

Symbol	Typ	Titel
<b>C</b>	<b>Sektion</b>	<b>CHEMISTRY; METALLURGY</b>
<b>C04</b>	<b>Klasse</b>	<b>CEMENTS; CONCRETE; ARTIFICIAL STONE; CERAMICS; REFRactories (alloys based on refractory metals C22C) [4]</b>
<b>C04B</b>	<b>Unterklasse</b>	<b>LIME; MAGNESIA; SLAG; CEMENTS; COMPOSITIONS THEREOF, e.g. MORTARS, CONCRETE OR LIKE BUILDING MATERIALS; ARTIFICIAL STONE; CERAMICS (devitrified glass-ceramics C03C 10/00); REFRactories; TREATMENT OF NATURAL STONE [4]</b>  <u>Lime; Magnesia; Slag</u>
<b>C04B 2/00</b>	<b>Hauptgruppe</b>	<b>Lime, magnesia or dolomite (hydraulic lime cements C04B 7/34) [4]</b>
C04B 2/02	1-Punkt Untergruppe	. Lime [4]
C04B 2/04	2-Punkt Untergruppe	.. Slaking [4]
C04B 2/06	3-Punkt Untergruppe	... with addition of substances, e.g. hydrophobic agents [4]
C04B 2/08	3-Punkt Untergruppe	... Devices therefor [4]
C04B 2/10	1-Punkt Untergruppe	. Preheating, burning, calcining or cooling (decarbonation during burning of cement raw materials C04B 7/43) [4]
C04B 2/12	2-Punkt Untergruppe	.. in shaft or vertical furnaces (shaft or vertical furnaces in general F27B 1/00) [4]
<b>C04B 5/00</b>	<b>Hauptgruppe</b>	<b>Treatment of molten slag (manufacture of slag wool C03B; in, or for, the production of metals C21B , C22B); Artificial stone from molten slag (mechanical aspects B28B 1/54) [4]</b>
C04B 5/02	1-Punkt Untergruppe	. Granulating (apparatus B01J 2/00); Dehydrating; Drying
C04B 5/06	1-Punkt Untergruppe	. Ingredients, other than water, added to the molten slag; Treatment with gases or gas generating material, e.g. to obtain porous slag [4]
<b><u>Cements</u></b>		
<b>C04B 7/00</b>	<b>Hauptgruppe</b>	<b>Hydraulic cements (calcium sulfate cements C04B 11/00)</b>
C04B 7/02	1-Punkt Untergruppe	. Portland cement
C04B 7/04	2-Punkt Untergruppe	.. using raw materials containing gypsum
C04B 7/06	2-Punkt Untergruppe	.. using alkaline raw materials
C04B 7/12	1-Punkt Untergruppe	. Natural pozzuolanas; Natural pozzuolana cements (cements containing slag C04B 7/14) [4]
C04B 7/13	2-Punkt Untergruppe	.. Mixtures thereof with inorganic cementitious materials, e.g. Portland cements [4]
C04B 7/14	1-Punkt Untergruppe	. Cements containing slag
C04B 7/147	2-Punkt Untergruppe	.. Metallurgical slag [4]
C04B 7/153	3-Punkt Untergruppe	... Mixtures thereof with other inorganic cementitious materials or other activators [4]
C04B 7/17	4-Punkt Untergruppe	.... with calcium oxide containing activators [4]
C04B 7/19	5-Punkt Untergruppe	..... Portland cements [4]
C04B 7/21	4-Punkt Untergruppe	.... with calcium sulfate containing activators [4]
C04B 7/22	1-Punkt Untergruppe	. Iron ore cements
C04B 7/24	1-Punkt Untergruppe	. Cements from oil shales, residues or waste other than slag [4]
C04B 7/26	2-Punkt Untergruppe	.. from raw materials containing flue dust

Symbol	Typ	Titel
C04B 7/28	2-Punkt Untergruppe	... from combustion residues (C04B 7/26 takes precedence) [4]
C04B 7/30	2-Punkt Untergruppe	... from oil shale; from oil shale residues [4]
C04B 7/32	1-Punkt Untergruppe	. Aluminous cements
C04B 7/34	1-Punkt Untergruppe	. Hydraulic lime cements; Roman cements
C04B 7/345	1-Punkt Untergruppe	. Hydraulic cements not provided for in one of the groups C04B 7/02 to C04B 7/34 [4]
C04B 7/36	1-Punkt Untergruppe	. Manufacture of hydraulic cements in general
C04B 7/38	2-Punkt Untergruppe	... Preparing or treating the raw materials individually or as batches [4]
C04B 7/40	3-Punkt Untergruppe	... Dehydrating; Forming, e.g. granulating (apparatus for granulating B01J 2/00)
C04B 7/42	3-Punkt Untergruppe	... Active ingredients added before, or during, the burning process (after the burning process C04B 22/00 , C04B 24/00)
C04B 7/43	2-Punkt Untergruppe	... Heat treatment, e.g. precalcining, burning, melting; Cooling [4]
C04B 7/44	3-Punkt Untergruppe	... Burning; Melting [4]
C04B 7/45	4-Punkt Untergruppe	.... in fluidised beds [4]
C04B 7/46	4-Punkt Untergruppe	.... electric [4]
C04B 7/47	3-Punkt Untergruppe	... Cooling [4]
C04B 7/48	2-Punkt Untergruppe	... Clinker treatment (C04B 7/47 takes precedence) [4]
C04B 7/51	3-Punkt Untergruppe	... Hydrating [4]
C04B 7/52	3-Punkt Untergruppe	... Grinding
C04B 7/60	2-Punkt Untergruppe	... Methods for eliminating alkali metals or compounds thereof [4]
<b>C04B 9/00</b>	<b>Hauptgruppe</b>	<b>Magnesium cements or silimar cements</b>
C04B 9/02	1-Punkt Untergruppe	. Magnesium cements containing chlorides, e.g. Sorel cement
C04B 9/04	1-Punkt Untergruppe	. Magnesium cements containing sulfates, nitrates, phosphates, or fluorides
C04B 9/06	1-Punkt Untergruppe	. Cements containing metal compounds other than magnesium compounds, e.g. compounds of zinc or lead
C04B 9/11	1-Punkt Untergruppe	. Mixtures thereof with other inorganic cementitious materials [4]
C04B 9/12	2-Punkt Untergruppe	... with hydraulic cements, e.g. Portland cements [4]
C04B 9/20	1-Punkt Untergruppe	. Manufacture, e.g. preparing the batches (preheating, burning, calcining or cooling lime stone, magnesite or dolomite C04B 2/10)
<b>C04B 11/00</b>	<b>Hauptgruppe</b>	<b>Calcium sulfate cements</b>
C04B 11/02	1-Punkt Untergruppe	. Dehydrating gypsum
C04B 11/024	2-Punkt Untergruppe	... Ingredients added before, or during, the calcining process, e.g. calcination modifiers [4]
C04B 11/028	2-Punkt Untergruppe	... Devices therefor [4]
C04B 11/032	3-Punkt Untergruppe	... for the wet process, e.g. dehydrating in solution or under saturated vapor conditions [4]
C04B 11/036	3-Punkt Untergruppe	... for the dry process, e.g. dehydrating in a fluidised bed or in a rotary kiln [4]
C04B 11/05	1-Punkt Untergruppe	. obtaining anhydrite (C04B 11/028 takes precedence) [4]

Symbol	Typ	Titel
C04B 11/06	1-Punkt Untergruppe	. starting from anhydrite
C04B 11/26	1-Punkt Untergruppe	. starting from phosphogypsum or from waste, e.g. purification products of smoke (C04B 11/02 takes precedence; chemical or biological purification of waste gases B01D 53/34) [4]
C04B 11/28	1-Punkt Untergruppe	. Mixtures thereof with other inorganic cementitious materials (C04B 7/04 , C04B 7/153 take precedence) [4]
C04B 11/30	2-Punkt Untergruppe	.. with hydraulic cements, e.g. Portland cements [4]
<b>C04B 12/00</b>	<b>Hauptgruppe</b>	<b>Cements not provided for in groups C04B 7/00 to C04B 11/00 [4]</b>
C04B 12/02	1-Punkt Untergruppe	. Phosphate cements (in, or for, the manufacture of ceramics C04B 33/00 , C04B 35/00) [4]
C04B 12/04	1-Punkt Untergruppe	. Alkali metal or ammonium silicate cements (alkali metal silicates per se, their preparation C01B 33/32; ammonium silicates per se, their preparation C01C 1/00) [4]
<b><u>Use of materials as fillers (ceramics C04B 33/00 , C04B 35/00; reinforcing elements for building materials E04C 5/00) [4]</u></b>		
<b>C04B 14/00</b>	<b>Hauptgruppe</b>	<b>Use of inorganic materials as fillers, e.g. pigments, for mortars, concrete or artificial stone; Treatment of inorganic materials specially adapted to enhance their filling properties in mortars, concrete or artificial stone (expanding or defibrillating materials C04B 20/00) [4]</b>
C04B 14/02	1-Punkt Untergruppe	. Granular materials [4]
C04B 14/04	2-Punkt Untergruppe	.. Silica-rich materials; Silicates [4]
C04B 14/06	3-Punkt Untergruppe	... Quartz; Sand [4]
C04B 14/08	3-Punkt Untergruppe	... Diatomaceous earth [4]
C04B 14/10	3-Punkt Untergruppe	... Clay [4]
C04B 14/12	4-Punkt Untergruppe	.... Expanded clay [4]
C04B 14/14	3-Punkt Untergruppe	... Minerals of volcanic origin [4]
C04B 14/16	4-Punkt Untergruppe	.... porous, e.g. pumice [4]
C04B 14/18	4-Punkt Untergruppe	.... Perlite [4]
C04B 14/20	3-Punkt Untergruppe	... Mica; Vermiculite [4]
C04B 14/22	3-Punkt Untergruppe	... Glass [4]
C04B 14/24	4-Punkt Untergruppe	.... porous, e.g. foamed glass [4]
C04B 14/26	2-Punkt Untergruppe	... Carbonates [4]
C04B 14/28	3-Punkt Untergruppe	... of calcium [4]
C04B 14/30	2-Punkt Untergruppe	.. Oxides other than silica [4]
C04B 14/32	2-Punkt Untergruppe	.. Carbides; Nitrides; Borides [4]
C04B 14/34	2-Punkt Untergruppe	.. Metals [4]
C04B 14/36	2-Punkt Untergruppe	.. Inorganic materials not provided for in groups C04B 14/04 to C04B 14/34 [4]
C04B 14/38	1-Punkt Untergruppe	. Fibrous materials; Whiskers [4]
C04B 14/40	2-Punkt Untergruppe	.. Asbestos [4]
C04B 14/42	2-Punkt Untergruppe	.. Glass [4]

Symbol	Typ	Titel
C04B 14/44	3-Punkt Untergruppe	... Treatment for enhancing alkali resistance [4]
C04B 14/46	2-Punkt Untergruppe	... Rock wool [4]
C04B 14/48	2-Punkt Untergruppe	... Metal [4]
<b>C04B 16/00</b>	<b>Hauptgruppe</b>	<b>Use of organic materials as fillers, e.g. pigments, for mortars, concrete or artificial stone; Treatment of organic materials specially adapted to enhance their filling properties in mortars, concrete or artificial stone [4]</b>
C04B 16/02	1-Punkt Untergruppe	. Cellulosic materials (cellulosic waste materials, e.g. sawdust, rice husks, C04B 18/24) [4]
C04B 16/04	1-Punkt Untergruppe	. Macromolecular compounds (C04B 16/02 takes precedence) [4]
C04B 16/06	2-Punkt Untergruppe	... fibrous [4]
C04B 16/08	2-Punkt Untergruppe	... porous, e.g. expanded polystyrene beads [4]
C04B 16/10	3-Punkt Untergruppe	... Treatment for enhancing the mixability with the mortar [4]
C04B 16/12	1-Punkt Untergruppe	. characterised by the shape (fibrous macromolecular compounds C04B 16/06; porous macromolecular compounds C04B 16/08) [4]
<b>C04B 18/00</b>	<b>Hauptgruppe</b>	<b>Use of agglomerated or waste materials or refuse as fillers for mortars, concrete or artificial stone (use of waste materials for the manufacture of cement C04B 7/24); Treatment of agglomerated or waste materials or refuse, specially adapted to enhance their filling properties in mortars, concrete or artificial stone [4]</b>
C04B 18/02	1-Punkt Untergruppe	. Agglomerated materials [4]
C04B 18/04	1-Punkt Untergruppe	. Waste materials; Refuse [4]
C04B 18/06	2-Punkt Untergruppe	... Combustion residues, e.g. purification products of smoke, fumes or exhaust gases [4]
C04B 18/08	3-Punkt Untergruppe	... Flue dust [4]
C04B 18/10	3-Punkt Untergruppe	... Burned refuse [4]
C04B 18/12	2-Punkt Untergruppe	... from quarries, mining or the like [4]
C04B 18/14	2-Punkt Untergruppe	... from metallurgical processes (treatment of molten slag C04B 5/00; for manufacture of cement C04B 7/14) [4]
C04B 18/16	2-Punkt Untergruppe	... from building or ceramic industry [4]
C04B 18/18	2-Punkt Untergruppe	... organic (C04B 18/10 takes precedence) [4]
C04B 18/20	3-Punkt Untergruppe	... from macromolecular compounds [4]
C04B 18/22	4-Punkt Untergruppe	.... Rubber [4]
C04B 18/24	3-Punkt Untergruppe	... Vegetable refuse, e.g. rice husks, maize-ear refuse; Cellulosic materials, e.g. paper [4]
C04B 18/26	4-Punkt Untergruppe	.... Wood, e.g. sawdust, wood shavings [4]
C04B 18/28	4-Punkt Untergruppe	.... Mineralising; Compositions therefor [4]
C04B 18/30	2-Punkt Untergruppe	... Mixed waste; Waste of undefined composition, e.g. municipal waste (C04B 18/10 takes precedence) [4]
<b>C04B 20/00</b>	<b>Hauptgruppe</b>	<b>Use of materials as fillers for mortars, concrete or artificial stone according to more than one of groups C04B 14/00 to C04B 18/00 and characterised by shape or grain distribution; Treatment of materials according to more than one of the groups C04B 14/00 to C04B 18/00 specially adapted to enhance their filling properties in mortars, concrete or artificial stone; Expanding or defibrillating materials [4]</b>
C04B 20/02	1-Punkt Untergruppe	. Treatment [4]

Symbol	Typ	Titel
C04B 20/04	2-Punkt Untergruppe	... Heat treatment [4]
C04B 20/06	3-Punkt Untergruppe	... Expanding clay, perlite, vermiculite or like granular materials [4]
C04B 20/08	2-Punkt Untergruppe	... Defibrillating asbestos [4]
C04B 20/10	1-Punkt Untergruppe	. Coating or impregnating [4]
C04B 20/12	2-Punkt Untergruppe	... Multiple coating or impregnating [4]
<b><u>Use of materials as active ingredients [4]</u></b>		
<b>C04B 22/00</b>	<b>Hauptgruppe</b>	<b>Use of inorganic materials as active ingredients for mortars, concrete or artificial stone, e.g. accelerators [4]</b>
C04B 22/02	1-Punkt Untergruppe	. Elements [4]
C04B 22/04	2-Punkt Untergruppe	... Metals, e.g. aluminium used as blowing agent [4]
C04B 22/06	1-Punkt Untergruppe	. Oxides; Hydroxides [4]
C04B 22/08	1-Punkt Untergruppe	. Acids or salts thereof [4]
C04B 22/10	2-Punkt Untergruppe	... containing carbon in the anion, e.g. carbonates [4]
C04B 22/12	2-Punkt Untergruppe	... containing halogen in the anion, e.g. calcium chloride [4]
C04B 22/14	2-Punkt Untergruppe	... containing sulfur in the anion, e.g. sulfides [4]
C04B 22/16	2-Punkt Untergruppe	... containing phosphorus in the anion, e.g. phosphates [4]
<b>C04B 24/00</b>	<b>Hauptgruppe</b>	<b>Use of organic materials as active ingredients for mortars, concrete or artificial stone, e.g. plasticisers [4]</b>
C04B 24/02	1-Punkt Untergruppe	. Alcohols; Phenols; Ethers [4]
C04B 24/04	1-Punkt Untergruppe	. Carboxylic acids; Salts, anhydrides or esters thereof [4]
C04B 24/06	2-Punkt Untergruppe	... containing hydroxy groups [4]
C04B 24/08	1-Punkt Untergruppe	. Fats; Fatty oils; Ester type waxes; Higher fatty acids, i.e. having at least seven carbon atoms in an unbroken chain bound to a carboxyl group; Oxidised oils or fats [4]
C04B 24/10	1-Punkt Untergruppe	. Carbohydrates or derivatives thereof [4]
C04B 24/12	1-Punkt Untergruppe	. Nitrogen containing compounds [4]
C04B 24/14	2-Punkt Untergruppe	... Peptides; Proteins; Derivatives thereof [4]
C04B 24/16	1-Punkt Untergruppe	. Sulfur-containing compounds [4]
C04B 24/18	2-Punkt Untergruppe	... Lignin sulfonic acid or derivatives thereof, e.g. sulfite lye [4]
C04B 24/20	2-Punkt Untergruppe	... Sulfonated aromatic compounds [4]
C04B 24/22	3-Punkt Untergruppe	... Condensation products thereof [4]
C04B 24/24	1-Punkt Untergruppe	. Macromolecular compounds (C04B 24/14 takes precedence; macromolecular compounds comprising sulfonate or sulfate groups C04B 24/16) [4, 6]
C04B 24/26	2-Punkt Untergruppe	... obtained by reactions only involving carbon-to-carbon unsaturated bonds [4]
C04B 24/28	2-Punkt Untergruppe	... obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [4]
C04B 24/30	3-Punkt Untergruppe	... Condensation polymers of aldehydes or ketones [4]

Symbol	Typ	Titel
C04B 24/32	3-Punkt Untergruppe	... Polyethers, e.g. alkylphenol polyglycoether [4]
C04B 24/34	2-Punkt Untergruppe	... Natural resins, e.g. rosin [4]
C04B 24/36	2-Punkt Untergruppe	... Bituminous materials, e.g. tar, pitch [4]
C04B 24/38	2-Punkt Untergruppe	... Polysaccharides or derivatives thereof [4]
C04B 24/40	1-Punkt Untergruppe	. Compounds containing silicon, titanium or zirconium [4]
C04B 24/42	2-Punkt Untergruppe	... Compounds having one or more carbon-to-silicon linkages [4]
<b><u>Compositions of mortars, concrete or artificial stone (artificial stone from molten slag C04B 5/00) [4]</u></b>		
<b>C04B 26/00</b>	<b>Hauptgruppe</b>	<b>Compositions of mortars, concrete or artificial stone, containing only organic binders [4]</b>
C04B 26/02	1-Punkt Untergruppe	. Macromolecular compounds [4]
C04B 26/04	2-Punkt Untergruppe	... obtained by reactions only involving carbon-to-carbon unsaturated bonds [4]
C04B 26/06	3-Punkt Untergruppe	... Acrylates [4]
C04B 26/08	3-Punkt Untergruppe	... containing halogen [4]
C04B 26/10	2-Punkt Untergruppe	... obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds [4]
C04B 26/12	3-Punkt Untergruppe	... Condensation polymers of aldehydes or ketones [4]
C04B 26/14	3-Punkt Untergruppe	... Polyepoxides [4]
C04B 26/16	3-Punkt Untergruppe	... Polyurethanes [4]
C04B 26/18	3-Punkt Untergruppe	... Polyesters; Polycarbonates [4]
C04B 26/20	3-Punkt Untergruppe	... Polyamides [4]
C04B 26/22	2-Punkt Untergruppe	... Natural resins, e.g. rosin [4]
C04B 26/24	3-Punkt Untergruppe	... Cellulosic waste liquor, e.g. sulfite lye [4]
C04B 26/26	2-Punkt Untergruppe	... Bituminous materials, e.g. tar, pitch [4]
C04B 26/28	2-Punkt Untergruppe	... Polysaccharides or derivatives thereof [4]
C04B 26/30	1-Punkt Untergruppe	. Compounds having one or more carbon-to-metal or carbon-to-silicon linkages [4]
C04B 26/32	2-Punkt Untergruppe	... containing silicon [4]
<b>C04B 28/00</b>	<b>Hauptgruppe</b>	<b>Compositions of mortars, concrete or artificial stone, containing inorganic binders or the reaction product of an inorganic and an organic binder, e.g. polycarboxylate cements [4]</b>
C04B 28/02	1-Punkt Untergruppe	. containing hydraulic cements other than calcium sulfates [4]
C04B 28/04	2-Punkt Untergruppe	... Portland cements [4]
C04B 28/06	2-Punkt Untergruppe	... Aluminous cements (monolithic refractories or refractory mortars C04B 35/66) [4]
C04B 28/08	2-Punkt Untergruppe	... Slag cements [4]
C04B 28/10	2-Punkt Untergruppe	... Lime cements or magnesium oxide cements [4]
C04B 28/12	3-Punkt Untergruppe	... Hydraulic lime [4]
C04B 28/14	1-Punkt Untergruppe	. containing calcium sulfate cements [4]

Symbol	Typ	Titel
C04B 28/16	2-Punkt Untergruppe	... containing anhydrite [4]
C04B 28/18	1-Punkt Untergruppe	. containing mixtures of the silica-lime type [4]
C04B 28/20	2-Punkt Untergruppe	... Sand-lime [4]
C04B 28/22	2-Punkt Untergruppe	... Lime and pozzuolanas [4]
C04B 28/24	1-Punkt Untergruppe	. containing alkyl ammonium or alkali metal silicates; containing silica sols [4]
C04B 28/26	2-Punkt Untergruppe	... Silicates of the alkali metals [4]
C04B 28/28	1-Punkt Untergruppe	. containing organic polyacids, e.g. polycarboxylate cements [4]
C04B 28/30	1-Punkt Untergruppe	. containing magnesium cements (magnesium oxide cements C04B 28/10) [4]
C04B 28/32	2-Punkt Untergruppe	... Magnesium oxychloride cements, e.g. Sorel cement [4]
C04B 28/34	1-Punkt Untergruppe	. containing cold phosphate binders [4]
C04B 28/36	1-Punkt Untergruppe	. containing sulfur, sulfides or selenium [4]
<b>C04B 30/00</b>	<b>Hauptgruppe</b>	<b>Compositions for artificial stone, not containing binders [4]</b>
C04B 30/02	1-Punkt Untergruppe	. containing fibrous materials [4]
<b>C04B 32/00</b>	<b>Hauptgruppe</b>	<b>Artificial stone not provided for in other groups of this subclass [4]</b>
C04B 32/02	1-Punkt Untergruppe	. with reinforcements [4]
<b><u>Ceramics</u></b>		
<b>C04B 33/00</b>	<b>Hauptgruppe</b>	<b>Clay-wares (monolithic refractories or refractory mortars C04B 35/66; porous products C04B 38/00 ) [2]</b>
C04B 33/02	1-Punkt Untergruppe	. Preparing or treating the raw materials individually or as batches
C04B 33/04	2-Punkt Untergruppe	... Clay; Kaolin
C04B 33/06	3-Punkt Untergruppe	... Rendering lime harmless
C04B 33/08	4-Punkt Untergruppe	.... Preventing efflorescence
C04B 33/10	2-Punkt Untergruppe	... Eliminating iron or lime
C04B 33/13	2-Punkt Untergruppe	... Compounding ingredients (C04B 33/36 , C04B 35/71 take precedence) [2]
C04B 33/14	3-Punkt Untergruppe	... Colouring matters
C04B 33/16	3-Punkt Untergruppe	... Lean materials, e.g. grog, quartz
C04B 33/18	3-Punkt Untergruppe	... for liquefying the batches
C04B 33/20	2-Punkt Untergruppe	... for dry-pressing (C04B 33/13 takes precedence)
C04B 33/22	1-Punkt Untergruppe	. Grog products
C04B 33/24	1-Punkt Untergruppe	. Manufacture of porcelain or white ware
C04B 33/26	2-Punkt Untergruppe	... of porcelain for electrical insulation
C04B 33/28	1-Punkt Untergruppe	. Slip casting (mechanical features B28B 1/26)
C04B 33/30	1-Punkt Untergruppe	. Drying methods
C04B 33/32	1-Punkt Untergruppe	. Burning methods

Symbol	Typ	Titel
C04B 33/34	2-Punkt Untergruppe	... combined with glazing
C04B 33/36	1-Punkt Untergruppe	. Reinforced clay-wares [2]
<b>C04B 35/00</b>	<b>Hauptgruppe</b>	<b>Shaped ceramic products characterised by their composition (porous products C04B 38/00; articles characterised by particular shape, see the relevant classes, e.g. linings for casting ladles, tundishes, cups or the like B22D 41/02); Ceramic compositions (containing free metal bonded to carbides, diamond, oxides, borides, nitrides, silicides, e.g. cermets, or other metal compounds, e.g. oxynitrides or sulfides, other than as macroscopic reinforcing agents C22C); Processing powders of inorganic compounds preparatory to the manufacturing of ceramic products (chemical preparation of powders of inorganic compounds C01) [4]</b>
C04B 35/01	1-Punkt Untergruppe	. based on oxides [6]
C04B 35/03	2-Punkt Untergruppe	... based on magnesium oxide, calcium oxide or oxide mixtures derived from dolomite [6]
C04B 35/035	3-Punkt Untergruppe	... Refractories from grain sized mixtures containing non-oxide refractory materials, e.g. carbon [6]
C04B 35/04	3-Punkt Untergruppe	... based on magnesium oxide [6]
C04B 35/043	4-Punkt Untergruppe	.... Refractories from grain sized mixtures [6]
C04B 35/047	5-Punkt Untergruppe	..... containing chromium oxide or chrome ore [6]
C04B 35/05	4-Punkt Untergruppe	.... Refractories by fusion casting [6]
C04B 35/053	4-Punkt Untergruppe	.... Fine ceramics [6]
C04B 35/057	3-Punkt Untergruppe	... based on calcium oxide [6]
C04B 35/06	3-Punkt Untergruppe	... based on oxide mixtures derived from dolomite
C04B 35/08	2-Punkt Untergruppe	... based on beryllium oxide [6]
C04B 35/10	2-Punkt Untergruppe	... based on aluminium oxide [6]
C04B 35/101	3-Punkt Untergruppe	... Refractories from grain sized mixtures [6]
C04B 35/103	4-Punkt Untergruppe	.... containing non-oxide refractory materials, e.g. carbon (C04B 35/106 takes precedence) [6]
C04B 35/105	4-Punkt Untergruppe	.... containing chromium oxide or chrome ore [6]
C04B 35/106	4-Punkt Untergruppe	.... containing zirconium oxide or zircon ( $ZrSiO_4$ ) [6]
C04B 35/107	3-Punkt Untergruppe	... Refractories by fusion casting [6]
C04B 35/109	4-Punkt Untergruppe	.... containing zirconium oxide or zircon ( $ZrSiO_4$ ) [6]
C04B 35/111	3-Punkt Untergruppe	... Fine ceramics [6]
C04B 35/113	4-Punkt Untergruppe	.... based on beta-aluminium oxide [6]
C04B 35/115	4-Punkt Untergruppe	.... Translucent or transparent products [6]
C04B 35/117	4-Punkt Untergruppe	.... Composites [6]
C04B 35/119	5-Punkt Untergruppe	.... with zirconium oxide [6]
C04B 35/12	2-Punkt Untergruppe	... based on chromium oxide (C04B 35/047, C04B 35/105 take precedence) [6]
C04B 35/14	2-Punkt Untergruppe	... based on silica [6]
C04B 35/16	2-Punkt Untergruppe	... based on silicates other than clay [6]

Symbol	Typ	Titel
C04B 35/18	3-Punkt Untergruppe	... rich in aluminium oxide [6]
C04B 35/185	4-Punkt Untergruppe	.... Mullite [6]
C04B 35/19	4-Punkt Untergruppe	.... Alkali metal aluminosilicates, e.g. spodumene [6]
C04B 35/195	4-Punkt Untergruppe	.... Alkaline earth aluminosilicates, e.g. cordierite [6]
C04B 35/20	3-Punkt Untergruppe	... rich in magnesium oxide [6]
C04B 35/22	3-Punkt Untergruppe	... rich in calcium oxide [6]
C04B 35/26	2-Punkt Untergruppe	... based on ferrites [2, 6]
C04B 35/28	3-Punkt Untergruppe	... with nickel oxide as the principal oxide [2, 6]
C04B 35/30	4-Punkt Untergruppe	.... with zinc oxide [2, 6]
C04B 35/32	3-Punkt Untergruppe	... with cobalt oxide as the principal oxide [2, 6]
C04B 35/34	4-Punkt Untergruppe	.... with zinc oxide [2, 6]
C04B 35/36	3-Punkt Untergruppe	... with manganese oxide as the principal oxide [2, 6]
C04B 35/38	4-Punkt Untergruppe	.... with zinc oxide [2, 6]
C04B 35/40	3-Punkt Untergruppe	... with rare earth oxide [2, 6]
C04B 35/42	2-Punkt Untergruppe	... based on chromites (C04B 35/047 , C04B 35/105 take precedence) [2, 6]
C04B 35/44	2-Punkt Untergruppe	... based on aluminates [2, 6]
C04B 35/443	3-Punkt Untergruppe	... Magnesium aluminate spinel [6]
C04B 35/447	2-Punkt Untergruppe	... based on phosphates [6]
C04B 35/45	2-Punkt Untergruppe	... based on copper oxide or solid solutions thereof with other oxides [6]
C04B 35/453	2-Punkt Untergruppe	... based on zinc, tin or bismuth oxides or solid solutions thereof with other oxides, e.g. zincates, stannates or bismuthates [6]
C04B 35/457	3-Punkt Untergruppe	... based on tin oxides or stannates [6]
C04B 35/46	2-Punkt Untergruppe	... based on titanium oxides or titanates (containing also zirconium or hafnium oxides, zirconates or hafnates C04B 35/49) [6]
C04B 35/462	3-Punkt Untergruppe	... based on titanates [6]
C04B 35/465	4-Punkt Untergruppe	.... based on alkaline earth metal titanates [6]
C04B 35/468	5-Punkt Untergruppe	..... based on barium titanates [6]
C04B 35/47	5-Punkt Untergruppe	..... based on strontium titanates [6]
C04B 35/472	4-Punkt Untergruppe	.... based on lead titanates [6]
C04B 35/475	4-Punkt Untergruppe	.... based on bismuth titanates [6]
C04B 35/478	4-Punkt Untergruppe	.... based on aluminium titanates [6]
C04B 35/48	2-Punkt Untergruppe	... based on zirconium or hafnium oxides or zirconates or hafnates [6]
C04B 35/482	3-Punkt Untergruppe	... Refractories from grain sized mixtures [6]

Symbol	Typ	Titel
C04B 35/484	3-Punkt Untergruppe	... Refractories by fusion casting [6]
C04B 35/486	3-Punkt Untergruppe	... Fine ceramics [6]
C04B 35/488	4-Punkt Untergruppe	.... Composites [6]
C04B 35/49	3-Punkt Untergruppe	... containing also titanium oxide or titanates [3, 6]
C04B 35/491	4-Punkt Untergruppe	.... based on lead zirconates and lead titanates [6]
C04B 35/493	5-Punkt Untergruppe	..... containing also other lead compounds [6]
C04B 35/495	2-Punkt Untergruppe	... based on vanadium, niobium, tantalum, molybdenum or tungsten oxides or solid solutions thereof with other oxides, e.g. vanadates, niobates, tantalates, molybdates or tungstates [6]
C04B 35/497	3-Punkt Untergruppe	... based on solid solutions with lead oxide [6]
C04B 35/499	4-Punkt Untergruppe	.... containing also titanates [6]
C04B 35/50	1-Punkt Untergruppe	. based on rare earth compounds
C04B 35/505	2-Punkt Untergruppe	.. based on yttrium oxide [6]
C04B 35/51	1-Punkt Untergruppe	. based on compounds of actinides (nuclear fuel materials G21C 3/62) [2]
C04B 35/515	1-Punkt Untergruppe	. based on non-oxides (C04B 35/50 , C04B 35/51 take precedence) [6]
C04B 35/52	2-Punkt Untergruppe	.. based on carbon, e.g. graphite [6]
C04B 35/524	3-Punkt Untergruppe	... obtained from polymer precursors, e.g. glass-like carbon material [6]
C04B 35/528	3-Punkt Untergruppe	... obtained from carbonaceous particles with or without other non-organic components [6]
C04B 35/532	4-Punkt Untergruppe	.... containing a carbonisable binder [6]
C04B 35/536	3-Punkt Untergruppe	... based on expanded graphite [6]
C04B 35/547	2-Punkt Untergruppe	.. based on sulfides or selenides [6]
C04B 35/553	2-Punkt Untergruppe	.. based on fluorides [6]
C04B 35/56	2-Punkt Untergruppe	.. based on carbides [4]
C04B 35/563	3-Punkt Untergruppe	... based on boron carbide [6]
C04B 35/565	3-Punkt Untergruppe	... based on silicon carbide [6]
C04B 35/567	4-Punkt Untergruppe	.... Refractories from grain sized mixtures [6]
C04B 35/569	4-Punkt Untergruppe	.... Fine ceramics [6]
C04B 35/571	5-Punkt Untergruppe	..... obtained from polymer precursors [6]
C04B 35/573	5-Punkt Untergruppe	..... obtained by reaction sintering [6]
C04B 35/575	5-Punkt Untergruppe	..... obtained by pressure sintering [6]
C04B 35/576	5-Punkt Untergruppe	..... obtained by sintering without pressure [6]
C04B 35/577	5-Punkt Untergruppe	..... Composites [6]
C04B 35/58	2-Punkt Untergruppe	.. based on borides, nitrides or silicides [4, 6]

Symbol	Typ	Titel
C04B 35/581	3-Punkt Untergruppe	... based on aluminium nitride [6]
C04B 35/582	4-Punkt Untergruppe	.... Composites [6]
C04B 35/583	3-Punkt Untergruppe	... based on boron nitride [6]
C04B 35/5831	4-Punkt Untergruppe	.... based on cubic boron nitride [6]
C04B 35/5833	4-Punkt Untergruppe	.... based on hexagonal boron nitride [6]
C04B 35/5835	4-Punkt Untergruppe	.... Composites [6]
C04B 35/584	3-Punkt Untergruppe	... based on silicon nitride [6]
C04B 35/586	4-Punkt Untergruppe	.... Refractories from grain sized mixtures [6]
C04B 35/587	4-Punkt Untergruppe	.... Fine ceramics [6]
C04B 35/589	5-Punkt Untergruppe	..... obtained from polymer precursors [6]
C04B 35/591	5-Punkt Untergruppe	..... obtained by reaction sintering [6]
C04B 35/593	5-Punkt Untergruppe	..... obtained by pressure sintering (C04B 35/594 takes precedence) [6]
C04B 35/594	5-Punkt Untergruppe	..... obtained by sintering a reaction-sintered product, with or without pressure [6]
C04B 35/596	5-Punkt Untergruppe	..... Composites [6]
C04B 35/597	3-Punkt Untergruppe	... based on silicon oxynitrides [6]
C04B 35/599	4-Punkt Untergruppe	... based on silicon aluminium oxynitrides (SIALONS) [6]
C04B 35/622	1-Punkt Untergruppe	. Forming processes; Processing powders of inorganic compounds preparatory to the manufacturing of ceramic products [6]
C04B 35/624	2-Punkt Untergruppe	.. Sol-gel processing [6]
C04B 35/626	2-Punkt Untergruppe	.. Preparing or treating the powders individually or as batches [6]
C04B 35/628	3-Punkt Untergruppe	... Coating the powders [6]
C04B 35/63	3-Punkt Untergruppe	... using additives specially adapted for forming the products [6]
C04B 35/632	4-Punkt Untergruppe	.... Organic additives [6]
C04B 35/634	5-Punkt Untergruppe	.... Polymers (C04B 35/636 takes precedence) [6]
C04B 35/636	5-Punkt Untergruppe	.... Polysaccharides or derivatives thereof [6]
C04B 35/638	4-Punkt Untergruppe	.... Removal thereof [6]
C04B 35/64	2-Punkt Untergruppe	.. Burning or sintering processes (C04B 33/32 takes precedence) [6]
C04B 35/645	3-Punkt Untergruppe	... Pressure sintering [6]
C04B 35/65	3-Punkt Untergruppe	... Reaction sintering of free metal- or free silicon-containing compositions [3]
C04B 35/653	2-Punkt Untergruppe	.. Processes involving a melting step [6]
C04B 35/657	3-Punkt Untergruppe	... for manufacturing refractories (C04B 35/05 , C04B 35/107 , C04B 35/484 take precedence) [6]
C04B 35/66	1-Punkt Untergruppe	. Monolithic refractories or refractory mortars, including those whether or not containing clay

Symbol	Typ	Titel
C04B 35/71	1-Punkt Untergruppe	. Ceramic products containing macroscopic reinforcing agents (C04B 35/66 takes precedence) [3, 4]
C04B 35/74	2-Punkt Untergruppe	... containing shaped metallic materials [2]
C04B 35/76	3-Punkt Untergruppe	... Fibres, filaments, whiskers, platelets, or the like [2]
C04B 35/78	2-Punkt Untergruppe	... containing non-metallic materials [2]
C04B 35/80	3-Punkt Untergruppe	... Fibres, filaments, whiskers, platelets, or the like [2]
C04B 35/81	4-Punkt Untergruppe	.... Whiskers [6]
C04B 35/82	4-Punkt Untergruppe	.... Asbestos; Glass; Fused silica [2]
C04B 35/83	4-Punkt Untergruppe	.... Carbon fibres in a carbon matrix [6]
C04B 35/84	3-Punkt Untergruppe	... Impregnated or coated materials [2]
<b>C04B 37/00</b>	<b>Hauptgruppe</b>	<b>Joining burned ceramic articles with other burned ceramic articles or other articles by heating (laminated products B32B , E04C)</b>
C04B 37/02	1-Punkt Untergruppe	. with metallic articles
C04B 37/04	1-Punkt Untergruppe	. with articles made from glass
<b>C04B 38/00</b>	<b>Hauptgruppe</b>	<b>Porous mortars, concrete, artificial stone or ceramic ware; Preparation thereof (treating slag with gases or gas generating material C04B 5/06) [4, 6]</b>
C04B 38/02	1-Punkt Untergruppe	. by adding chemical blowing agents [4]
C04B 38/04	1-Punkt Untergruppe	. by dissolving-out added substances [4]
C04B 38/06	1-Punkt Untergruppe	. by burning-out added substances [4]
C04B 38/08	1-Punkt Untergruppe	. by adding porous substances [4]
C04B 38/10	1-Punkt Untergruppe	. by using foaming agents (C04B 38/02 takes precedence) [4]
<b>C04B 40/00</b>	<b>Hauptgruppe</b>	<b>Processes, in general, for influencing or modifying the properties of mortars, concrete or artificial stone compositions, e.g. their setting or hardening ability (active ingredients C04B 22/00 to C04B 24/00; hardening of a well-defined composition C04B 26/00 to C04B 28/00; making porous, cellular or lightening C04B 38/00; mechanical aspects B28 , e.g. conditioning the materials prior to shaping B28B 17/02) [4, 6]</b>
C04B 40/02	1-Punkt Untergruppe	. Selection of the hardening environment [4]
C04B 40/04	1-Punkt Untergruppe	. Preventing evaporation of the mixing water (permanent coverings C04B 41/00) [4]
C04B 40/06	1-Punkt Untergruppe	. Inhibiting the setting, e.g. mortars of the deferred action type containing water in breakable containers [4]
<b>C04B 41/00</b>	<b>Hauptgruppe</b>	<b>After-treatment of mortars, concrete, artificial stone or ceramics; Treatment of natural stone (conditioning of the materials prior to shaping C04B 40/00; applying liquids or other fluent materials to surfaces, in general B05; grinding or polishing B24; apparatus or processes for treating or working shaped articles of clay or other ceramic compositions, slag or mixtures containing cementitious material B28B 11/00; working stone or stone-like materials B28D; glazes, other than cold glazes, C03C 8/00; etching, surface-brightening or pickling compositions C09K 13/00) [3]</b>
C04B 41/45	1-Punkt Untergruppe	. Coating or impregnating (paints C09D) [4]
C04B 41/46	2-Punkt Untergruppe	.. with organic materials [4]
C04B 41/47	3-Punkt Untergruppe	... Oils, fats or waxes [4]
C04B 41/48	3-Punkt Untergruppe	... Macromolecular compounds [4]

Symbol	Typ	Titel
C04B 41/49	3-Punkt Untergruppe	... Compounds having one or more carbon-to-metal or carbon-to-silicon linkages [4]
C04B 41/50	2-Punkt Untergruppe	... with inorganic materials [4]
C04B 41/51	3-Punkt Untergruppe	... Metallising [4]
C04B 41/52	2-Punkt Untergruppe	... Multiple coating or impregnating [4]
C04B 41/53	1-Punkt Untergruppe	. involving the removal of part of the materials of the treated article [4]
C04B 41/60	1-Punkt Untergruppe	. of only artificial stone [4]
C04B 41/61	2-Punkt Untergruppe	... Coating or impregnating [4]
C04B 41/62	3-Punkt Untergruppe	... with organic materials [4]
C04B 41/63	4-Punkt Untergruppe	.... Macromolecular compounds [4]
C04B 41/64	4-Punkt Untergruppe	.... Compounds having one or more carbon-to-metal or carbon-to-silicon linkages [4]
C04B 41/65	3-Punkt Untergruppe	... with inorganic materials [4]
C04B 41/66	4-Punkt Untergruppe	.... Fluorides, e.g. ocratation [4]
C04B 41/67	4-Punkt Untergruppe	.... Phosphates [4]
C04B 41/68	4-Punkt Untergruppe	.... Silicic acid; Silicates [4]
C04B 41/69	4-Punkt Untergruppe	.... Metals [4]
C04B 41/70	3-Punkt Untergruppe	... for obtaining at least two superposed coatings having different compositions [4]
C04B 41/71	4-Punkt Untergruppe	.... at least one coating being an organic material [4]
C04B 41/72	2-Punkt Untergruppe	... involving the removal of part of the materials of the treated articles, e.g. etching [4]
C04B 41/80	1-Punkt Untergruppe	. of only ceramics [4]
C04B 41/81	2-Punkt Untergruppe	... Coating or impregnating [4]
C04B 41/82	3-Punkt Untergruppe	... with organic materials [4]
C04B 41/83	4-Punkt Untergruppe	.... Macromolecular compounds [4]
C04B 41/84	4-Punkt Untergruppe	.... Compounds having one or more carbon-to-metal or carbon-to-silicon linkages [4]
C04B 41/85	3-Punkt Untergruppe	... with inorganic materials [4]
C04B 41/86	4-Punkt Untergruppe	.... Glazes; Cold glazes [4]
C04B 41/87	4-Punkt Untergruppe	.... Ceramics [4]
C04B 41/88	4-Punkt Untergruppe	.... Metals [4]
C04B 41/89	3-Punkt Untergruppe	... for obtaining at least two superposed coatings having different compositions [4]
C04B 41/90	4-Punkt Untergruppe	.... at least one coating being a metal [4]
C04B 41/91	2-Punkt Untergruppe	... involving the removal of part of the materials of the treated articles, e.g. etching [4]
<b><u>Indexing scheme associated with group C04B 35/00 , relating to high critical-temperature superconductive ceramics. The indexing code should be unlinked. [6]</u></b>		
<b>C04B 101/00</b>	<b>Hauptgruppe</b>	<b>High critical-temperature superconductive ceramics [6]</b>

Symbol	Typ	Titel
<b><u>Indexing scheme associated with groups C04B 22/00 and C04B 24/00 , relating to the function or property of the active ingredients. The indexing codes should be unlinked. [6]</u></b>		
<b>C04B 103/00</b>	<b>Hauptgruppe</b>	<b>Function or property of the active ingredients [6]</b>
C04B 103/10	1-Punkt Untergruppe	. Accelerators [6]
C04B 103/12	2-Punkt Untergruppe	.. Set accelerators [6]
C04B 103/14	2-Punkt Untergruppe	.. Hardening accelerators [6]
C04B 103/20	1-Punkt Untergruppe	. Retarders [6]
C04B 103/22	2-Punkt Untergruppe	.. Set retarders [6]
C04B 103/24	2-Punkt Untergruppe	.. Hardening retarders [6]
C04B 103/30	1-Punkt Untergruppe	. Water reducers, plasticisers, air-entrainers [6]
C04B 103/32	2-Punkt Untergruppe	.. Superplasticisers [6]
C04B 103/40	1-Punkt Untergruppe	. Surface-active agents, dispersants [6]
C04B 103/42	1-Punkt Untergruppe	. Pore formers [6]
C04B 103/44	1-Punkt Untergruppe	. Thickening, gelling or viscosity increasing agents [6]
C04B 103/46	1-Punkt Untergruppe	. Water-loss reducers, hygroscopic or hydrophilic agents [6]
C04B 103/48	1-Punkt Untergruppe	. Foam stabilisers [6]
C04B 103/50	1-Punkt Untergruppe	. Defoamers, air detrainers [6]
C04B 103/52	1-Punkt Untergruppe	. Grinding aids [6]
C04B 103/54	1-Punkt Untergruppe	. Pigments; Dyes [6]
C04B 103/56	1-Punkt Untergruppe	. Opacifiers [6]
C04B 103/60	1-Punkt Untergruppe	. Agents for protection against chemical, physical or biological attack [6]
C04B 103/61	2-Punkt Untergruppe	.. Corrosion inhibitors [6]
C04B 103/63	2-Punkt Untergruppe	.. Flame-proofing agents [6]
C04B 103/65	2-Punkt Untergruppe	.. Water proofers or repellants [6]
C04B 103/67	2-Punkt Untergruppe	.. Biocides [6]
C04B 103/69	3-Punkt Untergruppe	... Fungicides [6]
<b><u>Indexing scheme associated with groups C04B 26/00 to C04B 32/00 , relating to the function, property or use of the mortars, concrete or artificial stone. The indexing codes should be unlinked. [6]</u></b>		
<b>C04B 111/00</b>	<b>Hauptgruppe</b>	<b>Function, property or use of the mortars, concrete or artificial stone [6]</b>
C04B 111/10	1-Punkt Untergruppe	. Compositions characterized by the absence of a specified material [6]
C04B 111/12	2-Punkt Untergruppe	.. Absence of asbestos, e.g. cement-asbestos substitutes [6]
C04B 111/20	1-Punkt Untergruppe	. Resistance against chemical, physical or biological attack [6]
C04B 111/21	2-Punkt Untergruppe	.. Efflorescence resistance [6]
C04B 111/22	2-Punkt Untergruppe	.. Carbonation resistance [6]

Symbol	Typ	Titel
C04B 111/23	2-Punkt Untergruppe	... Acid resistance [6]
C04B 111/24	2-Punkt Untergruppe	... Sea water resistance [6]
C04B 111/25	2-Punkt Untergruppe	... Graffiti resistance [6]
C04B 111/26	2-Punkt Untergruppe	... Corrosion of reinforcement resistance [6]
C04B 111/27	2-Punkt Untergruppe	... Water resistance, i.e. waterproof or water repellent materials [6]
C04B 111/28	2-Punkt Untergruppe	... Fire resistance [6]
C04B 111/30	1-Punkt Untergruppe	. Nailable or sawable materials [6]
C04B 111/32	1-Punkt Untergruppe	. Expansion inhibited materials [6]
C04B 111/34	1-Punkt Untergruppe	. Non-shrinking materials [6]
C04B 111/40	1-Punkt Untergruppe	. Porous or lightweight materials [6]
C04B 111/42	2-Punkt Untergruppe	... Floating materials [6]
C04B 111/50	1-Punkt Untergruppe	. Flexible or elastic materials [6]
C04B 111/52	1-Punkt Untergruppe	. Sound insulating materials [6]
C04B 111/54	1-Punkt Untergruppe	. Substitutes for natural stone, e.g. artificial marble [6]
C04B 111/56	1-Punkt Untergruppe	. Compositions suited for fabrication of pipes, e.g. by centrifugal casting [6]
C04B 111/60	1-Punkt Untergruppe	. Flooring materials [6]
C04B 111/62	2-Punkt Untergruppe	... Self-levelling compositions [6]
C04B 111/70	1-Punkt Untergruppe	. Grouts [6]
C04B 111/72	1-Punkt Untergruppe	. Compositions used for repairing existing buildings or building materials [6]
C04B 111/74	1-Punkt Untergruppe	. Underwater applications [6]
C04B 111/76	1-Punkt Untergruppe	. Use at sub-zero temperatures [6]
C04B 111/80	1-Punkt Untergruppe	. Optical properties, e.g. transparency [6]
C04B 111/82	2-Punkt Untergruppe	... Coloured materials [6]
C04B 111/90	1-Punkt Untergruppe	. Electrical properties [6]
C04B 111/92	2-Punkt Untergruppe	... Electrically insulating materials [6]
C04B 111/94	2-Punkt Untergruppe	... Electrically conducting materials [6]