

| Symbol           | Typ                 | Titel   |
|------------------|---------------------|---|
| <b>B</b>         | <b>Sektion</b>      | <b>SECTION B — PERFORMING OPERATIONS; TRANSPORTING</b>  |
| <b>B05</b>       | <b>Klasse</b>       | <b>SPRAYING OR ATOMISING IN GENERAL; APPLYING LIQUIDS OR OTHER FLUENT MATERIALS TO SURFACES, IN GENERAL (domestic cleaning A47L; cleaning in general by methods essentially involving the use or presence of liquid B08B 3/00; sand-blasting B24C; coating of articles during shaping of substances in a plastic state B29C 39/10, B29C 39/18, B29C 41/20, B29C 41/30, B29C 43/18, B29C 43/28, B29C 45/14, B29C 47/02; for further classification of forming layered products, <u>see</u>B32B; printing, copying B41; conveying articles or workpieces through baths of liquid B65G, e.g. B65G 49/02; handling webs or filaments in general B65H; surface treatment of glass by coating C03C 17/00, C03C 25/10; coating or impregnation of mortars, concrete, stone or ceramics C04B 41/45, C04B 41/61, C04B 41/81; paints, varnishes, lacquers C09D; enamelling of metals, applying a vitreous layer to metals, chemical cleaning or de-greasing of metallic objects C23; electroplating C25D; treating of textile materials by liquids, gases or vapours D06B; laundering D06F; treating roads E01C; apparatus or processes for the preparation or treatment of photosensitive materials G03; apparatus or processes, restricted to a purpose fully provided for in a single other class, <u>see</u> the relevant class covering the purpose) [2]</b> |
| <b>B05B</b>      | <b>Unterklasse</b>  | <b>SPRAYING APPARATUS; ATOMISING APPARATUS; NOZZLES (spray-mixers with nozzles B01F 5/20; processes for applying liquids or other fluent materials to surfaces by spraying B05D; means for pumping fluids F04; valves, e.g. water-taps, F16K) [2]</b>   |
| <b>B05B 1/00</b> | <b>Hauptgruppe</b>  | <b>Nozzles, spray heads or other outlets, with or without auxiliary devices such as valves, heating means (B05B 3/00, B05B 5/00, B05B 7/00 take precedence; devices for applying liquids or other fluent materials to surfaces by contact B05C; nozzles for ink-jet printing mechanisms B41J 2/135; closures for containers B65D; nozzles for liquid-dispensing, e.g. in vehicle service stations, B67D 5/37)</b>   |
| B05B 1/02        | 1-Punkt Untergruppe | . designed to produce a jet, spray, or other discharge of particular shape or nature, e.g. in single drops (B05B 1/26, B05B 1/28, B05B 1/34 take precedence)  |
| B05B 1/04        | 2-Punkt Untergruppe | ... in flat form, e.g. fan-like, sheet-like   |
| B05B 1/06        | 2-Punkt Untergruppe | ... in annular, tubular or hollow conical form  |
| B05B 1/08        | 2-Punkt Untergruppe | ... of pulsating nature, e.g. delivering liquid in successive separate quantities   |
| B05B 1/10        | 2-Punkt Untergruppe | ... in the form of a fine jet, e.g. for use in wind-screen washers  |
| B05B 1/12        | 1-Punkt Untergruppe | . capable of producing different kinds of discharge, e.g. either jet or spray (B05B 1/16 takes precedence)  |
| B05B 1/14        | 1-Punkt Untergruppe | . with multiple outlet openings (B05B 1/02, B05B 1/26 take precedence); with strainers in or outside the outlet opening   |
| B05B 1/16        | 2-Punkt Untergruppe | ... having selectively-effective outlets  |
| B05B 1/18        | 2-Punkt Untergruppe | ... Roses; Shower heads   |
| B05B 1/20        | 2-Punkt Untergruppe | ... Perforated pipes or troughs, e.g. spray booms; Outlet elements therefor   |
| B05B 1/22        | 1-Punkt Untergruppe | . Spouts (anti-splash devices for water-taps E03C 1/08)   |
| B05B 1/24        | 1-Punkt Untergruppe | . incorporating means for heating the liquid or other fluent material, e.g. electrically  |

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| B05B 1/26        | 1-Punkt Untergruppe | . with means for mechanically breaking-up or deflecting the jet after discharge, e.g. with fixed deflectors; Breaking-up the discharged liquid or other fluent material by impinging jets   |
| B05B 1/28        | 1-Punkt Untergruppe | . with integral means for shielding the discharged liquid or other fluent material, e.g. to limit area of spray; with integral means for catching drips or collecting surplus liquid or other fluent material (means for any of these purposes, <u>per se</u> , B05B 15/04) |
| B05B 1/30        | 1-Punkt Untergruppe | . designed to control volume of flow, e.g. with adjustable passages (B05B 1/02 takes precedence)  |
| B05B 1/32        | 2-Punkt Untergruppe | .. in which a valve member forms part of the outlet opening   |
| B05B 1/34        | 1-Punkt Untergruppe | . designed to influence the nature of flow of the liquid or other fluent material, e.g. to produce swirl (B05B 1/30 takes precedence)   |
| B05B 1/36        | 1-Punkt Untergruppe | . Outlets for discharging by overflow   |
| <b>B05B 3/00</b> | <b>Hauptgruppe</b>  | <b>Spraying or sprinkling apparatus with moving outlet elements or moving deflecting elements (B05B 5/00 takes precedence)</b>  |
| B05B 3/02        | 1-Punkt Untergruppe | . with rotating elements  |
| B05B 3/04        | 2-Punkt Untergruppe | .. driven by the liquid or other fluent material discharged, e.g. the liquid actuating a motor before passing to the outlet   |
| B05B 3/06        | 3-Punkt Untergruppe | ... by jet reaction   |
| B05B 3/08        | 2-Punkt Untergruppe | .. in association with stationary outlet or deflecting elements   |
| B05B 3/10        | 2-Punkt Untergruppe | .. discharging over substantially the whole periphery of the rotating member  |
| B05B 3/12        | 2-Punkt Untergruppe | .. with spray booms or the like rotating around an axis by means independent of the liquid or other fluent material discharged  |
| B05B 3/14        | 1-Punkt Untergruppe | . with oscillating elements; with intermittent operation  |
| B05B 3/16        | 2-Punkt Untergruppe | .. driven or controlled by the liquid or other fluent material discharged, e.g. the liquid actuating a motor before passing to the outlet   |
| B05B 3/18        | 1-Punkt Untergruppe | . with elements moving in a straight line, e.g. along a track; Mobile sprinklers [2]  |
| <b>B05B 5/00</b> | <b>Hauptgruppe</b>  | <b>Electrostatic spraying apparatus; Spraying apparatus with means for charging the spray electrically; Apparatus for spraying liquids or other fluent materials by other electric means</b>  |
| B05B 5/025       | 1-Punkt Untergruppe | . Discharge apparatus, e.g. electrostatic spray guns [5]  |
| B05B 5/03        | 2-Punkt Untergruppe | .. characterised by the use of gas [5]  |
| B05B 5/035       | 2-Punkt Untergruppe | .. characterised by gasless spraying [5]  |
| B05B 5/04        | 2-Punkt Untergruppe | .. characterised by having rotary outlet or deflecting elements   |
| B05B 5/043       | 2-Punkt Untergruppe | .. using induction-charging [5]   |
| B05B 5/047       | 2-Punkt Untergruppe | .. using tribo-charging [5]   |
| B05B 5/053       | 2-Punkt Untergruppe | .. Arrangements for supplying power, e.g. charging power [5]  |
| B05B 5/057       | 2-Punkt Untergruppe | .. Arrangements for discharging liquids or other fluent material without using a gun or nozzle [5]  |
| B05B 5/06        | 1-Punkt Untergruppe | . using electric arc  |
| B05B 5/08        | 1-Punkt Untergruppe | . Plant for applying liquids or other fluent materials to objects   |
| B05B 5/10        | 2-Punkt Untergruppe | .. Arrangements for supplying power, e.g. charging power (B05B 5/053 takes precedence) [5]  |

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| B05B 5/12        | 2-Punkt Untergruppe | ... specially adapted for coating the interior of hollow bodies [5]   |
| B05B 5/14        | 2-Punkt Untergruppe | ... specially adapted for coating continuously moving elongated bodies, e.g. wires, strips, pipes [5]   |
| B05B 5/16        | 1-Punkt Untergruppe | . Arrangements for supplying liquids or other fluent material [5]   |
| <b>B05B 7/00</b> | <b>Hauptgruppe</b>  | <b>Spraying apparatus for discharge of liquids or other fluent materials from two or more sources, e.g. of liquid and air, of powder and gas (B05B 3/00, B05B 5/00 take precedence; outlets not specially modified for two media B05B 1/00)</b> |
| B05B 7/02        | 1-Punkt Untergruppe | . Spray pistols; Apparatus for discharge (B05B 7/14, B05B 7/16, B05B 7/24 take precedence)  |
| B05B 7/04        | 2-Punkt Untergruppe | .. with arrangements for mixing liquids or other fluent materials before discharge (mixing in general B01F, e.g. B01F 5/00; mixing valves F16K 11/00) [2]   |
| B05B 7/06        | 2-Punkt Untergruppe | .. with one outlet orifice surrounding another approximately in the same plane (B05B 7/10 takes precedence)   |
| B05B 7/08        | 2-Punkt Untergruppe | .. with separate outlet orifices, e.g. to form parallel jets, to form intersecting jets   |
| B05B 7/10        | 2-Punkt Untergruppe | .. producing a swirling discharge   |
| B05B 7/12        | 2-Punkt Untergruppe | .. designed to control volume of flow, e.g. with adjustable passages  |
| B05B 7/14        | 1-Punkt Untergruppe | . designed for spraying particulate materials (B05B 7/16 takes precedence)  |
| B05B 7/16        | 1-Punkt Untergruppe | . incorporating means for heating the material to be sprayed  |
| B05B 7/18        | 2-Punkt Untergruppe | .. the material having originally the shape of a wire, rod, or the like   |
| B05B 7/20        | 2-Punkt Untergruppe | .. by flame or combustion   |
| B05B 7/22        | 2-Punkt Untergruppe | .. electrically, e.g. by arc  |
| B05B 7/24        | 1-Punkt Untergruppe | . with means, e.g. a container, for supplying liquid or other fluent material to a discharge device (B05B 7/14, B05B 7/16, B05B 11/00 take precedence)  |
| B05B 7/26        | 2-Punkt Untergruppe | .. Apparatus in which liquids or other fluent materials from different sources are brought together before entering the discharge device  |
| B05B 7/28        | 3-Punkt Untergruppe | ... in which one liquid or other fluent material is fed or drawn through an orifice into a stream of a carrying fluid   |
| B05B 7/30        | 4-Punkt Untergruppe | .... the first liquid or other fluent material being fed by gravity, or sucked into the carrying fluid  |
| B05B 7/32        | 4-Punkt Untergruppe | .... the fed liquid or other fluent material being under pressure   |
| <b>B05B 9/00</b> | <b>Hauptgruppe</b>  | <b>Spraying apparatus for discharge of liquid or other fluent material without essentially mixing with gas or vapour (B05B 11/00 takes precedence) [3]</b>  |
| B05B 9/01        | 1-Punkt Untergruppe | . Spray pistols (B05B 9/03 takes precedence) [3]  |
| B05B 9/03        | 1-Punkt Untergruppe | . characterised by means for supplying liquid or other fluent material [3]  |
| B05B 9/04        | 2-Punkt Untergruppe | .. with pressurised or compressible container (aerosol containers B65D 83/14); with pump [3]  |
| B05B 9/043       | 3-Punkt Untergruppe | ... having pump readily separable from container [2, 3]   |
| B05B 9/047       | 3-Punkt Untergruppe | ... supply being effected by follower in container, e.g. membrane or floating piston [2, 3]   |
| B05B 9/06        | 3-Punkt Untergruppe | ... the delivery being related to the movement of a vehicle, e.g. the pump being driven by a vehicle wheel [3]  |
| B05B 9/08        | 3-Punkt Untergruppe | ... Apparatus to be carried on or by a person, e.g. of knapsack type (details or components, e.g. casings, bodies, of portable power-driven tools not particularly related to the operation performed B25F 5/00) [3, 4]                         |

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| <b>B05B 11/00</b> | <b>Hauptgruppe</b>  | <b>Single-unit, i.e. unitary, hand-held apparatus in which flow of liquid or other fluent material is produced by the operator at the moment of use [2]</b>   |
| B05B 11/02        | 1-Punkt Untergruppe | . the flow being effected by a follower, e.g. membrane, floating piston, in container for liquid or other fluent material [2]   |
| B05B 11/04        | 1-Punkt Untergruppe | . the flow being effected by deformation of container for liquid or other fluent material [2]   |
| B05B 11/06        | 1-Punkt Untergruppe | . the spray being effected by gas or vapour flow, e.g. from a compressible bulb [2, 3]  |
| <b>B05B 12/00</b> | <b>Hauptgruppe</b>  | <b>Arrangements or special adaptations of delivery controlling means in spraying systems (controlling in general G05) [2]</b>   |
| B05B 12/02        | 1-Punkt Untergruppe | . for controlling time, or sequence, of delivery [2]  |
| B05B 12/04        | 2-Punkt Untergruppe | .. for sequential operation or multiple outlets [2]   |
| B05B 12/06        | 2-Punkt Untergruppe | .. for effecting pulsating flow [2]   |
| B05B 12/08        | 1-Punkt Untergruppe | . responsive to condition of liquid or other fluent material discharged, of ambient medium or of target [2]   |
| B05B 12/10        | 2-Punkt Untergruppe | .. responsive to temperature or viscosity of liquid or other fluent material discharged [2]   |
| B05B 12/12        | 2-Punkt Untergruppe | .. responsive to conditions of ambient medium or target, e.g. humidity, temperature [2]   |
| B05B 12/14        | 1-Punkt Untergruppe | . for supplying a selected one of a plurality of liquids or other fluent materials to a single spray outlet [3]   |
| <b>B05B 13/00</b> | <b>Hauptgruppe</b>  | <b>Machines or plants for applying liquids or other fluent materials to surfaces of objects or other work by spraying, not covered by groups B05B 1/00-B05B 11/00 (processes for applying liquids or other fluent materials to surfaces in general B05D; means for supplying or discharging liquid or other fluent material for this purpose, <u>see the relevant one of groups B05B 1/00-B05B 12/00</u>) [3]</b> |
| B05B 13/02        | 1-Punkt Untergruppe | . Means for supporting work; Arrangement or mounting of spray heads; Adaptation or arrangement of means for feeding work (B05B 13/06 takes precedence)  |
| B05B 13/04        | 2-Punkt Untergruppe | .. the spray heads being moved during operation   |
| B05B 13/06        | 1-Punkt Untergruppe | . specially designed for treating the inside of hollow bodies (spray heads B05B 1/00-B05B 7/00)   |
| <b>B05B 15/00</b> | <b>Hauptgruppe</b>  | <b>Details of spraying plant or apparatus not otherwise provided for; Accessories (accessories applicable to other methods of applying liquids or other fluent materials to surfaces B05C) [4]</b>  |
| B05B 15/02        | 1-Punkt Untergruppe | . Arrangements or devices for cleaning discharge openings   |
| B05B 15/04        | 1-Punkt Untergruppe | . Control of spray area, e.g. masking, side shields; Means for collection or re-use of excess material (B05B 1/28 takes precedence)   |
| B05B 15/06        | 1-Punkt Untergruppe | . Mountings, supporting or holding means, or rests for spray heads or other outlets when in use or out of use (B05B 15/10 takes precedence)   |
| B05B 15/08        | 2-Punkt Untergruppe | .. Means for adjusting position of spray heads  |
| B05B 15/10        | 1-Punkt Untergruppe | . Arrangements for moving spray heads automatically to or from the working position   |
| B05B 15/12        | 1-Punkt Untergruppe | . Spray booths [4]  |
| <b>B05B 17/00</b> | <b>Hauptgruppe</b>  | <b>Apparatus for spraying or atomising liquids or other fluent materials, not covered by any other group of this subclass (dropping or releasing powdered, liquid or gaseous matter in flight B64D 1/16) [2]</b>  |
| B05B 17/04        | 1-Punkt Untergruppe | . operating with special methods  |
| B05B 17/06        | 2-Punkt Untergruppe | .. using ultrasonic vibrations  |
| B05B 17/08        | 1-Punkt Untergruppe | . Fountains (drinking fountains E03B 9/20; wash fountains E03C 1/16)  |