vegetal material on the root-crops not yet harvested (with cutters A01D 2023/026))
23/02/24 . . (Devices with fix blades for topping)
23/02/26 . . (Devices with movable knives for topping, e.g. rotatable cutting disks)
23/02/28 . . (Cutters rotating around a shaft forming a cutting rotor)
23/04 . . cutting the tops after being lifted (processing of harvested root-crops in bulk A01F 29/00, A23N)
23/06 . . with collecting and depositing devices for the tops; Devices for protecting the tops against damage

25/00 Lifters for beet or like crops
25/005 . . (Auxiliary devices for the lifters)
25/02 . . Machines with rigid tools
25/04 . . Machines with moving or rotating tools
25/042 . . (with driven tools)
25/044 . . (with driven rotating tools)
25/046 . . (with oscillating tools)
25/048 . . (with endless chains)

27/00 Machines with both topping and lifting mechanisms
27/02 . . with rigid tools
27/04 . . with moving or rotating tools

29/00 Harvesters for peanuts

31/00 Other digging harvesters [(for harvesting asparagus A01D 45/002)]
31/02 . . combined with other agricultural machines, e.g. drilling, planting, hay-harvesting machines

33/00 Accessories for digging harvesters
2033/005 . . (Yield crop determination mechanisms for root-crop harvesters)
33/02 . . Foliage-separating mechanisms

33/04 . . Stone-separating mechanisms
33/06 . . Haulm-cutting mechanisms
33/08 . . Special sorting and cleaning mechanisms
33/10 . . Crop collecting devices, with or without weighing apparatus
33/105 . . (Devices for gathering the crop in a row)
33/12 . . Driving mechanisms, with or without motor
33/14 . . Lifting or lowering mechanisms for the tools

Harvesters or mowers for grass, cereals, or other crops
(component parts thereof A01D 57/00 - A01D 69/00; accessories therefor A01D 75/00)

34/00 Mowers (combined with apparatus performing additional operations while mowing A01D 37/00 - A01D 41/00, A01D 43/00; convertible to apparatus for purposes other than mowing or capable of performing operations other than mowing A01D 42/00) (Mowing apparatus of harvesters)
34/001 . . (Accessories not otherwise provided for)
34/003 . . (Means for cleaning the machine)
34/005 . . (Mulching means)
34/006 . . (Control or measuring arrangements)
34/008 . . (for automated or remotely controlled operation)
34/01 . . characterised by features relating to the type of cutting apparatus
34/015 . . (Cutting mechanisms not covered by another group)
34/02 . . having reciprocating cutters
34/03 . . mounted on a vehicle, e.g. a tractor, or drawn by an animal or a vehicle
34/032 . . (drawn by an animal or a vehicle)
34/035 . . . . . . . (with cutter bars driven by a power take-off from the vehicle)
34/037 . . . . . . . (with additional power-supply)
34/04 . . . . with cutters at the front
34/043 . . . . (for cutting at the side)
34/046 . . . . (drawn by an animal or a vehicle)
34/06 . . . . with cutters at the side
34/065 . . . . . . . (drawn by an animal or a vehicle)
34/07 . . . . with cutters at the back
34/08 . . . . hand-guided by a walking operator
34/10 . . . . with motor driven cutters or wheels
34/125 . . . . . . . with means for discharging mown material (A01D 57/26 - A01D 57/30 take precedence; combined with means for gathering or loading mown material A01D 43/006)
34/13 . . . . Cutting apparatus
34/135 . . . . having oppositely movable cooperating knife-bars
34/14 . . . . Knive-bars
34/145 . . . . (Devices for connecting the knife-bars to the driving mechanism)
34/16 . . . . Guides for the knife-bar in the ledger-plate
34/17 . . . . Holding-down devices for the knife
34/18 . . . . Guard fingers; Ledger-plates
34/20 . . . . Ledger-plate bars
34/22 . . . . Shoes therefor
34/23 . . . . with additional vertical cutter-bar
34/24 . . . . Lifting devices for the cutter-bar
34/243 . . . . (Mechanical lifting devices (A01D 34/26 takes precedence))
34/246 . . . . (Hydraulic lifting devices)
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Harvesters or mowers for grass, cereals, or other crops

34/26 . . . manually actuated
34/27 . . . Devices for disengaging the knife-driving mechanisms during the lifting of the cutter-bar
34/28 . . . Adjusting devices for the cutter-bar
34/283 . . . [Adjustment of the cutter bar in a vertical plane, i.e. to adjust the angle between the cutter bar and the soil]
34/286 . . . [Adjustment of the cutter bar on a horizontal plane, i.e. to adjust the angle between the cutter bar and the tractor]
34/30 . . . Driving mechanisms for the cutters
34/305 . . . [Balancing]
34/32 . . . Connecting-rods for knife-driving mechanisms
34/33 . . . Devices for connecting the rod to the knife-bar
34/34 . . . Devices for connecting the rod to the crank-pin of the driving mechanism
34/36 . . . actuated by advance of the machine
34/37 . . . electric
34/38 . . . fluid
34/40 . . . Other details
34/404 . . . having cutters driven to oscillate in a horizontal plane
34/408 . . . and cooperating with counter-cutters
34/412 . . . having rotating cutters
34/416 . . . Flexible line cutters
34/4161 . . . [Means for feeding cutter line]
34/4162 . . . [automatically]
34/4163 . . . [by triggered line feedout, e.g. bump-feeding]
34/4165 . . . [Mounting of the cutter head]
34/4166 . . . [Mounting or replacement of the lines]
34/4167 . . . [Protection devices]
34/4168 . . . [Constructional details of the flexible lines]
34/42 . . . having cutters rotating about a horizontal axis, e.g. cutting-cylinders
34/43 . . . mounted on a vehicle, e.g. a tractor, or drawn by an animal or a vehicle
34/435 . . . (Flail harvesters or mowers (cutting flails A01D 34/535))
34/44 . . . with two or more cutters
34/46 . . . hand-guided by a walking operator (A01D 34/43 takes precedence)
34/47 . . . with motor driven cutters or wheels
34/475 . . . [Driving mechanisms (for the cutters A01D 34/56)]
34/49 . . . with means for discharging mown material (A01D 57/26 - A01D 57/30 take precedence; combined with means for gathering or loading mown material A01D 43/06)
34/52 . . . Cutting apparatus
34/53 . . . Helic ally shaped cutting members
34/535 . . . , with cutting members pivotally attached to the rotating axle, e.g. flails
34/54 . . . Cutting-height adjustment
34/56 . . . Driving mechanisms for the cutters
34/57 . . . actuated by advance of the machine
34/58 . . . electric
34/60 . . . fluid
34/62 . . . Other details
34/63 . . . having cutters rotating about a vertical axis
34/64 . . . mounted on a vehicle, e.g. a tractor, or drawn by an animal or a vehicle (A01D 34/695 takes precedence)
2034/645 . . . [Lifting means for the cutter of the lawnmower mounted at the front of the vehicle for inspection and maintenance]
34/66 . . . with two or more cutters
34/661 . . . [Mounting means]
34/662 . . . . . . . . . . . . to the front of the vehicle
34/664 . . . . . . . . . . . . [Disc cutter bars]
34/665 . . . . . . . . . . . . [modular]
34/667 . . . . . . . . . . . . [Means for directing the cut crop]
34/668 . . . . . . . . . . . . [rotating]
34/67 . . . hand-guided by a walking operator
34/68 . . . with motor driven cutters or wheels
34/6806 . . . [Driving mechanisms (for the cutters A01D 34/76)]
34/6812 . . . . . . . . . . . . [Braking or clutching mechanisms]
34/6818 . . . . . . . . . . . . [Motor starting mechanisms]
2034/6825 . . . . . . . . . . . . [being tire driven]
2034/6831 . . . . . . . . . . . . [being fluid driven]
2034/6837 . . . . . . . . . . . . [Drive connections]
2034/6843 . . . . . . . . . . . . [Control levers on the handle of the mower]
34/685 . . . . . . . . . . . . with two or more cutters
34/69 . . . with motor driven wheels
34/695 . . . supported by an air cushion
34/71 . . . with means for discharging mown material (A01D 57/26 - A01D 57/30 take precedence; combined with means for gathering or loading mown material A01D 43/06)
34/73 . . . Cutting apparatus
34/733 . . . [Cutting-blade mounting means]
34/736 . . . [Flail type]
34/74 . . . Cutting-height adjustment
34/76 . . . Driving mechanisms for the cutters
34/77 . . . actuated by advance of the machine
34/78 . . . electric
34/80 . . . fluid
34/81 . . . Casings; Housings (A01D 34/71 takes precedence)
34/82 . . . Other details
34/822 . . . [Devices for guiding or supporting cables]
34/824 . . . [Handle arrangements]
34/826 . . . . . . . . . . . . [Noise reduction means]
34/828 . . . . . . . . . . . . [Safety devices]
34/83 . . . having cutting members on endless belts or sprocket chains
34/831 . . . . . . . . . . . . [with blades on endless belts]
34/833 . . . . . . . . . . . . [with blades on endless sprocket chains]
34/835 . . . specially adapted for particular purposes
34/8355 . . . [for cutting up or crushing remaining standing stalks, e.g. stubble (mowers combined with means for cutting up, crushing or bruising, the mown crop A01D 43/08, A01D 43/10; apparatus for crushing or bruising mown stalks A01D 82/00; apparatus for cutting up the mown crop A01F 29/00)]
34/84 . . . for edges of lawns or fields, e.g. for mowing close to trees or walls ([for embankments A01D 34/86 takes precedence; ] hand-held edge trimmers A01G 30/06)
Harvesters or mowers for grass, cereals, or other crops

34/86 . . . for use on sloping ground, e.g. on embankments (or in ditches) (underrigging or frames specially adapted for harvesters or mowers A01D 67/00; control mechanisms for harvesters or mowers when moving on slopes A01D 75/28)

34/863 . . . [and for mowing around obstacles, e.g. posts, trees, fences or the like (A01D 34/868 takes precedence)]

34/866 . . . [Mounting means]
34/90 . . . for carrying by the operator
34/902 . . . [Ergonomic provisions]
34/905 . . . [Vibration dampening means]
2034/907 . . . [Control levers for portable mowing machines]

37/00 Reaper-binders (features relating to mowing only A01D 34/00, to binding only A01D 39/00; equipment thereon for binding harvested produce, e.g. knotters, A01D 59/00; (bundling articles B65B 13/00))
37/02 . . . with receiving platform and binding apparatus but without elevating canvases (knotting D04G)
37/04 . . . conveying the stalks in vertical position (delivering devices for standing stalks A01D 57/22)
37/06 . . . binding with stalks or straw bands (implements for laying-out bands for sheaves A01D 75/16)

39/00 Independent binders, e.g. for hay; Binders attachable to mowers (equipment thereon for binding harvested produce, e.g. knotters, A01D 59/00; stationary apparatus or hand tools for forming or binding hay or straw into bundles A01F 1/00; (bundling articles B65B 13/00; knotting D04G))
39/005 . . . [Binders combined with devices for picking-up the harvest]

41/00 Combines, i.e. harvesters or mowers combined with threshing devices (threshing devices for combines A01F 7/00 - A01F 12/00)
41/02 . . . Self-propelled combines
41/04 . . . Tractor-driven combines
41/06 . . . Combines with headers
41/08 . . . Combines with thresh before the stalk is cut
41/10 . . . Field threshers with windrow pick-up apparatus
41/12 . . . Details of combines
41/1208 . . . [Tanks for grain or chaff (for threshing machines A01F 12/60)]
41/1217 . . . [Unloading mechanisms]
41/1226 . . . [Extension mechanisms]
41/1235 . . . [Platforms for sacking]
41/1243 . . . [Devices for laying-out or distributing the straw]
41/1252 . . . [Anti-dust devices]
41/1261 . . . [Access devices for personnel]
41/1267 . . . [Control or arranging arrangements specially adapted for combines]
41/1271 . . . [for measuring crop flow]
41/1272 . . . [for measuring grain flow]
41/1273 . . . [for measuring grain loss]
41/1274 . . . [for drives]
41/1275 . . . [for the level of grain in grain tanks]
41/1276 . . . [for cleaning mechanisms]
41/1277 . . . [for measuring grain quality]
41/1278 . . . [for automatic steering]
41/133 . . . Drying devices
41/14 . . . Mowing tables
41/141 . . . [Automatic header control]
41/142 . . . [Header drives]
41/144 . . . [Foldable headers]
41/145 . . . [Header lifting devices]
41/147 . . . [Sunflower header attachments]
41/148 . . . [Telescopic headers]
41/16 . . . Devices for coupling mowing tables to conveyors

42/00 Mowers convertible to apparatus for purposes other than mowing; Mowers capable of performing operations other than mowing (mowers combined with apparatus performing additional operations while mowing A01D 43/00)
42/005 . . . [Mulching (shredders or like cutting implements for comminuting plant waste per se A01G 3/002)]
42/02 . . . Raking
42/04 . . . Soil working
42/06 . . . Sweeping or cleaning lawns or other surfaces (sweeping apparatus for lawns per se A01G 20/43)
42/08 . . . Sweeping snow

43/00 Mowers combined with apparatus performing additional operations while mowing (A01D 37/00, A01D 39/00, A01D 41/00, take precedence)
43/003 . . . [with devices for drying or burning]
43/006 . . . [with devices for pressing or compacting]
43/02 . . . with rakes
43/04 . . . with haymakers, e.g. tedders
43/06 . . . with means for collecting, gathering or loading mown material (A01D 34/868 takes precedence; for hay or the like A01D 87/00)
43/063 . . . in or into a container carried by the mower; Containers therefor (A01D 43/077 takes precedence)
43/0631 . . . [Control devices specially adapted therefor]
43/0633 . . . [with compacting means]
43/0635 . . . [with emptying means]
43/0636 . . . [Flexible containers]
43/0638 . . . [Rigid containers]
43/07 . . . in or into a trailer (A01D 43/077 takes precedence)
43/073 . . . with controllable discharge spout
43/077 . . . with auxiliary means, e.g. fans, for transporting the mown crop
43/0775 . . . [for airborne lawn-mowers]
43/08 . . . with means for cutting up the mown crop, e.g. forage harvesters (threshing machines having chaff-cutters A01F 12/40; cutting apparatus of chaff-cutters or of apparatus for cutting up mown crop A01F 29/00)
43/081 . . . [specially adapted for ensilage of maize]
43/082 . . . [Gathering units]
43/083 . . . [with belts or chains]
43/085 . . . [Control or measuring arrangements specially adapted therefor]
43/086 . . . [and means for collecting, gathering or loading mown material]
43/087 . . . [with controllable discharge spout]
43/088 . . . [Mounting means]
43/10 . . . with means for crushing or bruising the mown crop (stalk crushers or bruisers per se for standing stalks or stubbles A01D 34/8355, for mown crop A01D 82/00, for straw A01F 12/40)
Harvesters or mowers for grass, cereals, or other crops

43/102  . . . { Bruising control devices }
43/105  . . . { Driving control devices }
43/107  . . . { Mounting means }
43/12   . with soil-working implements, e.g. ploughs
43/14   . with dispensing apparatus, e.g. for fertilisers, herbicides or preservatives
43/16   . with lawn edgers

44/00   Harvesting of underwater plants, e.g. harvesting of seaweed
44/02   . of laver

45/00   Harvesting of standing crops ( A01D 44/00 takes precedence; threshing machines adapted for special crops, threshing devices for combines adapted for special crops A01F 11/00; harvesting of mushrooms A01G 18/70)
45/001  . with arrangements for transport of personnel
45/002  . (of pineapples)
45/003  . (of millet, sorghum)
45/006  . (of tomatoes)
45/007  . (of asparagus)
45/008  . (of cucumbers)
45/02   . of maize, i.e. kernel harvesting (for ensilage maize A01D 43/081)
45/021  . . . { Comheaders }
45/023  . . . { Gathering chains of belts }
45/025  . . . { Snapping rolls }
45/026  . . . { Hand implements }
45/028  . . { Harvesting devices mounted to a vehicle }
45/04   . of rice
45/06   . of flax, or similar fibrous plants
45/065  . . . { of fibrous plants other than flax, e.g. ramie, sisal, hemp, jute, Spanish grass, raffia }
45/10   . of sugar cane, for digging sugar cane A01D 31/00)
45/16   . of tobacco
45/22   . of beans
45/24   . of peas
45/26   . of cabbage or lettuce
45/263  . . . { of lettuce }
45/266  . . . { of Brussels sprouts }
45/28   . of spinach
45/30   . of grass-seeds or like seeds

46/00   Picking of fruits, vegetables, hops, or the like; Devices for shaking trees or shrubs

NOTE
In this group, group A01D 46/30 takes precedence over groups A01D 46/02 - A01D 46/28

46/005  . . . { Picking or shaking pneumatically (of cotton A01D 46/10) }
46/02   . of hops
46/04   . of tea
46/06   . of coffee
46/08   . of cotton
46/081  . . . { with harvesters characterised by transversally adjustable row units }
46/082  . . . { with harvesters characterised by basket means }
46/084  . . . { with compacting means }
46/085  . . . { Control or measuring arrangements specially adapted for cotton harvesters }
46/087  . . . { Hand implements }
46/088  . . . { with harvesters characterised by the lubricant distribution systems }
46/10   . . . pneumatically ( A01D 46/081 - A01D 46/088 take precedence )
46/12   . . using boll-from-plant strippers
46/14   . . using lint-from-plant pickers
46/16   . . . using rotary or oscillating spindles
46/18   . . . mounted on rotary carrier
46/20   . Platforms with lifting and lowering devices
46/22   . Baskets or bags attachable to the picker
46/24   . Devices for picking apples or like fruit ( A01D 46/26 and A01D 46/005 takes precedence )
46/243  . . . { Accessories specially adapted for manual picking, e.g. ladders, carts }
46/247  . . . Manually operated fruit-picking tools ( A01D 46/26 takes precedence )
46/253  . . Portable motorised fruit pickers
46/26   . Devices for shaking trees or shrubs; Fruit catching devices to be used therewith ( A01D 46/26 takes precedence )
2046/262 . . { Collecting surfaces extended around a tree in order to catch the fruit }
46/264  . . . { Devices for beating or vibrating the foliage; Fruit catching devices to be used therewith }
2046/266  . . { Portable devices to shake branches }
2046/268  . . { Devices to shake the branches pneumatically powered }
46/28   . Vintaging machines, i.e. grape harvesting machines
46/285  . . . { with means for separating leaves and grapes, e.g. pneumatical means like blowing or aspirating devices }
46/30   . Robotic devices for individually picking crops

47/00   Headers [ for topping of plants, e.g. stalks with ears ]

51/00   Apparatus for gathering together crops spread on the soil, e.g. apples, beets, nuts, potatoes, cotton, cane sugar
51/002  . . . for apples or nuts
51/005  . . { Loaders for beets, beetleaf or potatoes }
51/007  . . . for grains

Components of harvesters or mowers for grass or cereals
(mowing apparatus A01D 34/00; wheels B60B; wheel scrapers B60S 1/68)

57/00   Delivering mechanisms for harvesters or mowers
57/01   . Devices for leading crops to the mowing apparatus
57/02   . . using reels
57/025  . . . (with synchronised driving means )
57/03   . . with supplementary controlled movement of the crop-engaging members, e.g. of the tines ( A01D 57/025 takes precedence )
57/04   . . Arrangements for changing the position of the reels
57/05   . . . Detachable reels for converting a mower into a harvester
57/06   . . using endless conveyors
57/08   . . using swinging rakes
57/10   . . using fans
57/12   . Rotating rakes
57/14   . Single-platform rakes
57/16   . Tilting tables
57/18   . Bunching devices, e.g. with tipping bars
Components of harvesters or mowers for grass or cereals

69/00  Accessories for harvesters or mowers

   75/00  [Carriers for the transport of harvesters or mowers]
   75/002  .  [for mowers]
   75/006  .  [for lawn-mowers]
   75/008  .  [Tool-carrying means]
   75/02  Implementes for collecting grain crop
   75/04  Sheaf carriers
   75/06  Sheaf shockers or stookers
   75/065  .  [hand-operated]
   75/08  Sharpening apparatus fixed to the harvester or mower (sharpening machines or devices per se B24B, B24D)
   75/10  Devices for reconditioning the knife-bar, e.g. removing the knife from its backing
   75/12  Instruments for removing the knife-bar from the cutter
   75/16  Implements for laying-out bands for sheaves
   75/18  Safety devices for parts of the machines (safety devices in general F16P)
   75/182  .  [Avoiding overload]
   75/185  .  [Avoiding collisions with obstacles]
   75/187  .  [Removing foreign objects]
   75/20  Devices for protecting men or animals (safety devices in general F16P)
   2075/203  .  [by stopping driving when lifting frames, e.g. for haymakers]
   75/206  .  [for mowers carried by operator]
   75/24  Special devices for harvesters or mowers drawn by animals
   75/243  .  [Poles]
   75/246  .  [Devices for harnessing]
   75/26  Front trucks; Axle-pivot steering of front trucks
   75/265  .  [Support wheels for poles or supporting devices]
   75/28  Control mechanisms for harvesters or mowers when moving on slopes; Devices preventing lateral pull
   75/282  .  [acting on the grain cleaning and separating device (grain cleaners, separators per se A01F 12/44)]
   75/285  .  [with arrangements for holding the harvesting or mowing apparatur in a horizontal position]
   75/287  .  [acting on the mowing table (A01D 75/285 takes precedence)]
   75/30  Arrangements for trailing two or more mowers
   75/303  .  [for mowers positioned one behind the other or side by side]
   75/306  .  [for lawn mowers positioned one behind the other or side by side]

Haymakers (combined with mowers A01D 43/04); Crop Conditioners

NOTE

In groups A01D 76/00 - A01D 87/00, the following terms are used with the meanings indicated:
- “hay” includes all mowed forage crop in a dry or partially dry state;
- “haymakers” covers all apparatus working on mowed forage crop laying on the ground with the intention to make hay,
Haymakers; Crop Conditioners

A01D

Haymakers with tines that are stationary with respect to the machine during operation but that may be liftable for dumping

76/00 Haymakers with tines that are stationary with respect to the machine during operation but that may be liftable for dumping

76/003 . [Hand-operated wheeled rakes (hand-operated rakes A01D 78/00)]

76/006 . [Hay-sweeps (rakes for making stacks A01D 85/001; sweep rakes A01D 87/08)]

78/00 Haymakers with tines moving with respect to the machine

78/001 . [Side-delivery rakes (A01D 78/04 takes precedence)]

78/002 . [Drum-turner-tedders with lateral discharge]

78/003 . [Drum-turner-tedders with throwing wheel]

78/005 . [Turners; Tedders]

78/006 . [Rotating turners]

78/007 . . . [Control mechanisms therefor]

78/008 . . . [with forks]

78/009 . . . with tine-carrying bars or equivalent members which interconnect heads rotating about horizontal axes, e.g. of rotary-drum type

78/010 . . . the tine-carrying members moving obliquely or at right angles to the direction of travel of the machine

78/012 . . . with tine-carrying endless chains or belts

78/013 . . . with tine-carrying rotary heads or wheels

78/10 . . . the tines rotating about a substantially vertical axis

78/1007 . . . [Arrangements to facilitate transportation specially adapted therefor (A01D 78/1021 takes precedence); for other agricultural machines or implements A01B 73/00; carriers A01D 80/005]

78/1014 . . . [Folding frames]

78/1021 . . . [Telescopic frames]

78/1028 . . . [Pivotal rotor support arms (A01D 78/1007 takes precedence)]

78/1035 . . . [pivotal by orientation of the support wheels]

78/1042 . . . [Steering devices]

78/105 . . . [Ground support for rotors]

78/1057 . . . [Drive mechanisms]

78/1064 . . . [Arrangements of tines (A01D 78/1007 takes precedence)]

78/1071 . . . [Having only one rotor]

78/1078 . . . [Having only one row of rotors arranged on the same horizontal line perpendicular to the advance direction of the machine]

78/1085 . . . [Having two rows of rotors on two different horizontal lines perpendicular to the advance direction of the machine]

78/1092 . . . [Having more than two rows of rotors on more than two different horizontal lines perpendicular to the advance direction of the machine]

78/11 . . . the tines having an additional movement superimposed upon their rotary movement

78/1125 . . . [by a guiding track]

78/114 . . . the tines rotating about a substantially horizontal axis

78/1142 . . . [Arrangements for transport by movement of the heads carrying rake arms]

78/144 . . . . [in a vertical plane]

78/146 . . . . [in a horizontal plane]

78/148 . . . . [Rakes having only one heads carrying arm]

78/16 . . . . with positive drive of the heads or wheels

78/18 . . . . of the reciprocating tine type

78/20 . . . . the tines reciprocating in a direction parallel to the direction of travel of the machine

80/00 Parts or details of [, or accessories for,] haymakers (parts or details specific for one type of machine, see the relevant groups for these machines)

80/005 . . . [Carriers for the transport of haymakers (arrangements of the haymaker to facilitate transportation A01D 78/1007)]

80/02 . . . Tines; Attachment of tines

82/00 Crop conditioners, i.e. machines for crushing or bruising stalks (combined with harvesters A01D 43/10)

82/02 . . . Rollers for crop conditioners

84/00 Haymakers not provided for in a single one of groups A01D 76/00 - A01D 82/00

84/02 . . . with flexible tools

85/00 Arrangements for making or setting stacks

85/001 . . . [making or setting stacks of cereals or grass, e.g. rack formers, fixed haystacks (rakes for making windrows, hay sweeps A01D 76/006; drying racks A01F 25/12)]

85/002 . . . [with binding equipment, e.g. binding groups of bales]

85/004 . . . [with pressing equipment, e.g. vehicles for forming stacks]

85/005 . . . [Forming groups of bales, e.g. bale sledges (loaders for bales A01D 87/12; vehicles for loading bales A01D 90/08)]

2085/007 . . . [Machines directly attached to a baler]

2085/008 . . . [Making groups of bales just at horizontal level for leaving them on the field]

87/00 Loaders for hay or like field crops (combined with mowers A01D 43/06; loading in forage silos A01F 25/18; loading in general B65G, B66)

87/0007 . . . [with chopping devices (harvesters with loaders A01D 43/06; forage harvesters A01D 43/08; special adaptations of cutting machines for hay, straw or fodder A01F 29/00)]

87/0015 . . . [Arrangements for making a strand (forming round bales A01F 15/07)]

87/0023 . . . [Coupling arrangements between tractors, loaders or vehicles (for harvesters A01D 67/005)]

87/003 . . . [with gripping or clamping devices (manure loaders A01C 3/04)]

87/0038 . . . [Dumpboxes or metering devices for loading or unloading]

87/0046 . . . [Distributing devices at the delivery side of loaders]

87/0053 . . . [Tractor-mounted loaders (bucket-takes, transporting rakes A01D 87/08; manure loaders A01C 3/04; fork loaders, fork lifts B66F; earth-moving machines E02D)]

87/0061 . . . [mounted on the three-point lifting system of the tractor]

87/0069 . . . [mounted on the tractor but having their own lifting device]

87/0076 . . . [Front loaders]
Haymakers; Crop Conditioners

87/0084 . . . {Rear loaders}
87/0092 . . . {Accessories}
87/02 . with conveyor belts [or conveyor chains, with or without pick-up means]
87/04 . . with rakes feeding crop to the conveyor
87/06 . with oscillating or reciprocating rake-bars
87/08 . with sweep rakes {, i.e. buck-rakes, e.g. transporting rakes (gripping or clamping devices A01D 87/003; fork loaders A01D 87/0053)}
87/10 . with blowers { (blowing and conveying B65G 53/00; loading or distributing arrangements in forage silos A01F 25/18)}
87/12 . Loaders for sheaves, stacks or bales
87/121 . . . {for sheaves, stacks}
87/122 . . . {for bales on the ground (vehicles for loading A01D 90/08)}
2087/123 . . . {Manual trolleys for bales}
87/125 . . . {mounted on the press without laying down the bales}
87/126 . . . {Loaders for stacks or groups of bales}
87/127 . . . {Apparatus for handling, loading or unrolling round bales}
2087/128 . . . {Devices for unrolling or breaking round bales}

89/00 Pick-ups for loaders, chaff-cutters, balers, field-threshers, or the like {, i.e. attachments for picking-up hay or the like field crops (field threshers with window pick-up apparatus A01D 41/109)}
89/001 . . . {Pick-up systems}
89/002 . . . {Rotors}
89/003 . . . {Endless belts}
89/004 . . . {Mountings, e.g. height adjustment, wheels, lifting devices}
89/005 . . . {Drives}
89/006 . . . {Accessories (feeding devices for baling presses A01F 15/10; for cutting machines A01F 29/10)}
89/007 . . . {Devices for preparing the picking-up of the windrow}
89/008 . . . {Devices cooperating with the pick-up}

90/00 Vehicles for carrying harvested crops with means for selfloading or unloading (combined with mowers A01D 43/06; load transporting vehicles modified to facilitate loading in general B60P; bucket cars, i.e. having scraper bowls E02F 3/64)
2090/005 . . . {Vehicles for transporting bunches of bananas}
90/02 . Loading means { (loaders A01D 87/00; pick-ups A01D 89/00)}
90/04 . . . with additional cutting means
90/06 . . . with chaff cutters, {i.e. choppers} used as loading and cutting means (A01D 43/08 takes precedence)
90/08 . . . with bale-forming means additionally used for loading; with means for picking-up bales and transporting them into the vehicle
90/083 . . . {Round-bale trailers (trailers in general B62D)}
2090/086 . . . {Taking loose material, i.e. before having been baled, into the vehicle}
90/10 . Unloading means { (manure distributors A01C 3/06)}
90/105 . . . {Automatic side-emptying forage wagons}
90/12 . with additional devices or implements {arrangements of coupling devices A01B 59/00}

91/00 Methods for harvesting agricultural products (essentially requiring the use of particular machines, see the relevant groups for the machines)
91/02 . Products growing in the soil
91/04 . Products growing above the soil (fruit, hops A01D 46/00)

93/00 Harvesting apparatus not provided for in other groups of this subclass

2101/00 Lawn-mowers