

| Symbol             | Typ                 | Titel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| <b>C</b>           | <b>Sektion</b>      | <b>CHEMISTRY; METALLURGY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>C10</b>         | <b>Klasse</b>       | <b>PETROLEUM, GAS OR COKE INDUSTRIES; TECHNICAL GASES CONTAINING CARBON MONOXIDE; FUELS; LUBRICANTS; PEAT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>C10M</b>        | <b>Unterklasse</b>  | <b>LUBRICATING COMPOSITIONS (well-drilling compositions C09K 7/00); USE OF CHEMICAL SUBSTANCES EITHER ALONE OR AS LUBRICATING INGREDIENTS IN A LUBRICATING COMPOSITION (mould release, i.e. separating, agents for metals B22C 3/00 , for plastics or substances in a plastic state, in general B29C 33/56 , for glass C03B 40/02; textile lubricating compositions D06M 11/00 , D06M 13/00 , D06M 15/00; use of particular substances in particular apparatus or conditions, see F16N or the relevant groups for the application, e.g. A21D 8/08 , B21C 9/00 , H01B 3/18; immersion oils for microscopy G02B 21/33) [4]</b><br><br><b><u>Base-materials [4]</u></b> |
| <b>C10M 101/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the base-material being a mineral or fatty oil ( containing more than 10% water %QC 10 M C10M 173/00 \$) [4]</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| C10M 101/02        | 1-Punkt Untergruppe | . Petroleum fractions [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| C10M 101/04        | 1-Punkt Untergruppe | . Fatty oil fractions [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>C10M 103/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the base-material being an inorganic material ( containing more than 10% water %QC 10 M C10M 173/00 \$) [4]</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| C10M 103/02        | 1-Punkt Untergruppe | . Carbon; Graphite [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| C10M 103/04        | 1-Punkt Untergruppe | . Metals; Alloys [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| C10M 103/06        | 1-Punkt Untergruppe | . Metal compounds [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>C10M 105/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the base-material being a non-macromolecular organic compound [4]</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| C10M 105/02        | 1-Punkt Untergruppe | . Well-defined hydrocarbons (petroleum fractions C10M 101/02) [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| C10M 105/04        | 2-Punkt Untergruppe | . . aliphatic [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| C10M 105/06        | 2-Punkt Untergruppe | . . aromatic [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| C10M 105/08        | 1-Punkt Untergruppe | . containing oxygen [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| C10M 105/10        | 2-Punkt Untergruppe | . . having hydroxy groups bound to acyclic or cycloaliphatic carbon atoms [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| C10M 105/12        | 3-Punkt Untergruppe | . . . monohydroxy [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| C10M 105/14        | 3-Punkt Untergruppe | . . . polyhydroxy [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| C10M 105/16        | 2-Punkt Untergruppe | . . having hydroxy groups bound to a carbon atom of a six-membered aromatic ring [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| C10M 105/18        | 2-Punkt Untergruppe | . . Ethers, e.g. epoxides [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| C10M 105/20        | 2-Punkt Untergruppe | . . Aldehydes; Ketones [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| C10M 105/22        | 2-Punkt Untergruppe | . . Carboxylic acids or their salts [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| C10M 105/24        | 3-Punkt Untergruppe | . . . having only one carboxyl group bound to an acyclic carbon atom, cycloaliphatic carbon atom or hydrogen [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| C10M 105/26        | 3-Punkt Untergruppe | . . . having more than one carboxyl group bound to an acyclic carbon atom or cycloaliphatic carbon atom [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| C10M 105/28        | 3-Punkt Untergruppe | . . . having only one carboxyl group bound to a carbon atom of a six-membered aromatic ring [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| C10M 105/30        | 3-Punkt Untergruppe | . . . having more than one carboxyl group bound to a carbon atom of a six-membered aromatic ring [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

| Symbol             | Typ                 | Titel                                                                                                                                                                                                                                                                                                                           |
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| C10M 105/32        | 2-Punkt Untergruppe | . . Esters [4]                                                                                                                                                                                                                                                                                                                  |
| C10M 105/34        | 3-Punkt Untergruppe | . . . of monocarboxylic acids [4]                                                                                                                                                                                                                                                                                               |
| C10M 105/36        | 3-Punkt Untergruppe | . . . of polycarboxylic acids [4]                                                                                                                                                                                                                                                                                               |
| C10M 105/38        | 3-Punkt Untergruppe | . . . of polyhydroxy compounds [4]                                                                                                                                                                                                                                                                                              |
| C10M 105/40        | 3-Punkt Untergruppe | . . . containing free hydroxy or carboxyl groups [4]                                                                                                                                                                                                                                                                            |
| C10M 105/42        | 3-Punkt Untergruppe | . . . Complex esters, i.e. compounds containing at least three esterified carboxyl groups and derived from the combination of at least three different types of the following five types of compound: monohydroxy compounds, polyhydroxy compounds, monocarboxylic acids, polycarboxylic acids and hydroxy carboxylic acids [4] |
| C10M 105/44        | 4-Punkt Untergruppe | . . . . derived from the combination of monocarboxylic acids, dicarboxylic acids and dihydroxy compounds only and having no free hydroxy or carboxyl groups [4]                                                                                                                                                                 |
| C10M 105/46        | 4-Punkt Untergruppe | . . . . derived from the combination of monohydroxy compounds, dihydroxy compounds and dicarboxylic acids only and having no free hydroxy or carboxyl groups [4]                                                                                                                                                                |
| C10M 105/48        | 3-Punkt Untergruppe | . . . of carbonic acid [4]                                                                                                                                                                                                                                                                                                      |
| C10M 105/50        | 1-Punkt Untergruppe | . containing halogen [4]                                                                                                                                                                                                                                                                                                        |
| C10M 105/52        | 2-Punkt Untergruppe | . . containing carbon, hydrogen and halogen only [4]                                                                                                                                                                                                                                                                            |
| C10M 105/54        | 2-Punkt Untergruppe | . . containing carbon, hydrogen, halogen and oxygen [4]                                                                                                                                                                                                                                                                         |
| C10M 105/56        | 1-Punkt Untergruppe | . containing nitrogen [4]                                                                                                                                                                                                                                                                                                       |
| C10M 105/58        | 2-Punkt Untergruppe | . . Amines, e.g. polyalkylene polyamines, quaternary amines (polyalkylene polyamines with eleven or more monomer units C10M 107/44) [4]                                                                                                                                                                                         |
| C10M 105/60        | 3-Punkt Untergruppe | . . . having amino groups bound to an acyclic or cycloaliphatic carbon atom [4]                                                                                                                                                                                                                                                 |
| C10M 105/62        | 4-Punkt Untergruppe | . . . . containing hydroxy groups [4]                                                                                                                                                                                                                                                                                           |
| C10M 105/64        | 3-Punkt Untergruppe | . . . having amino groups bound to a carbon atom of a six-membered aromatic ring [4]                                                                                                                                                                                                                                            |
| C10M 105/66        | 4-Punkt Untergruppe | . . . . containing hydroxy groups [4]                                                                                                                                                                                                                                                                                           |
| C10M 105/68        | 2-Punkt Untergruppe | . . Amides; Imides [4]                                                                                                                                                                                                                                                                                                          |
| C10M 105/70        | 2-Punkt Untergruppe | . . as ring hetero atom [4]                                                                                                                                                                                                                                                                                                     |
| C10M 105/72        | 1-Punkt Untergruppe | . containing sulfur, selenium or tellurium [4]                                                                                                                                                                                                                                                                                  |
| C10M 105/74        | 1-Punkt Untergruppe | . containing phosphorus [4]                                                                                                                                                                                                                                                                                                     |
| C10M 105/76        | 1-Punkt Untergruppe | . containing silicon [4]                                                                                                                                                                                                                                                                                                        |
| C10M 105/78        | 1-Punkt Untergruppe | . containing boron [4]                                                                                                                                                                                                                                                                                                          |
| C10M 105/80        | 1-Punkt Untergruppe | . containing atoms of elements not provided for in groups C10M 105/02 to C10M 105/78 [4]                                                                                                                                                                                                                                        |
| <b>C10M 107/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the base-material being a macromolecular compound [4]</b>                                                                                                                                                                                                                          |
| C10M 107/02        | 1-Punkt Untergruppe | . Hydrocarbon polymers; Hydrocarbon polymers modified by oxidation [4]                                                                                                                                                                                                                                                          |
| C10M 107/04        | 2-Punkt Untergruppe | . . Polyethene [4]                                                                                                                                                                                                                                                                                                              |
| C10M 107/06        | 2-Punkt Untergruppe | . . containing propene [4]                                                                                                                                                                                                                                                                                                      |

| Symbol             | Typ                 | Titel                                                                                                                                                                                                                            |
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| C10M 107/08        | 2-Punkt Untergruppe | . . containing butene [4]                                                                                                                                                                                                        |
| C10M 107/10        | 2-Punkt Untergruppe | . . containing aliphatic monomer having more than 4 carbon atoms [4]                                                                                                                                                             |
| C10M 107/12        | 2-Punkt Untergruppe | . . containing aromatic monomer, e.g. styrene [4]                                                                                                                                                                                |
| C10M 107/14        | 2-Punkt Untergruppe | . . containing conjugated diene [4]                                                                                                                                                                                              |
| C10M 107/16        | 2-Punkt Untergruppe | . . containing non-conjugated diene [4]                                                                                                                                                                                          |
| C10M 107/18        | 2-Punkt Untergruppe | . . Hydrocarbon polymers modified by oxidation [4]                                                                                                                                                                               |
| C10M 107/20        | 1-Punkt Untergruppe | . containing oxygen (C10M 107/18 takes precedence) [4]                                                                                                                                                                           |
| C10M 107/22        | 2-Punkt Untergruppe | . . Macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds [4]                                                                                                                         |
| C10M 107/24        | 3-Punkt Untergruppe | . . . containing monomers having an unsaturated radical bound to an alcohol, aldehydo, ketonic, ether, ketal or acetal radical [4]                                                                                               |
| C10M 107/26        | 3-Punkt Untergruppe | . . . containing monomers having an unsaturated radical bound to an acyloxy radical of a saturated carboxylic or carbonic acid [4]                                                                                               |
| C10M 107/28        | 3-Punkt Untergruppe | . . . containing monomers having an unsaturated radical bound to a carboxyl radical, e.g. acrylate [4]                                                                                                                           |
| C10M 107/30        | 2-Punkt Untergruppe | . . Macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [4]                                                                                                          |
| C10M 107/32        | 3-Punkt Untergruppe | . . . Condensation polymers of aldehydes or ketones; Polyesters; Polyethers [4]                                                                                                                                                  |
| C10M 107/34        | 4-Punkt Untergruppe | . . . . Polyoxyalkylenes [4]                                                                                                                                                                                                     |
| C10M 107/36        | 2-Punkt Untergruppe | . . Polysaccharides, e.g. cellulose [4]                                                                                                                                                                                          |
| C10M 107/38        | 1-Punkt Untergruppe | . containing halogen [4]                                                                                                                                                                                                         |
| C10M 107/40        | 1-Punkt Untergruppe | . containing nitrogen [4]                                                                                                                                                                                                        |
| C10M 107/42        | 2-Punkt Untergruppe | . . Macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds [4]                                                                                                                         |
| C10M 107/44        | 2-Punkt Untergruppe | . . Macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [4]                                                                                                          |
| C10M 107/46        | 1-Punkt Untergruppe | . containing sulfur [4]                                                                                                                                                                                                          |
| C10M 107/48        | 1-Punkt Untergruppe | . containing phosphorus [4]                                                                                                                                                                                                      |
| C10M 107/50        | 1-Punkt Untergruppe | . containing silicon [4]                                                                                                                                                                                                         |
| C10M 107/52        | 1-Punkt Untergruppe | . containing boron [4]                                                                                                                                                                                                           |
| C10M 107/54        | 1-Punkt Untergruppe | . containing atoms of elements not provided for in groups C10M 107/02 to C10M 107/52 [4]                                                                                                                                         |
| <b>C10M 109/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the base-material being a compound of unknown or incompletely defined constitution (C10M 101/00 takes precedence) [4]</b>                                                           |
| C10M 109/02        | 1-Punkt Untergruppe | . Reaction products [4]                                                                                                                                                                                                          |
| <b>C10M 111/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the base-material being a mixture of two or more compounds covered by more than one of the main groups C10M 101/00 to C10M 109/00 , each of these compounds being essential [4]</b> |
| C10M 111/02        | 1-Punkt Untergruppe | . at least one of them being a non-macromolecular organic compound [4]                                                                                                                                                           |
| C10M 111/04        | 1-Punkt Untergruppe | . at least one of them being a macromolecular organic compound [4]                                                                                                                                                               |

| Symbol             | Typ                 | Titel                                                                                                                                                       |
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| C10M 111/06        | 1-Punkt Untergruppe | . at least one of them being a compound of the type covered by group C10M 109/00 [4]                                                                        |
| <b>C10M 113/00</b> | <b>Hauptgruppe</b>  | <b><u>Thickeners [4]</u></b><br><b>Lubricating compositions characterised by the thickener being an inorganic material [4]</b>                              |
| C10M 113/02        | 1-Punkt Untergruppe | . Carbon; Graphite [4]                                                                                                                                      |
| C10M 113/04        | 1-Punkt Untergruppe | . Sulfur [4]                                                                                                                                                |
| C10M 113/06        | 1-Punkt Untergruppe | . Metals; Alloys [4]                                                                                                                                        |
| C10M 113/08        | 1-Punkt Untergruppe | . Metal compounds [4]                                                                                                                                       |
| C10M 113/10        | 1-Punkt Untergruppe | . Clays; Micas [4]                                                                                                                                          |
| C10M 113/12        | 1-Punkt Untergruppe | . Silica [4]                                                                                                                                                |
| C10M 113/14        | 1-Punkt Untergruppe | . Glass [4]                                                                                                                                                 |
| C10M 113/16        | 1-Punkt Untergruppe | . Inorganic material treated with organic compounds, e.g. coated [4]                                                                                        |
| <b>C10M 115/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the thickener being a non-macromolecular organic compound other than a carboxylic acid or salt thereof [4]</b> |
| C10M 115/02        | 1-Punkt Untergruppe | . Hydrocarbons (petroleum fractions C10M 121/02) [4]                                                                                                        |
| C10M 115/04        | 1-Punkt Untergruppe | . containing oxygen [4]                                                                                                                                     |
| C10M 115/06        | 1-Punkt Untergruppe | . containing halogen [4]                                                                                                                                    |
| C10M 115/08        | 1-Punkt Untergruppe | . containing nitrogen [4]                                                                                                                                   |
| C10M 115/10        | 1-Punkt Untergruppe | . containing sulfur [4]                                                                                                                                     |
| C10M 115/12        | 1-Punkt Untergruppe | . containing phosphorus [4]                                                                                                                                 |
| <b>C10M 117/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the thickener being a non-macromolecular carboxylic acid or salt thereof [4]</b>                               |
| C10M 117/02        | 1-Punkt Untergruppe | . having only one carboxyl group bound to an acyclic carbon atom, cycloaliphatic carbon atom or hydrogen [4]                                                |
| C10M 117/04        | 2-Punkt Untergruppe | . . containing hydroxy groups [4]                                                                                                                           |
| C10M 117/06        | 1-Punkt Untergruppe | . having more than one carboxyl group bound to an acyclic carbon atom or cycloaliphatic carbon atom [4]                                                     |
| C10M 117/08        | 1-Punkt Untergruppe | . having only one carboxyl group bound to a carbon atom of a six-membered aromatic ring [4]                                                                 |
| C10M 117/10        | 1-Punkt Untergruppe | . having more than one carboxyl group bound to a carbon atom of a six-membered aromatic ring [4]                                                            |
| <b>C10M 119/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the thickener being a macromolecular compound [4]</b>                                                          |
| C10M 119/02        | 1-Punkt Untergruppe | . Hydrocarbons polymers; Hydrocarbon polymers modified by oxidation [4]                                                                                     |
| C10M 119/04        | 1-Punkt Untergruppe | . containing oxygen (hydrocarbon polymers modified by oxidation C10M 119/02) [4]                                                                            |
| C10M 119/06        | 2-Punkt Untergruppe | . . Macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds [4]                                                    |
| C10M 119/08        | 3-Punkt Untergruppe | . . . containing monomers having an unsaturated radical bound to an alcohol, aldehydo, ketonic, ether, ketal or acetal radical [4]                          |
| C10M 119/10        | 3-Punkt Untergruppe | . . . containing monomers having an unsaturated radical bound to an acyloxy radical of a saturated carboxylic or carbonic acid [4]                          |
| C10M 119/12        | 3-Punkt Untergruppe | . . . containing monomers having an unsaturated radical bound to a carboxyl radical, e.g. acrylate [4]                                                      |

| Symbol             | Typ                 | Titel                                                                                                                                                                                                                                                                                        |
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| C10M 119/14        | 2-Punkt Untergruppe | . . Macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [4]                                                                                                                                                                      |
| C10M 119/16        | 3-Punkt Untergruppe | . . . Condensation polymers of aldehydes or ketones; Polyesters; Polyethers [4]                                                                                                                                                                                                              |
| C10M 119/18        | 4-Punkt Untergruppe | . . . . Polyoxyalkylenes [4]                                                                                                                                                                                                                                                                 |
| C10M 119/20        | 2-Punkt Untergruppe | . . Polysaccharides, e.g. cellulose [4]                                                                                                                                                                                                                                                      |
| C10M 119/22        | 1-Punkt Untergruppe | . containing halogen [4]                                                                                                                                                                                                                                                                     |
| C10M 119/24        | 1-Punkt Untergruppe | . containing nitrogen [4]                                                                                                                                                                                                                                                                    |
| C10M 119/26        | 1-Punkt Untergruppe | . containing sulfur [4]                                                                                                                                                                                                                                                                      |
| C10M 119/28        | 1-Punkt Untergruppe | . containing phosphorus [4]                                                                                                                                                                                                                                                                  |
| C10M 119/30        | 1-Punkt Untergruppe | . containing atoms of elements not provided for in groups C10M 119/02 to C10M 119/28 [4]                                                                                                                                                                                                     |
| <b>C10M 121/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the thickener being a compound of unknown or incompletely defined constitution [4]</b>                                                                                                                                                          |
| C10M 121/02        | 1-Punkt Untergruppe | . Petroleum fractions, e.g. tars [4]                                                                                                                                                                                                                                                         |
| C10M 121/04        | 1-Punkt Untergruppe | . Reaction products [4]                                                                                                                                                                                                                                                                      |
| <b>C10M 123/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the thickener being a mixture of two or more compounds covered by more than one of the main groups C10M 113/00 to C10M 121/00 , each of these compounds being essential (inorganic materials coated with organic compounds C10M 113/16) [4]</b> |
| C10M 123/02        | 1-Punkt Untergruppe | . at least one of them being a non-macromolecular compound [4]                                                                                                                                                                                                                               |
| C10M 123/04        | 1-Punkt Untergruppe | . at least one of them being a macromolecular compound [4]                                                                                                                                                                                                                                   |
| C10M 123/06        | 1-Punkt Untergruppe | . at least one of them being a compound of the type covered by group C10M 121/00 [4]                                                                                                                                                                                                         |
|                    |                     | <b><u>Additives [4]</u></b>                                                                                                                                                                                                                                                                  |
| <b>C10M 125/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being an inorganic material [4]</b>                                                                                                                                                                                                |
| C10M 125/02        | 1-Punkt Untergruppe | . Carbon; Graphite [4]                                                                                                                                                                                                                                                                       |
| C10M 125/04        | 1-Punkt Untergruppe | . Metals; Alloys [4]                                                                                                                                                                                                                                                                         |
| C10M 125/06        | 1-Punkt Untergruppe | . Sulfur [4]                                                                                                                                                                                                                                                                                 |
| C10M 125/08        | 1-Punkt Untergruppe | . Metal carbides or hydrides [4]                                                                                                                                                                                                                                                             |
| C10M 125/10        | 1-Punkt Untergruppe | . Metal oxides, hydroxides, carbonates or bicarbonates [4]                                                                                                                                                                                                                                   |
| C10M 125/12        | 1-Punkt Untergruppe | . Metal carbonyls [4]                                                                                                                                                                                                                                                                        |
| C10M 125/14        | 1-Punkt Untergruppe | . Water (aqueous lubricating compositions containing more than 10% water %QC 10 M C10M 173/00 \$) [4]                                                                                                                                                                                        |
| C10M 125/16        | 1-Punkt Untergruppe | . Hydrogen peroxide; Oxygenated water [4]                                                                                                                                                                                                                                                    |
| C10M 125/18        | 1-Punkt Untergruppe | . Compounds containing halogen [4]                                                                                                                                                                                                                                                           |
| C10M 125/20        | 1-Punkt Untergruppe | . Compounds containing nitrogen [4]                                                                                                                                                                                                                                                          |
| C10M 125/22        | 1-Punkt Untergruppe | . Compounds containing sulfur, selenium or tellurium [4]                                                                                                                                                                                                                                     |
| C10M 125/24        | 1-Punkt Untergruppe | . Compounds containing phosphorus, arsenic or antimony [4]                                                                                                                                                                                                                                   |
| C10M 125/26        | 1-Punkt Untergruppe | . Compounds containing silicon or boron, e.g. silica, sand [4]                                                                                                                                                                                                                               |

| Symbol             | Typ                 | Titel                                                                                                                                      |
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| C10M 125/28        | 2-Punkt Untergruppe | . . Glass [4]                                                                                                                              |
| C10M 125/30        | 2-Punkt Untergruppe | . . Clay [4]                                                                                                                               |
| <b>C10M 127/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being a non-macromolecular hydrocarbon (petroleum fractions C10M 159/04) [4]</b> |
| C10M 127/02        | 1-Punkt Untergruppe | . well-defined aliphatic [4]                                                                                                               |
| C10M 127/04        | 1-Punkt Untergruppe | . well-defined aromatic [4]                                                                                                                |
| C10M 127/06        | 1-Punkt Untergruppe | . Alkylated aromatic hydrocarbons [4]                                                                                                      |
| <b>C10M 129/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being an organic non-macromolecular compound containing oxygen [4]</b>           |
| C10M 129/02        | 1-Punkt Untergruppe | . having a carbon chain of less than 30 atoms [4]                                                                                          |
| C10M 129/04        | 2-Punkt Untergruppe | . . Hydroxy compounds [4]                                                                                                                  |
| C10M 129/06        | 3-Punkt Untergruppe | . . . having hydroxy groups bound to acyclic or cycloaliphatic carbon atoms [4]                                                            |
| C10M 129/08        | 4-Punkt Untergruppe | . . . . containing at least 2 hydroxy groups [4]                                                                                           |
| C10M 129/10        | 3-Punkt Untergruppe | . . . having hydroxy groups bound to a carbon atom of a six-membered aromatic ring [4]                                                     |
| C10M 129/12        | 4-Punkt Untergruppe | . . . . with condensed rings [4]                                                                                                           |
| C10M 129/14        | 4-Punkt Untergruppe | . . . . containing at least 2 hydroxy groups [4]                                                                                           |
| C10M 129/16        | 2-Punkt Untergruppe | . . Ethers [4]                                                                                                                             |
| C10M 129/18        | 3-Punkt Untergruppe | . . . Epoxides [4]                                                                                                                         |
| C10M 129/20        | 3-Punkt Untergruppe | . . . Cyclic ethers having 4 or more ring atoms, e.g. furans, dioxolanes [4]                                                               |
| C10M 129/22        | 2-Punkt Untergruppe | . . Peroxides; Ozonides [4]                                                                                                                |
| C10M 129/24        | 2-Punkt Untergruppe | . . Aldehydes; Ketones [4]                                                                                                                 |
| C10M 129/26        | 2-Punkt Untergruppe | . . Carboxylic acids; Salts thereof [4]                                                                                                    |
| C10M 129/28        | 3-Punkt Untergruppe | . . . having carboxyl groups bound to acyclic or cycloaliphatic carbon atoms [4]                                                           |
| C10M 129/30        | 4-Punkt Untergruppe | . . . . having 7 or less carbon atoms [4]                                                                                                  |
| C10M 129/32        | 5-Punkt Untergruppe | . . . . . monocarboxylic [4]                                                                                                               |
| C10M 129/34        | 5-Punkt Untergruppe | . . . . . polycarboxylic [4]                                                                                                               |
| C10M 129/36        | 5-Punkt Untergruppe | . . . . . containing hydroxy groups [4]                                                                                                    |
| C10M 129/38        | 4-Punkt Untergruppe | . . . . having 8 or more carbon atoms [4]                                                                                                  |
| C10M 129/40        | 5-Punkt Untergruppe | . . . . . monocarboxylic [4]                                                                                                               |
| C10M 129/42        | 5-Punkt Untergruppe | . . . . . polycarboxylic [4]                                                                                                               |
| C10M 129/44        | 5-Punkt Untergruppe | . . . . . containing hydroxy groups [4]                                                                                                    |
| C10M 129/46        | 4-Punkt Untergruppe | . . . . cycloaliphatic [4]                                                                                                                 |
| C10M 129/48        | 3-Punkt Untergruppe | . . . having carboxyl groups bound to a carbon atom of a six-membered aromatic ring [4]                                                    |
| C10M 129/50        | 4-Punkt Untergruppe | . . . . monocarboxylic [4]                                                                                                                 |

| Symbol             | Typ                 | Titel                                                                                                                                                                                                                                                                                                                        |
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| C10M 129/52        | 4-Punkt Untergruppe | . . . . polycarboxylic [4]                                                                                                                                                                                                                                                                                                   |
| C10M 129/54        | 4-Punkt Untergruppe | . . . . containing hydroxy groups [4]                                                                                                                                                                                                                                                                                        |
| C10M 129/56        | 3-Punkt Untergruppe | . . . Acids of unknown or incompletely defined constitution [4]                                                                                                                                                                                                                                                              |
| C10M 129/58        | 4-Punkt Untergruppe | . . . . Naphthenic acids [4]                                                                                                                                                                                                                                                                                                 |
| C10M 129/60        | 4-Punkt Untergruppe | . . . . Tall oil acids [4]                                                                                                                                                                                                                                                                                                   |
| C10M 129/62        | 4-Punkt Untergruppe | . . . . Rosin acids [4]                                                                                                                                                                                                                                                                                                      |
| C10M 129/64        | 3-Punkt Untergruppe | . . . Acids obtained from polymerised unsaturated acids [4]                                                                                                                                                                                                                                                                  |
| C10M 129/66        | 2-Punkt Untergruppe | . . Epoxidised acids or esters [4]                                                                                                                                                                                                                                                                                           |
| C10M 129/68        | 2-Punkt Untergruppe | . . Esters (epoxidised C10M 129/66) [4]                                                                                                                                                                                                                                                                                      |
| C10M 129/70        | 3-Punkt Untergruppe | . . . of monocarboxylic acids [4]                                                                                                                                                                                                                                                                                            |
| C10M 129/72        | 3-Punkt Untergruppe | . . . of polycarboxylic acids [4]                                                                                                                                                                                                                                                                                            |
| C10M 129/74        | 3-Punkt Untergruppe | . . . of polyhydroxy compounds [4]                                                                                                                                                                                                                                                                                           |
| C10M 129/76        | 3-Punkt Untergruppe | . . . containing free hydroxy or carboxyl groups [4]                                                                                                                                                                                                                                                                         |
| C10M 129/78        | 3-Punkt Untergruppe | . . . Complex esters, i.e. compounds containing at least three esterified carboxyl groups and derived from the combination of at least three different types of the following five types of compound: monohydroxy compounds, polyhydroxy compounds, monocarboxylic acids, polycarboxylic acids, hydroxy carboxylic acids [4] |
| C10M 129/80        | 4-Punkt Untergruppe | . . . . derived from the combination of monocarboxylic acids, dicarboxylic acids and dihydroxy compounds only and having no free hydroxy or carboxyl groups [4]                                                                                                                                                              |
| C10M 129/82        | 4-Punkt Untergruppe | . . . . derived from the combination of monohydroxy compounds, dihydroxy compounds and dicarboxylic acids only and having no free hydroxy or carboxyl groups [4]                                                                                                                                                             |
| C10M 129/84        | 3-Punkt Untergruppe | . . . of carbonic acid [4]                                                                                                                                                                                                                                                                                                   |
| C10M 129/86        | 1-Punkt Untergruppe | . having a carbon chain of 30 or more atoms [4]                                                                                                                                                                                                                                                                              |
| C10M 129/88        | 2-Punkt Untergruppe | . . Hydroxy compounds [4]                                                                                                                                                                                                                                                                                                    |
| C10M 129/90        | 3-Punkt Untergruppe | . . . having hydroxy groups bound to acyclic or cycloaliphatic carbon atoms [4]                                                                                                                                                                                                                                              |
| C10M 129/91        | 3-Punkt Untergruppe | . . . having hydroxy groups bound to a carbon atom of a six-membered aromatic ring [4]                                                                                                                                                                                                                                       |
| C10M 129/92        | 2-Punkt Untergruppe | . . Carboxylic acids [4]                                                                                                                                                                                                                                                                                                     |
| C10M 129/93        | 3-Punkt Untergruppe | . . . having carboxyl groups bound to acyclic or cycloaliphatic carbon atoms [4]                                                                                                                                                                                                                                             |
| C10M 129/94        | 3-Punkt Untergruppe | . . . having carboxyl groups bound to a carbon atom of a six-membered aromatic ring [4]                                                                                                                                                                                                                                      |
| C10M 129/95        | 2-Punkt Untergruppe | . . Esters [4]                                                                                                                                                                                                                                                                                                               |
| <b>C10M 131/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being an organic non-macromolecular compound containing halogen [4]</b>                                                                                                                                                                                            |
| C10M 131/02        | 1-Punkt Untergruppe | . containing carbon, hydrogen and halogen only [4]                                                                                                                                                                                                                                                                           |
| C10M 131/04        | 2-Punkt Untergruppe | . . aliphatic [4]                                                                                                                                                                                                                                                                                                            |
| C10M 131/06        | 2-Punkt Untergruppe | . . aromatic [4]                                                                                                                                                                                                                                                                                                             |

| Symbol             | Typ                 | Titel                                                                                                                                   |
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| C10M 131/08        | 1-Punkt Untergruppe | . containing carbon, hydrogen, halogen and oxygen [4]                                                                                   |
| C10M 131/10        | 2-Punkt Untergruppe | . . Alcohols; Ethers; Aldehydes; Ketones [4]                                                                                            |
| C10M 131/12        | 2-Punkt Untergruppe | . . Acids; Salts or esters thereof [4]                                                                                                  |
| C10M 131/14        | 1-Punkt Untergruppe | . Halogenated waxes [4]                                                                                                                 |
| <b>C10M 133/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being an organic non-macromolecular compound containing nitrogen [4]</b>      |
| C10M 133/02        | 1-Punkt Untergruppe | . having a carbon chain of less than 30 atoms [4]                                                                                       |
| C10M 133/04        | 2-Punkt Untergruppe | . . Amines, e.g. polyalkylene polyamines; Quaternary amines (polyalkylene polyamines with eleven or more monomer units C10M 149/22) [4] |
| C10M 133/06        | 3-Punkt Untergruppe | . . . having amino groups bound to acyclic or cycloaliphatic carbon atoms [4]                                                           |
| C10M 133/08        | 4-Punkt Untergruppe | . . . . containing hydroxy groups [4]                                                                                                   |
| C10M 133/10        | 4-Punkt Untergruppe | . . . . cycloaliphatic [4]                                                                                                              |
| C10M 133/12        | 3-Punkt Untergruppe | . . . having amino groups bound to a carbon atom of a six-membered aromatic ring [4]                                                    |
| C10M 133/14        | 4-Punkt Untergruppe | . . . . containing hydroxy groups [4]                                                                                                   |
| C10M 133/16        | 2-Punkt Untergruppe | . . Amides; Imides [4]                                                                                                                  |
| C10M 133/18        | 3-Punkt Untergruppe | . . . of carbonic or haloformic acids [4]                                                                                               |
| C10M 133/20        | 4-Punkt Untergruppe | . . . . Ureas; Semicarbazides; Allophanates [4]                                                                                         |
| C10M 133/22        | 2-Punkt Untergruppe | . . containing a carbon-to-nitrogen double bond, e.g. guanidines, hydrazones, semicarbazones [4]                                        |
| C10M 133/24        | 2-Punkt Untergruppe | . . Nitriles [4]                                                                                                                        |
| C10M 133/26        | 2-Punkt Untergruppe | . . containing a nitrogen-to-nitrogen double bond [4]                                                                                   |
| C10M 133/28        | 3-Punkt Untergruppe | . . . Azo compounds [4]                                                                                                                 |
| C10M 133/30        | 2-Punkt Untergruppe | . . containing a nitrogen-to-oxygen bond [4]                                                                                            |
| C10M 133/32        | 3-Punkt Untergruppe | . . . containing a nitro group [4]                                                                                                      |
| C10M 133/34        | 3-Punkt Untergruppe | . . . containing a nitroso group [4]                                                                                                    |
| C10M 133/36        | 3-Punkt Untergruppe | . . . Hydroxylamines [4]                                                                                                                |
| C10M 133/38        | 2-Punkt Untergruppe | . . Heterocyclic nitrogen compounds [4]                                                                                                 |
| C10M 133/40        | 3-Punkt Untergruppe | . . . Six-membered ring containing nitrogen and carbon only [4]                                                                         |
| C10M 133/42        | 4-Punkt Untergruppe | . . . . Triazines [4]                                                                                                                   |
| C10M 133/44        | 3-Punkt Untergruppe | . . . Five-membered ring containing nitrogen and carbon only [4]                                                                        |
| C10M 133/46        | 4-Punkt Untergruppe | . . . . Imidazoles [4]                                                                                                                  |
| C10M 133/48        | 3-Punkt Untergruppe | . . . the ring containing both nitrogen and oxygen [4]                                                                                  |
| C10M 133/50        | 4-Punkt Untergruppe | . . . . Morpholines [4]                                                                                                                 |
| C10M 133/52        | 1-Punkt Untergruppe | . having a carbon chain of 30 or more atoms [4]                                                                                         |

| Symbol             | Typ                 | Titel                                                                                                                                                   |
|--------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| C10M 133/54        | 2-Punkt Untergruppe | . . Amines [4]                                                                                                                                          |
| C10M 133/56        | 2-Punkt Untergruppe | . . Amides; Imides [4]                                                                                                                                  |
| C10M 133/58        | 2-Punkt Untergruppe | . . Heterocyclic compounds [4]                                                                                                                          |
| <b>C10M 135/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being an organic non-macromolecular compound containing sulfur, selenium or tellurium [4]</b> |
| C10M 135/02        | 1-Punkt Untergruppe | . Sulfurised compounds [4]                                                                                                                              |
| C10M 135/04        | 2-Punkt Untergruppe | . . Hydrocarbons [4]                                                                                                                                    |
| C10M 135/06        | 2-Punkt Untergruppe | . . Esters, e.g. fats [4]                                                                                                                               |
| C10M 135/08        | 1-Punkt Untergruppe | . containing a sulfur-to-oxygen bond [4]                                                                                                                |
| C10M 135/10        | 2-Punkt Untergruppe | . . Sulfonic acids or derivatives thereof [4]                                                                                                           |
| C10M 135/12        | 1-Punkt Untergruppe | . Thio-acids; Thiocyanates; Derivatives thereof [4]                                                                                                     |
| C10M 135/14        | 2-Punkt Untergruppe | . . having a carbon-to-sulfur double bond [4]                                                                                                           |
| C10M 135/16        | 3-Punkt Untergruppe | . . . thiourea type, i.e. containing the group [Bild nicht vorhanden.] [4]                                                                              |
| C10M 135/18        | 3-Punkt Untergruppe | . . . thiocarbamic type, e.g. containing the groups [Bild nicht vorhanden.] [4]                                                                         |
| C10M 135/20        | 1-Punkt Untergruppe | . Thiols; Sulfides; Polysulfides [4]                                                                                                                    |
| C10M 135/22        | 2-Punkt Untergruppe | . . containing sulfur atoms bound to acyclic or cycloaliphatic carbon atoms [4]                                                                         |
| C10M 135/24        | 3-Punkt Untergruppe | . . . containing hydroxy groups; Derivatives thereof [4]                                                                                                |
| C10M 135/26        | 3-Punkt Untergruppe | . . . containing carboxyl groups; Derivatives thereof [4]                                                                                               |
| C10M 135/28        | 2-Punkt Untergruppe | . . containing sulfur atoms bound to a carbon atom of a six-membered aromatic ring [4]                                                                  |
| C10M 135/30        | 3-Punkt Untergruppe | . . . containing hydroxy groups; Derivatives thereof [4]                                                                                                |
| C10M 135/32        | 1-Punkt Untergruppe | . Heterocyclic sulfur, selenium or tellurium compounds [4]                                                                                              |
| C10M 135/34        | 2-Punkt Untergruppe | . . the ring containing sulfur and carbon only [4]                                                                                                      |
| C10M 135/36        | 2-Punkt Untergruppe | . . the ring containing sulfur and carbon with nitrogen or oxygen [4]                                                                                   |
| <b>C10M 137/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being an organic non-macromolecular compound containing phosphorus [4]</b>                    |
| C10M 137/02        | 1-Punkt Untergruppe | . having no phosphorus-to-carbon bond [4]                                                                                                               |
| C10M 137/04        | 2-Punkt Untergruppe | . . Phosphate esters [4]                                                                                                                                |
| C10M 137/06        | 3-Punkt Untergruppe | . . . Metal salts [4]                                                                                                                                   |
| C10M 137/08        | 3-Punkt Untergruppe | . . . Ammonium or amine salts [4]                                                                                                                       |
| C10M 137/10        | 3-Punkt Untergruppe | . . . Thio derivatives [4]                                                                                                                              |
| C10M 137/12        | 1-Punkt Untergruppe | . having a phosphorus-to-carbon bond [4]                                                                                                                |
| C10M 137/14        | 2-Punkt Untergruppe | . . containing sulfur [4]                                                                                                                               |
| C10M 137/16        | 1-Punkt Untergruppe | . having a phosphorus-to-nitrogen bond [4]                                                                                                              |
| <b>C10M 139/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being an organic non-macromolecular</b>                                                       |

| Symbol             | Typ                 | Titel                                                                                                                                                                                                                       |
|--------------------|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                    |                     | <b>compound containing atoms of elements not provided for in groups C10M 127/00 to C10M 137/00 [4]</b>                                                                                                                      |
| C10M 139/02        | 1-Punkt Untergruppe | . Esters of silicon acids [4]                                                                                                                                                                                               |
| C10M 139/04        | 1-Punkt Untergruppe | . having a silicon-to-carbon bond, e.g. silanes [4]                                                                                                                                                                         |
| C10M 139/06        | 1-Punkt Untergruppe | . having a metal-to-carbon bond (metal complexes of unknown constitution C10M 159/18) [4]                                                                                                                                   |
| <b>C10M 141/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being a mixture of two or more compounds covered by more than one of the main groups C10M 125/00 to C10M 139/00 , each of these compounds being essential [4]</b> |
| C10M 141/02        | 1-Punkt Untergruppe | . at least one of them being an organic oxygen-containing compound [4]                                                                                                                                                      |
| C10M 141/04        | 1-Punkt Untergruppe | . at least one of them being an organic halogen-containing compound [4]                                                                                                                                                     |
| C10M 141/06        | 1-Punkt Untergruppe | . at least one of them being an organic nitrogen-containing compound [4]                                                                                                                                                    |
| C10M 141/08        | 1-Punkt Untergruppe | . at least one of them being an organic sulfur-, selenium- or tellurium-containing compound [4]                                                                                                                             |
| C10M 141/10        | 1-Punkt Untergruppe | . at least one of them being an organic phosphorus-containing compound [4]                                                                                                                                                  |
| C10M 141/12        | 1-Punkt Untergruppe | . at least one of them being an organic compound containing atoms of elements not provided for in groups C10M 141/02 to C10M 141/10 [4]                                                                                     |
| <b>C10M 143/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating composition characterised by the additive being a macromolecular hydrocarbon or such hydrocarbon modified by oxidation [4]</b>                                                                               |
| C10M 143/02        | 1-Punkt Untergruppe | . Polyethene [4]                                                                                                                                                                                                            |
| C10M 143/04        | 1-Punkt Untergruppe | . containing propene [4]                                                                                                                                                                                                    |
| C10M 143/06        | 1-Punkt Untergruppe | . containing butene [4]                                                                                                                                                                                                     |
| C10M 143/08        | 1-Punkt Untergruppe | . containing aliphatic monomer having more than 4 carbon atoms [4]                                                                                                                                                          |
| C10M 143/10        | 1-Punkt Untergruppe | . containing aromatic monomer, e.g. styrene [4]                                                                                                                                                                             |
| C10M 143/12        | 1-Punkt Untergruppe | . containing conjugated diene [4]                                                                                                                                                                                           |
| C10M 143/14        | 1-Punkt Untergruppe | . containing non-conjugated diene [4]                                                                                                                                                                                       |
| C10M 143/16        | 1-Punkt Untergruppe | . containing cycloaliphatic monomer [4]                                                                                                                                                                                     |
| C10M 143/18        | 1-Punkt Untergruppe | . Oxidised hydrocarbons, i.e. oxidised subsequent to macromolecular formation [4]                                                                                                                                           |
| <b>C10M 145/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being a macromolecular compound containing oxygen (oxidised hydrocarbons C10M 143/18) [4]</b>                                                                     |
| C10M 145/02        | 1-Punkt Untergruppe | . Macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds [4]                                                                                                                      |
| C10M 145/04        | 2-Punkt Untergruppe | . . containing monomers having an unsaturated radical bound to an alcohol, aldehyde, ketonic, ether, ketal or acetal radical [4]                                                                                            |
| C10M 145/06        | 2-Punkt Untergruppe | . . containing monomers having an unsaturated radical bound to an alkoxy radical of a saturated carboxylic or carbonic acid [4]                                                                                             |
| C10M 145/08        | 3-Punkt Untergruppe | . . . Vinyl esters of a saturated carboxylic or carbonic acid [4]                                                                                                                                                           |
| C10M 145/10        | 2-Punkt Untergruppe | . . containing monomers having an unsaturated radical bound to a carboxyl radical, e.g. acrylate [4]                                                                                                                        |
| C10M 145/12        | 3-Punkt Untergruppe | . . . monocarboxylic [4]                                                                                                                                                                                                    |
| C10M 145/14        | 4-Punkt Untergruppe | . . . . Acrylate; Methacrylate [4]                                                                                                                                                                                          |

| Symbol             | Typ                 | Titel                                                                                                                                      |
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| C10M 145/16        | 3-Punkt Untergruppe | . . . polycarboxylic [4]                                                                                                                   |
| C10M 145/18        | 1-Punkt Untergruppe | . Macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [4]                      |
| C10M 145/20        | 2-Punkt Untergruppe | . . Condensation polymers of aldehydes or ketones [4]                                                                                      |
| C10M 145/22        | 2-Punkt Untergruppe | . . Polyesters [4]                                                                                                                         |
| C10M 145/24        | 2-Punkt Untergruppe | . . Polyethers [4]                                                                                                                         |
| C10M 145/26        | 3-Punkt Untergruppe | . . . Polyoxyalkylenes [4]                                                                                                                 |
| C10M 145/28        | 4-Punkt Untergruppe | . . . . of alkylene oxides containing 2 carbon atoms only [4]                                                                              |
| C10M 145/30        | 4-Punkt Untergruppe | . . . . of alkylene oxides containing 3 carbon atoms only [4]                                                                              |
| C10M 145/32        | 4-Punkt Untergruppe | . . . . of alkylene oxides containing 4 or more carbon atoms [4]                                                                           |
| C10M 145/34        | 4-Punkt Untergruppe | . . . . of two or more specified different types [4]                                                                                       |
| C10M 145/36        | 4-Punkt Untergruppe | . . . . etherified [4]                                                                                                                     |
| C10M 145/38        | 4-Punkt Untergruppe | . . . . esterified [4]                                                                                                                     |
| C10M 145/40        | 1-Punkt Untergruppe | . Polysaccharides, e.g. cellulose [4]                                                                                                      |
| <b>C10M 147/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being a macromolecular compound containing halogen [4]</b>                       |
| C10M 147/02        | 1-Punkt Untergruppe | . Monomer containing carbon, hydrogen and halogen only [4]                                                                                 |
| C10M 147/04        | 1-Punkt Untergruppe | . Monomer containing carbon, hydrogen, halogen and oxygen [4]                                                                              |
| <b>C10M 149/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being a macromolecular compound containing nitrogen [4]</b>                      |
| C10M 149/02        | 1-Punkt Untergruppe | . Macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds [4]                                     |
| C10M 149/04        | 2-Punkt Untergruppe | . . containing monomers having an unsaturated radical bound to an amino group [4]                                                          |
| C10M 149/06        | 2-Punkt Untergruppe | . . containing monomers having an unsaturated radical bound to an amido or imido group [4]                                                 |
| C10M 149/08        | 2-Punkt Untergruppe | . . containing monomers having an unsaturated radical bound to a nitrile group [4]                                                         |
| C10M 149/10        | 2-Punkt Untergruppe | . . containing monomers having an unsaturated radical bound to a nitrogen-containing hetero ring [4]                                       |
| C10M 149/12        | 1-Punkt Untergruppe | . Macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [4]                      |
| C10M 149/14        | 2-Punkt Untergruppe | . . a condensation reaction being involved [4]                                                                                             |
| C10M 149/16        | 3-Punkt Untergruppe | . . . between the nitrogen-containing monomer and an aldehyde or ketone [4]                                                                |
| C10M 149/18        | 3-Punkt Untergruppe | . . . Polyamides [4]                                                                                                                       |
| C10M 149/20        | 3-Punkt Untergruppe | . . . Polyureas [4]                                                                                                                        |
| C10M 149/22        | 3-Punkt Untergruppe | . . . Polyamines [4]                                                                                                                       |
| <b>C10M 151/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being a macromolecular compound containing sulfur, selenium or tellurium [4]</b> |
| C10M 151/02        | 1-Punkt Untergruppe | . Macromolecular compounds obtained by reactions involving only carbon-to-carbon unsaturated bonds [4]                                     |

| Symbol             | Typ                 | Titel                                                                                                                                                                                                                                               |
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| C10M 151/04        | 1-Punkt Untergruppe | . Macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [4]                                                                                                                               |
| <b>C10M 153/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being a macromolecular compound containing phosphorus [4]</b>                                                                                                                             |
| C10M 153/02        | 1-Punkt Untergruppe | . Macromolecular compounds obtained by reactions involving only carbon-to-carbon unsaturated bonds [4]                                                                                                                                              |
| C10M 153/04        | 1-Punkt Untergruppe | . Macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [4]                                                                                                                               |
| <b>C10M 155/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being a macromolecular compound containing atoms of elements not provided for in groups C10M 143/00 to C10M 153/00 [4]</b>                                                                |
| C10M 155/02        | 1-Punkt Untergruppe | . Monomer containing silicon [4]                                                                                                                                                                                                                    |
| C10M 155/04        | 1-Punkt Untergruppe | . Monomer containing boron [4]                                                                                                                                                                                                                      |
| <b>C10M 157/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being a mixture of two or more macromolecular compounds covered by more than one of the main groups C10M 143/00 to C10M 155/00 , each of these compounds being essential [4]</b>          |
| C10M 157/02        | 1-Punkt Untergruppe | . at least one of them being a halogen-containing compound [4]                                                                                                                                                                                      |
| C10M 157/04        | 1-Punkt Untergruppe | . at least one of them being a nitrogen-containing compound [4]                                                                                                                                                                                     |
| C10M 157/06        | 1-Punkt Untergruppe | . at least one of them being a sulfur-, selenium- or tellurium-containing compound [4]                                                                                                                                                              |
| C10M 157/08        | 1-Punkt Untergruppe | . at least one of them being a phosphorus-containing compound [4]                                                                                                                                                                                   |
| C10M 157/10        | 1-Punkt Untergruppe | . at least one of them being a compound containing atoms of elements not provided for in groups C10M 157/02 to C10M 157/08 [4]                                                                                                                      |
| <b>C10M 159/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being of unknown or incompletely defined constitution (carboxylic acids with less than 30 carbon atoms in the chain, of unknown or incompletely defined constitution C10M 129/56) [4]</b> |
| C10M 159/02        | 1-Punkt Untergruppe | . Natural products [4]                                                                                                                                                                                                                              |
| C10M 159/04        | 2-Punkt Untergruppe | . . Petroleum fractions, e.g. tars, solvents [4]                                                                                                                                                                                                    |
| C10M 159/06        | 2-Punkt Untergruppe | . . Waxes, e.g. ozocerite, ceresine, petrolatum, slack-wax [4]                                                                                                                                                                                      |
| C10M 159/08        | 2-Punkt Untergruppe | . . Fatty oils [4]                                                                                                                                                                                                                                  |
| C10M 159/10        | 2-Punkt Untergruppe | . . Rubber [4]                                                                                                                                                                                                                                      |
| C10M 159/12        | 1-Punkt Untergruppe | . Reaction products [4]                                                                                                                                                                                                                             |
| C10M 159/14        | 2-Punkt Untergruppe | . . obtained by Friedel-Crafts condensation [4]                                                                                                                                                                                                     |
| C10M 159/16        | 2-Punkt Untergruppe | . . obtained by Mannich reactions [4]                                                                                                                                                                                                               |
| C10M 159/18        | 2-Punkt Untergruppe | . . Complexes with metals [4]                                                                                                                                                                                                                       |
| C10M 159/20        | 2-Punkt Untergruppe | . . Reaction mixtures having an excess of neutralising base, e.g. so-called overbasic or highly basic products [4]                                                                                                                                  |
| C10M 159/22        | 3-Punkt Untergruppe | . . . containing phenol radicals [4]                                                                                                                                                                                                                |
| C10M 159/24        | 3-Punkt Untergruppe | . . . containing sulfonic radicals [4]                                                                                                                                                                                                              |
| <b>C10M 161/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being a mixture of a macromolecular compound and a non-macromolecular compound, each of these compounds being essential [4]</b>                                                           |
| <b>C10M 163/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being a mixture of a compound of unknown or incompletely defined constitution and a non-macromolecular compound, each of these compounds being essential [4]</b>                          |

| Symbol             | Typ                 | Titel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>C10M 165/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being a mixture of a macromolecular compound and a compound of unknown or incompletely defined constitution, each of these compounds being essential [4]</b>                                                                                                                                                                                                                                                                                                    |
| <b>C10M 167/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by the additive being a mixture of a macromolecular compound, a non-macromolecular compound and a compound of unknown or incompletely defined constitution, each of these compounds being essential [4]</b><br><b><u>Mixtures of base-materials, thickeners and additives [4]</u></b>                                                                                                                                                                                           |
| <b>C10M 169/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by containing as components a mixture of at least two types of ingredient selected from base-materials, thickeners or additives, covered by the preceding groups, each of these compounds being essential [4]</b>                                                                                                                                                                                                                                                               |
| C10M 169/02        | 1-Punkt Untergruppe | . Mixtures of base-materials and thickeners [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| C10M 169/04        | 1-Punkt Untergruppe | . Mixtures of base-materials and additives [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| C10M 169/06        | 1-Punkt Untergruppe | . Mixtures of thickeners and additives [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                    |                     | <b><u>Compositions characterised by physical properties [4]</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>C10M 171/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions characterised by purely physical criteria, e.g. containing as base-material, thickener or additive, ingredients which are characterised exclusively by their numerically specified physical properties, i.e. containing ingredients which are physically well defined but for which the chemical nature is either unspecified or only very vaguely indicated (chemically defined ingredients C10M 101/00 to C10M 169/00; petroleum fractions C10M 101/02 , C10M 121/02 , C10M 159/04) [4]</b> |
| C10M 171/02        | 1-Punkt Untergruppe | . Specified values of viscosity or viscosity index [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| C10M 171/04        | 1-Punkt Untergruppe | . Specified molecular weight or molecular weight distribution [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| C10M 171/06        | 1-Punkt Untergruppe | . Particles of special shape or size [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                    |                     | <b><u>Aqueous lubricating compositions [4]</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>C10M 173/00</b> | <b>Hauptgruppe</b>  | <b>Lubricating compositions containing more than 10% water [4]</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| C10M 173/02        | 1-Punkt Untergruppe | . not containing mineral or fatty oils [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                    |                     | <b><u>Working-up [4]</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>C10M 175/00</b> | <b>Hauptgruppe</b>  | <b>Working-up used lubricants to recover useful products [4]</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| C10M 175/02        | 1-Punkt Untergruppe | . mineral-oil based [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| C10M 175/04        | 1-Punkt Untergruppe | . aqueous emulsion based [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| C10M 175/06        | 1-Punkt Untergruppe | . by ultrafiltration or osmosis [4]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                    |                     | <b><u>Preparation or after-treatment [4]</u></b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>C10M 177/00</b> | <b>Hauptgruppe</b>  | <b>Special methods of preparation of lubricating compositions; Chemical modification by after-treatment of components or of the whole of a lubricating composition, not covered by other classes [4]</b>                                                                                                                                                                                                                                                                                                                  |