

| Symbol           | Typ                 | Titel   |
|------------------|---------------------|---|
| <b>F</b>         | <b>Sektion</b>      | <b>SECTION F — MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING</b>   |
| <b>F42</b>       | <b>Klasse</b>       | <b>AMMUNITION; BLASTING</b>   |
| <b>F42B</b>      | <b>Unterklasse</b>  | <b>EXPLOSIVE CHARGES, e.g. FOR BLASTING; FIREWORKS; AMMUNITION (explosive compositions C06B; fuzes F42C; blasting F42D) [2, 5]</b>  |
| <b>F42B 1/00</b> | <b>Hauptgruppe</b>  | <b>Explosive charges characterised by form or shape but not dependent on shape of container</b>   |
| F42B 1/02        | 1-Punkt Untergruppe | . Shaped or hollow charges (blasting cartridges with cavities in the charge F42B 3/08; oil-winning using shaped-charge perforators E21B 43/116)                             |
| F42B 1/024       | 2-Punkt Untergruppe | . . provided with embedded bodies of inert material [5]   |
| F42B 1/028       | 2-Punkt Untergruppe | . . characterised by the form of the liner [5]  |
| F42B 1/032       | 2-Punkt Untergruppe | . . characterised by the material of the liner [5]  |
| F42B 1/036       | 2-Punkt Untergruppe | . . Manufacturing processes therefor [5]  |
| F42B 1/04        | 1-Punkt Untergruppe | . Detonator charges not forming part of the fuze  |
| <b>F42B 3/00</b> | <b>Hauptgruppe</b>  | <b>Blasting cartridges, i.e. case and explosive (fuse cords, e.g. detonating fuse cords, C06C 5/00; chemical aspects of detonators, blasting caps or primers C06C 7/00)</b> |
| F42B 3/02        | 1-Punkt Untergruppe | . adapted to be united into assemblies  |
| F42B 3/04        | 1-Punkt Untergruppe | . for producing gas under pressure  |
| F42B 3/06        | 2-Punkt Untergruppe | . . with re-utilisable case   |
| F42B 3/08        | 1-Punkt Untergruppe | . with cavities in the charge, e.g. hollow-charge blasting cartridges   |
| F42B 3/087       | 1-Punkt Untergruppe | . Flexible or deformable blasting cartridges, e.g. bags or hoses (loaded cartridge bags F42B 5/38) [5]  |
| F42B 3/093       | 2-Punkt Untergruppe | . . in mat or tape form [5]   |
| F42B 3/10        | 1-Punkt Untergruppe | . Initiators therefor (percussion fuzes F42C 7/00; percussion caps F42C 19/10; electric primers F42C 19/12)   |
| F42B 3/103       | 2-Punkt Untergruppe | . . Mounting initiator heads in initiators; Sealing-plugs [5]   |
| F42B 3/107       | 3-Punkt Untergruppe | . . . Sealing-plugs characterised by the material used [5]  |
| F42B 3/11        | 2-Punkt Untergruppe | . . characterised by the material used, e.g. for initiator case or electric leads (F42B 3/107 takes precedence) [5]   |
| F42B 3/113       | 2-Punkt Untergruppe | . . activated by optical means, e.g. laser, flashlight [5]  |
| F42B 3/117       | 2-Punkt Untergruppe | . . activated by friction [5]   |
| F42B 3/12        | 2-Punkt Untergruppe | . . Bridge initiators   |
| F42B 3/13        | 3-Punkt Untergruppe | . . . with semiconductive bridge [5]  |
| F42B 3/14        | 2-Punkt Untergruppe | . . Spark initiators  |
| F42B 3/16        | 2-Punkt Untergruppe | . . Delay initiators  |
| F42B 3/18        | 2-Punkt Untergruppe | . . Safety initiators resistant to premature firing by static electricity or stray currents   |
| F42B 3/182       | 3-Punkt Untergruppe | . . . having shunting means [5]   |
| F42B 3/185       | 3-Punkt Untergruppe | . . . having semiconductive sealing plugs [5]   |

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| F42B 3/188       | 3-Punkt Untergruppe | . . . having radio-frequency filters [5]   |
| F42B 3/192       | 2-Punkt Untergruppe | . . designed for neutralisation on contact with water [5]  |
| F42B 3/195       | 2-Punkt Untergruppe | . . Manufacture [5]  |
| F42B 3/198       | 3-Punkt Untergruppe | . . . of electric initiator heads [5]  |
| F42B 3/22        | 1-Punkt Untergruppe | . Elements for controlling or guiding the detonation wave, e.g. tubes (using inert bodies embedded in shaped or hollow charges F42B 1/024) [5]   |
| F42B 3/24        | 1-Punkt Untergruppe | . Cartridge closures or seals (top closures for shotgun ammunition cartridges F42B 7/12) [5]   |
| F42B 3/26        | 1-Punkt Untergruppe | . Arrangements for mounting initiators; Accessories therefor, e.g. tools [5]   |
| F42B 3/28        | 1-Punkt Untergruppe | . Cartridge cases characterised by the material used, e.g. coatings (for initiator cases F42B 3/11) [5]  |
| <b>F42B 4/00</b> | <b>Hauptgruppe</b>  | <b>Fireworks, i.e. pyrotechnic devices for amusement, display, illumination, or signal purposes ( signalling by explosives G08B; advertising by firework G09F 13/46) [2]</b>                           |
| F42B 4/02        | 1-Punkt Untergruppe | . in cartridge form, i.e. shell, propellant, and primer [2]  |
| F42B 4/04        | 1-Punkt Untergruppe | . Firecrackers [2]   |
| F42B 4/06        | 1-Punkt Untergruppe | . Aerial display rockets (rockets in general F42B 15/00) [2]   |
| F42B 4/08        | 2-Punkt Untergruppe | . . characterised by having vanes, wings, parachutes, or balloons [2]  |
| F42B 4/10        | 2-Punkt Untergruppe | . . characterised by having means to separate article or charge from casing without destroying casing [2]  |
| F42B 4/12        | 3-Punkt Untergruppe | . . . Parachute or flare separation [2]  |
| F42B 4/14        | 2-Punkt Untergruppe | . . characterised by having plural successively-ignited charges [2]  |
| F42B 4/16        | 1-Punkt Untergruppe | . Hand-thrown impact-exploded noise makers (cap pistols F41C 3/06) [4]   |
| F42B 4/18        | 1-Punkt Untergruppe | . Simulations, e.g. pine cone, house that is destroyed, warship, volcano [2]   |
| F42B 4/20        | 1-Punkt Untergruppe | . characterised by having holder or support other than casing, e.g. whirler or spike support [2]   |
| F42B 4/22        | 1-Punkt Untergruppe | . characterised by having means to separate an article or charge from casing without destroying casing (in aerial display rockets F42B 4/10) [2]   |
| F42B 4/24        | 1-Punkt Untergruppe | . characterised by having plural successively-ignited charges (in aerial display rockets F42B 4/14) [2]  |
| F42B 4/26        | 1-Punkt Untergruppe | . Flares; Torches [2]  |
| F42B 4/28        | 2-Punkt Untergruppe | . . Parachute flares (F42B 4/12 takes precedence) [2]  |
| F42B 4/30        | 1-Punkt Untergruppe | . Manufacture [2]  |
| <b>F42B 5/00</b> | <b>Hauptgruppe</b>  | <b>Cartridge ammunition, e.g. separately-loaded propellant charges (shotgun ammunition F42B 7/00; practice or training ammunition F42B 8/00; missiles therefor F42B 12/00, F42B 14/00, F42B 15/00)</b> |
| F42B 5/02        | 1-Punkt Untergruppe | . Cartridges, i.e. cases with propellant charge and missile  |
| F42B 5/03        | 2-Punkt Untergruppe | . . containing more than one missile [4]   |
| F42B 5/045       | 2-Punkt Untergruppe | . . of telescopic type (F42B 5/184 takes precedence) [5]   |
| F42B 5/05        | 2-Punkt Untergruppe | . . for recoilless guns (recoilless guns using a counter-projectile to balance recoil F41A 1/10) [4]   |
| F42B 5/067       | 2-Punkt Untergruppe | . . Mounting or locking missiles in cartridge cases (F42B 5/18 takes precedence) [5]   |
| F42B 5/073       | 3-Punkt Untergruppe | . . . using an auxiliary locking element [5]   |

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| F42B 5/08        | 2-Punkt Untergruppe | . . modified for electric ignition  |
| F42B 5/10        | 2-Punkt Untergruppe | . . with self-propelled bullet  |
| F42B 5/14        | 2-Punkt Untergruppe | . . for marking cattle  |
| F42B 5/145       | 2-Punkt Untergruppe | . . for dispensing gases, vapours, powders, particles or chemically-reactive substances (from projectiles F42B 12/46, F42B 12/70) [5]   |
| F42B 5/15        | 3-Punkt Untergruppe | . . . for creating a screening or decoy effect, e.g. using radar chaff or infra-red material (infra-red flares F42B 4/26) [5]   |
| F42B 5/155       | 4-Punkt Untergruppe | . . . . Smoke-pot projectors, e.g. arranged on vehicles [5]   |
| F42B 5/16        | 2-Punkt Untergruppe | . . characterised by composition or physical dimensions or form of propellant charge or powder (chemical composition C06B)  |
| F42B 5/18        | 2-Punkt Untergruppe | . . Caseless ammunition; Cartridges having combustible cases [5]  |
| F42B 5/184       | 3-Punkt Untergruppe | . . . telescopic [5]  |
| F42B 5/188       | 3-Punkt Untergruppe | . . . Manufacturing processes therefor [5]  |
| F42B 5/192       | 3-Punkt Untergruppe | . . . Cartridge cases characterised by the material used [5]  |
| F42B 5/196       | 4-Punkt Untergruppe | . . . . Coatings [5]  |
| F42B 5/24        | 2-Punkt Untergruppe | . . for cleaning; for cooling; for lubricating [5]  |
| F42B 5/26        | 1-Punkt Untergruppe | . Cartridge cases (F42B 5/18 takes precedence)  |
| F42B 5/28        | 2-Punkt Untergruppe | . . of metal  |
| F42B 5/285       | 3-Punkt Untergruppe | . . . formed by assembling several elements [4]   |
| F42B 5/29        | 4-Punkt Untergruppe | . . . . wound from sheets or strips [4]   |
| F42B 5/295       | 3-Punkt Untergruppe | . . . coated [4]  |
| F42B 5/297       | 4-Punkt Untergruppe | . . . . with plastics [5]   |
| F42B 5/30        | 2-Punkt Untergruppe | . . of plastics   |
| F42B 5/307       | 3-Punkt Untergruppe | . . . formed by assembling several elements [4]   |
| F42B 5/313       | 4-Punkt Untergruppe | . . . . all elements made of plastics [4]   |
| F42B 5/32        | 2-Punkt Untergruppe | . . for rim fire  |
| F42B 5/34        | 2-Punkt Untergruppe | . . with provision for varying the length   |
| F42B 5/36        | 2-Punkt Untergruppe | . . modified for housing an integral firing-cap   |
| F42B 5/38        | 1-Punkt Untergruppe | . Separately-loaded propellant charges, e.g. cartridge bags [4]   |
| <b>F42B 6/00</b> | <b>Hauptgruppe</b>  | <b>Projectiles or missiles specially adapted for projection without use of explosive or combustible propellant charge, e.g. for blow guns, bows or crossbows, hand-held spring or air guns (for delivering hypodermic charges F42B 12/54; throwing-darts A63B 65/02; projectiles or missiles incorporating springs as the projecting means F41B 7/02) [5]</b> |
| F42B 6/02        | 1-Punkt Untergruppe | . Arrows; Crossbow bolts; Harpoons for hand-held spring or air guns [5]   |
| F42B 6/04        | 2-Punkt Untergruppe | . . Archery arrows (F42B 6/08, F41B 5/06 take precedence) [5]   |

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| F42B 6/06         | 3-Punkt Untergruppe | . . . Tail ends, e.g. nocks, fletching [5]  |
| F42B 6/08         | 2-Punkt Untergruppe | . . Arrow heads; Harpoon heads [5]  |
| F42B 6/10         | 1-Punkt Untergruppe | . Air gun pellets [5]   |
| <b>F42B 7/00</b>  | <b>Hauptgruppe</b>  | <b>Shotgun ammunition</b>   |
| F42B 7/02         | 1-Punkt Untergruppe | . Cartridges, i.e. cases with propellant charge and missile   |
| F42B 7/04         | 2-Punkt Untergruppe | . . of pellet type  |
| F42B 7/06         | 2-Punkt Untergruppe | . . with cartridge case of plastics   |
| F42B 7/08         | 2-Punkt Untergruppe | . . Wads therefor   |
| F42B 7/10         | 2-Punkt Untergruppe | . . Ball or slug shotgun cartridges   |
| F42B 7/12         | 2-Punkt Untergruppe | . . Cartridge top closures, i.e. for the missile side (closures for blasting cartridges F42B 3/24) [5]  |
| <b>F42B 8/00</b>  | <b>Hauptgruppe</b>  | <b>Practice or training ammunition (range-reducing, destabilising or braking arrangements F42B 10/00; with signalling effect F42B 12/02; F42B 19/00 takes precedence) [4]</b>   |
| F42B 8/02         | 1-Punkt Untergruppe | . Cartridges [5]  |
| F42B 8/04         | 2-Punkt Untergruppe | . . Blank cartridges, i.e. primed cartridges without projectile but containing an explosive or combustible powder charge [5]  |
| F42B 8/06         | 3-Punkt Untergruppe | . . . for cap-firing pistols [5]  |
| F42B 8/08         | 2-Punkt Untergruppe | . . Dummy cartridges, i.e. inert cartridges containing neither primer nor explosive or combustible powder charge [5]  |
| F42B 8/10         | 2-Punkt Untergruppe | . . with sub-calibre adaptor [5]  |
| F42B 8/12         | 1-Punkt Untergruppe | . Projectiles or missiles (F42B 19/36 takes precedence) [5]   |
| F42B 8/14         | 2-Punkt Untergruppe | . . disintegrating in flight or upon impact [5]   |
| F42B 8/16         | 3-Punkt Untergruppe | . . . containing an inert filler in powder or granular form [5]   |
| F42B 8/18         | 2-Punkt Untergruppe | . . Rifle grenades [5]  |
| F42B 8/20         | 2-Punkt Untergruppe | . . Mortar grenades [5]   |
| F42B 8/22         | 2-Punkt Untergruppe | . . Fall bombs [5]  |
| F42B 8/24         | 2-Punkt Untergruppe | . . Rockets [5]   |
| F42B 8/26         | 2-Punkt Untergruppe | . . Hand grenades [5]   |
| F42B 8/28         | 1-Punkt Untergruppe | . Land or marine mines; Depth charges [5]   |
| <b>F42B 10/00</b> | <b>Hauptgruppe</b>  | <b>Means for influencing, e.g. improving, the aerodynamic properties of projectiles or missiles; Arrangements on projectiles or missiles for stabilising, steering, range-reducing, range-increasing or fall-retarding (F42B 6/00 takes precedence; sub-calibre projectiles having sabots F42B 14/00) [5]</b> |
| F42B 10/02        | 1-Punkt Untergruppe | . Stabilising arrangements [5]  |
| F42B 10/04        | 2-Punkt Untergruppe | . . using fixed fins (F42B 10/22 takes precedence) [5]  |
| F42B 10/06        | 3-Punkt Untergruppe | . . . Tail fins [5]   |
| F42B 10/08        | 4-Punkt Untergruppe | . . . . Flechette-type projectiles [5]  |

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| F42B 10/10        | 4-Punkt Untergruppe | . . . the fins being formed in the barrel by deformation of the projectile body [5]   |
| F42B 10/12        | 2-Punkt Untergruppe | . . using fins longitudinally-slidable with respect to the projectile or missile [5]  |
| F42B 10/14        | 2-Punkt Untergruppe | . . using fins spread or deployed after launch, e.g. after leaving the barrel [5]   |
| F42B 10/16        | 3-Punkt Untergruppe | . . . Wrap-around fins [5]  |
| F42B 10/18        | 3-Punkt Untergruppe | . . . using a longitudinally slidable support member [5]  |
| F42B 10/20        | 3-Punkt Untergruppe | . . . deployed by combustion gas pressure, or by pneumatic or hydraulic forces [5]  |
| F42B 10/22        | 2-Punkt Untergruppe | . . Projectiles of cannellured type [5]   |
| F42B 10/24        | 3-Punkt Untergruppe | . . . with inclined grooves [5]   |
| F42B 10/26        | 2-Punkt Untergruppe | . . using spin (F42B 10/04, F42B 10/12, F42B 10/14, F42B 10/24, F42B 14/02 take precedence) [5]   |
| F42B 10/28        | 3-Punkt Untergruppe | . . . induced by gas action [5]   |
| F42B 10/30        | 4-Punkt Untergruppe | . . . using rocket motor nozzles [5]  |
| F42B 10/32        | 1-Punkt Untergruppe | . Range-reducing or range-increasing arrangements; Fall-retarding means [5]   |
| F42B 10/34        | 2-Punkt Untergruppe | . . Tubular projectiles [5]   |
| F42B 10/36        | 3-Punkt Untergruppe | . . . Ring-foil projectiles [5]   |
| F42B 10/38        | 2-Punkt Untergruppe | . . Range-increasing arrangements (F42B 10/34 takes precedence) [5]   |
| F42B 10/40        | 3-Punkt Untergruppe | . . . with combustion of a slow-burning charge, e.g. fumers, base-bleed projectiles [5]   |
| F42B 10/42        | 3-Punkt Untergruppe | . . . Streamlined projectiles [5]   |
| F42B 10/44        | 4-Punkt Untergruppe | . . . Boat-tails specially adapted for drag reduction [5]   |
| F42B 10/46        | 4-Punkt Untergruppe | . . . Streamlined nose cones; Windshields; Radomes [5]  |
| F42B 10/48        | 2-Punkt Untergruppe | . . Range-reducing, destabilising or braking arrangements; Fall-retarding means (F42B 10/34 takes precedence) [5]   |
| F42B 10/50        | 3-Punkt Untergruppe | . . . Brake flaps [5]   |
| F42B 10/52        | 3-Punkt Untergruppe | . . . Nose cones [5]  |
| F42B 10/54        | 3-Punkt Untergruppe | . . . Spin braking means [5]  |
| F42B 10/56        | 3-Punkt Untergruppe | . . . of parachute type [5]   |
| F42B 10/58        | 3-Punkt Untergruppe | . . . of rotochute type [5]   |
| F42B 10/60        | 1-Punkt Untergruppe | . Steering arrangements (F42B 19/01 takes precedence) [5]   |
| F42B 10/62        | 2-Punkt Untergruppe | . . Steering by movement of flight surfaces [5]   |
| F42B 10/64        | 3-Punkt Untergruppe | . . . of fins [5]   |
| F42B 10/66        | 2-Punkt Untergruppe | . . Steering by varying intensity or direction of thrust (thrust vector control of rocket engine plants F02K 9/80) [5]  |
| <b>F42B 12/00</b> | <b>Hauptgruppe</b>  | <b>Projectiles, missiles or mines characterised by the warhead, the intended effect, or the material ( F42B 6/00, F42B 10/00, F42B 14/00 take precedence; for practice or training F42B 8/12, F42B 8/28 ; self-propulsion or guidance aspects F42B 15/00) [5]</b> |

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| F42B 12/02 | 1-Punkt Untergruppe | . characterised by the warhead or the intended effect [5]  |
| F42B 12/04 | 2-Punkt Untergruppe | . . of armour-piercing type [5]  |
| F42B 12/06 | 3-Punkt Untergruppe | . . . with hard or heavy core; Kinetic energy penetrators (F42B 12/16, F42B 12/74 take precedence) [5]                     |
| F42B 12/08 | 3-Punkt Untergruppe | . . . with armour-piercing caps; with armoured cupola [5]  |
| F42B 12/10 | 3-Punkt Untergruppe | . . . with shaped or hollow charge (shaped or hollow charges <u>per se</u> F42B 1/02) [5]                                  |
| F42B 12/12 | 4-Punkt Untergruppe | . . . . rotatably mounted with respect to missile housing [5]  |
| F42B 12/14 | 4-Punkt Untergruppe | . . . . the symmetry axis of the hollow charge forming an angle with the longitudinal axis of the projectile [5]           |
| F42B 12/16 | 4-Punkt Untergruppe | . . . . in combination with an additional projectile or charge, acting successively on the target [5]                      |
| F42B 12/18 | 5-Punkt Untergruppe | . . . . . Hollow charges in tandem arrangement [5]   |
| F42B 12/20 | 2-Punkt Untergruppe | . . of high-explosive type (F42B 12/44 takes precedence) [5]   |
| F42B 12/22 | 3-Punkt Untergruppe | . . . with fragmentation-hull construction [5]   |
| F42B 12/24 | 4-Punkt Untergruppe | . . . . with grooves, recesses or other wall weakenings [5]  |
| F42B 12/26 | 4-Punkt Untergruppe | . . . . the projectile wall being formed by a spirally-wound element [5]   |
| F42B 12/28 | 4-Punkt Untergruppe | . . . . the projectile wall being built from annular elements [5]  |
| F42B 12/30 | 4-Punkt Untergruppe | . . . . Continuous-rod warheads [5]  |
| F42B 12/32 | 4-Punkt Untergruppe | . . . . the hull or case comprising a plurality of discrete bodies, e.g. steel balls, embedded therein [5]                 |
| F42B 12/34 | 2-Punkt Untergruppe | . . expanding before or on impact, i.e. of dum dum or mushroom type [5]  |
| F42B 12/36 | 2-Punkt Untergruppe | . . for dispensing materials; for producing chemical or physical reaction; for signalling [5]                              |
| F42B 12/38 | 3-Punkt Untergruppe | . . . of tracer type [5]   |
| F42B 12/40 | 3-Punkt Untergruppe | . . . of target-marking, i.e. impact-indicating, type (F42B 12/48 takes precedence) [5]                                    |
| F42B 12/42 | 3-Punkt Untergruppe | . . . of illuminating type, e.g. carrying flares [5]   |
| F42B 12/44 | 3-Punkt Untergruppe | . . . of incendiary type (F42B 12/46 takes precedence) [5]   |
| F42B 12/46 | 3-Punkt Untergruppe | . . . for dispensing gases, vapours, powders or chemically-reactive substances (F42B 12/70 takes precedence) [5]           |
| F42B 12/48 | 4-Punkt Untergruppe | . . . . smoke-producing [5]  |
| F42B 12/50 | 4-Punkt Untergruppe | . . . . by dispersion [5]  |
| F42B 12/52 | 5-Punkt Untergruppe | . . . . . Fuel-air explosive devices [5]   |
| F42B 12/54 | 4-Punkt Untergruppe | . . . . by implantation, e.g. hypodermic projectiles [5]   |
| F42B 12/56 | 3-Punkt Untergruppe | . . . for dispensing discrete solid bodies (F42B 12/70 takes precedence) [5]   |
| F42B 12/58 | 4-Punkt Untergruppe | . . . . Cluster or cargo ammunition, i.e. projectiles containing one or more submissiles (F42B 12/32 takes precedence) [5] |
| F42B 12/60 | 5-Punkt Untergruppe | . . . . . the submissiles being ejected radially [5]   |
| F42B 12/62 | 5-Punkt Untergruppe | . . . . . the submissiles being ejected parallel to the longitudinal axis of the projectile [5]                            |

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| F42B 12/64        | 6-Punkt Untergruppe | . . . . . the submissiles being of shot- or flechette-type [5]   |
| F42B 12/66        | 5-Punkt Untergruppe | . . . . . Chain-shot, i.e. the submissiles being interconnected by chains or the like [5]  |
| F42B 12/68        | 4-Punkt Untergruppe | . . . . Line-carrying missiles, e.g. for life-saving (harpoons F42B 30/14) [5]   |
| F42B 12/70        | 4-Punkt Untergruppe | . . . . for dispensing radar chaff or infra-red material (radar-reflector targets, active targets transmitting infra-red radiation F41J 2/00; radar-reflecting surfaces H01Q 15/14) [5]  |
| F42B 12/72        | 1-Punkt Untergruppe | . characterised by the material (heat treatment for explosive shells C21D 9/16) [5]  |
| F42B 12/74        | 2-Punkt Untergruppe | . . of the core or solid body [5]  |
| F42B 12/76        | 2-Punkt Untergruppe | . . of the casing [5]  |
| F42B 12/78        | 3-Punkt Untergruppe | . . . of jackets for smallarm bullets [5]  |
| F42B 12/80        | 3-Punkt Untergruppe | . . . Coatings [5]   |
| F42B 12/82        | 4-Punkt Untergruppe | . . . . reduction friction [5]   |
| <b>F42B 14/00</b> | <b>Hauptgruppe</b>  | <b>Projectiles or missiles characterised by arrangements for guiding or sealing them inside barrels, or for lubricating or cleaning barrels [5]</b>  |
| F42B 14/02        | 1-Punkt Untergruppe | . Driving bands; Rotating bands (F42B 14/04 takes precedence) [5]  |
| F42B 14/04        | 1-Punkt Untergruppe | . Lubrication means in missiles (coatings for reducing friction F42B 12/82) [5]  |
| F42B 14/06        | 1-Punkt Untergruppe | . Sub-calibre projectiles having sabots; Sabots therefor [5]   |
| F42B 14/08        | 2-Punkt Untergruppe | . . Sabots filled with propulsive charges; Removing sabots by combustion of pyrotechnic elements or by propulsive-gas pressure (arrangements on barrels for removing sabots from projectiles F41A 21/46) [5]   |
| <b>F42B 15/00</b> | <b>Hauptgruppe</b>  | <b>Self-propelled projectiles or missiles, e.g. rockets; Guided missiles (F42B 10/00, F42B 12/00, F42B 14/00 take precedence; for practice or training F42B 8/12; rocket torpedoes F42B 17/00; marine torpedoes F42B 19/00; cosmonautic vehicles B64G; jet-propulsion plants F02K) [4]</b> |
| F42B 15/01        | 1-Punkt Untergruppe | . Arrangements thereon for guidance or control (aircraft flight control B64C; guidance systems other than those only installed aboard F41G 7/00, F41G 9/00; locating by use of radio or other waves G01S; flight control in general G05D 1/00; computing aspects G06) [5]                  |
| F42B 15/04        | 2-Punkt Untergruppe | . . using wire, e.g. for guiding ground-to-ground rockets  |
| F42B 15/08        | 1-Punkt Untergruppe | . for carrying measuring instruments (adaptations for meteorology G01W 1/08)   |
| F42B 15/10        | 1-Punkt Untergruppe | . Missiles having a trajectory only in the air   |
| F42B 15/12        | 2-Punkt Untergruppe | . . Intercontinental ballistic missiles (F42B 15/01 takes precedence) [4]  |
| F42B 15/20        | 1-Punkt Untergruppe | . Missiles having a trajectory beginning below water surface (having additional propulsion means for movement through water F42B 17/00)  |
| F42B 15/22        | 1-Punkt Untergruppe | . Missiles having a trajectory finishing below water surface (having additional propulsion means for movement through water F42B 17/00)  |
| F42B 15/34        | 1-Punkt Untergruppe | . Protection against overheating or radiation, e.g. heat shields; Additional cooling arrangements [5]  |
| F42B 15/36        | 1-Punkt Untergruppe | . Means for interconnecting rocket-motor and body section; Multi-stage connectors; Disconnecting means [5]   |
| F42B 15/38        | 2-Punkt Untergruppe | . . Ring-shaped explosive elements for the separation of rocket parts [5]  |
| <b>F42B 17/00</b> | <b>Hauptgruppe</b>  | <b>Rocket torpedoes, i.e. missiles provided with separate propulsion means for movement through air and through water (F42B 12/00 takes precedence)</b>  |
| <b>F42B 19/00</b> | <b>Hauptgruppe</b>  | <b>Marine torpedoes, e.g. launched by surface vessels or submarines (having additional propulsion means for movement through air F42B 17/00); Sea mines having self-propulsion means (F42B</b>   |

| Symbol            | Typ                 | Titel   |
|-------------------|---------------------|---|
|                   |                     | <b>12/00 takes precedence; launching means F41F; locating by use of radio or other waves G01S; automatic control of course G05D 1/00; firing directors or calculators G06G)</b> |
| F42B 19/01        | 1-Punkt Untergruppe | . Steering control  |
| F42B 19/04        | 2-Punkt Untergruppe | . . Depth control   |
| F42B 19/06        | 2-Punkt Untergruppe | . . Directional control   |
| F42B 19/08        | 2-Punkt Untergruppe | . . with means for preventing rolling or pitching   |
| F42B 19/10        | 2-Punkt Untergruppe | . . remotely controlled, e.g. by sonic or radio control (control systems using wire F41G 7/32)  |
| F42B 19/12        | 1-Punkt Untergruppe | . Propulsion specially adapted for torpedoes (marine propulsion in general B63H)  |
| F42B 19/14        | 2-Punkt Untergruppe | . . by compressed-gas motors  |
| F42B 19/16        | 3-Punkt Untergruppe | . . . of cylinder type  |
| F42B 19/18        | 3-Punkt Untergruppe | . . . of turbine type   |
| F42B 19/20        | 3-Punkt Untergruppe | . . . characterised by the composition of propulsive gas; Manufacture or heating thereof in torpedoes   |
| F42B 19/22        | 2-Punkt Untergruppe | . . by internal-combustion engines  |
| F42B 19/24        | 2-Punkt Untergruppe | . . by electric motors  |
| F42B 19/26        | 2-Punkt Untergruppe | . . by jet propulsion   |
| F42B 19/28        | 2-Punkt Untergruppe | . . with means for avoiding visible wake  |
| F42B 19/30        | 2-Punkt Untergruppe | . . with timing control of propulsion   |
| F42B 19/36        | 1-Punkt Untergruppe | . adapted to be used for exercise purposes, e.g. indicating position or course  |
| F42B 19/38        | 2-Punkt Untergruppe | . . with means for causing torpedoes to surface at end of run   |
| F42B 19/40        | 3-Punkt Untergruppe | . . . by expelling liquid ballast   |
| F42B 19/42        | 3-Punkt Untergruppe | . . . by releasing solid ballast  |
| F42B 19/44        | 3-Punkt Untergruppe | . . . by enlarging displacement   |
| F42B 19/46        | 1-Punkt Untergruppe | . adapted to be launched from aircraft  |
| <b>F42B 21/00</b> | <b>Hauptgruppe</b>  | <b>Depth charges (F42B 12/00 takes precedence; for practice or training F42B 8/28; laying aspects B63G)</b>   |
| <b>F42B 22/00</b> | <b>Hauptgruppe</b>  | <b>Marine mines, e.g. launched by surface vessels or submarines (F42B 12/00 takes precedence; for practice or training F42B 8/28; mine laying or sweeping B63G)</b>             |
| F42B 22/02        | 1-Punkt Untergruppe | . Contact mines (contact fuzes F42C 7/02)   |
| F42B 22/04        | 1-Punkt Untergruppe | . Influenced mines, e.g. by magnetic or acoustic effect   |
| F42B 22/06        | 1-Punkt Untergruppe | . Ground mines  |
| F42B 22/08        | 1-Punkt Untergruppe | . Drifting mines (with propulsion means F42B 19/00)   |
| F42B 22/10        | 1-Punkt Untergruppe | . Moored mines  |
| F42B 22/12        | 2-Punkt Untergruppe | . . at a fixed depth setting  |
| F42B 22/14        | 2-Punkt Untergruppe | . . at a variable depth setting   |



| Symbol            | Typ                 | Titel   |
|-------------------|---------------------|---|
| F42B 22/16        | 3-Punkt Untergruppe | . . . using mechanical means, e.g. plummet and float  |
| F42B 22/18        | 3-Punkt Untergruppe | . . . using hydrostatic means   |
| F42B 22/20        | 3-Punkt Untergruppe | . . . using magnetic or acoustic depth-control means  |
| F42B 22/22        | 1-Punkt Untergruppe | . having self-contained sinking means   |
| F42B 22/24        | 1-Punkt Untergruppe | . Arrangement of mines in fields or barriers (net barriers for harbour defence F41H 11/05)  |
| F42B 22/42        | 1-Punkt Untergruppe | . with anti-sweeping means, e.g. electrical   |
| F42B 22/44        | 1-Punkt Untergruppe | . adapted to be launched from aircraft  |
| <b>F42B 23/00</b> | <b>Hauptgruppe</b>  | <b>Land mines (F42B 12/00 takes precedence; for practice or training F42B 8/28)</b>   |
| F42B 23/04        | 1-Punkt Untergruppe | . anti-vehicle [5]  |
| F42B 23/08        | 2-Punkt Untergruppe | . . non-metallic [5]  |
| F42B 23/10        | 1-Punkt Untergruppe | . anti-personnel [5]  |
| F42B 23/14        | 2-Punkt Untergruppe | . . non-metallic [5]  |
| F42B 23/16        | 2-Punkt Untergruppe | . . of missile type, i.e. for detonation after ejection from ground (fuzes for initiating mine ejection F42C 1/09) [5]  |
| F42B 23/24        | 1-Punkt Untergruppe | . Details   |
| <b>F42B 25/00</b> | <b>Hauptgruppe</b>  | <b>Fall bombs (F42B 10/00, F42B 12/00 take precedence; for practice or training F42B 8/12) [5]</b>  |
| <b>F42B 27/00</b> | <b>Hauptgruppe</b>  | <b>Hand grenades (F42B 12/00 takes precedence; for practice or training F42B 8/12)</b>  |
| F42B 27/08        | 1-Punkt Untergruppe | . with handle   |
| <b>F42B 29/00</b> | <b>Hauptgruppe</b>  | <b>Noiseless, smokeless, or flashless missiles launched by their own explosive propellant</b>   |
| <b>F42B 30/00</b> | <b>Hauptgruppe</b>  | <b>Projectiles or missiles, not otherwise provided for, characterised by the ammunition class or type, e.g. by the launching apparatus or weapon used (F42B 10/00, F42B 12/00, F42B 14/00 take precedence) [5]</b>              |
| F42B 30/02        | 1-Punkt Untergruppe | . Bullets [5]   |
| F42B 30/04        | 1-Punkt Untergruppe | . Rifle grenades [5]  |
| F42B 30/06        | 2-Punkt Untergruppe | . . Bullet traps or bullet decelerators therefor [5]  |
| F42B 30/08        | 1-Punkt Untergruppe | . Ordnance projectiles or missiles, e.g. shells [5]   |
| F42B 30/10        | 2-Punkt Untergruppe | . . Mortar projectiles [5]  |
| F42B 30/12        | 3-Punkt Untergruppe | . . . with provision for additional propulsive charges, or for varying the length [5]   |
| F42B 30/14        | 1-Punkt Untergruppe | . Harpoons (for hand-held spring or air guns F42B 6/02) [5]   |
| <b>F42B 33/00</b> | <b>Hauptgruppe</b>  | <b>Manufacture of ammunition; Dismantling of ammunition; Apparatus therefor (F42B 5/188 takes precedence; manufacturing processes for hollow charges F42B 1/036; manufacturing of blasting cartridge initiators F42B 3/195)</b> |
| F42B 33/02        | 1-Punkt Untergruppe | . Filling cartridges, missiles, or fuzes; Inserting propellant or explosive charges   |
| F42B 33/04        | 1-Punkt Untergruppe | . Fitting or extracting primers in or from fuzes or charges   |
| F42B 33/06        | 1-Punkt Untergruppe | . Dismantling fuzes, cartridges, projectiles, missiles, rockets, or bombs (F42B 33/04 takes precedence)   |
| F42B 33/10        | 1-Punkt Untergruppe | . Reconditioning used cartridge cases   |
| F42B 33/12        | 1-Punkt Untergruppe | . Crimping shotgun cartridges   |

| Symbol            | Typ                 | Titel   |
|-------------------|---------------------|---|
| F42B 33/14        | 1-Punkt Untergruppe | . Surface treatment of cartridges or cartridge cases  |
| <b>F42B 35/00</b> | <b>Hauptgruppe</b>  | <b>Testing or checking of ammunition</b>  |
| F42B 35/02        | 1-Punkt Untergruppe | . Gauging, sorting, trimming or shortening cartridges or missiles   |
| <b>F42B 39/00</b> | <b>Hauptgruppe</b>  | <b>Packaging or storage of ammunition or explosive charges; Safety features thereof; Cartridge belts or bags</b>                            |
| F42B 39/02        | 1-Punkt Untergruppe | . Cartridge bags; Bandoleers  |
| F42B 39/08        | 1-Punkt Untergruppe | . Cartridge belts   |
| F42B 39/10        | 2-Punkt Untergruppe | . . Machines for charging or for extracting cartridges from feed belts  |
| F42B 39/14        | 1-Punkt Untergruppe | . Explosion or fire protection arrangements on packages or ammunition (F42B 39/20 takes precedence) [5]                                     |
| F42B 39/16        | 2-Punkt Untergruppe | . . Fire-extinguishing [5]  |
| F42B 39/18        | 2-Punkt Untergruppe | . . Heat shields; Thermal insulation [5]  |
| F42B 39/20        | 1-Punkt Untergruppe | . Packages or ammunition having valves for pressure-equalising; Packages or ammunition having plugs for pressure release, e.g. meltable [5] |
| F42B 39/22        | 1-Punkt Untergruppe | . Locking of ammunition in transport containers [5]   |
| F42B 39/24        | 1-Punkt Untergruppe | . Shock-absorbing arrangements in packages [5]  |
| F42B 39/26        | 1-Punkt Untergruppe | . Packages or containers for a plurality of ammunition, e.g. cartridges (F42B 39/14-F42B 39/24, F42B 39/28 take precedence) [5]             |
| F42B 39/28        | 1-Punkt Untergruppe | . Ammunition racks, e.g. in vehicles [5]  |
| F42B 39/30        | 1-Punkt Untergruppe | . Containers for detonators or fuzes (F42B 39/14, F42B 39/20 take precedence) [5]   |
| <b>F42B 99/00</b> | <b>Hauptgruppe</b>  | <b>Subject matter not provided for in other groups of this subclass [2006.01]</b>   |