

**CPC****COOPERATIVE PATENT CLASSIFICATION****F05C****INDEXING SCHEME RELATING TO MATERIALS, MATERIAL PROPERTIES OR MATERIAL CHARACTERISTICS FOR MACHINES, ENGINES OR PUMPS OTHER THAN NON-POSITIVE-DISPLACEMENT MACHINES OR ENGINES****NOTE**

This subclass constitutes an internal scheme for indexing only.

**F05C 2201/00****Metals**

- F05C 2201/02 . Light metals
- F05C 2201/021 . . Aluminium
- F05C 2201/023 . . Beryllium
- F05C 2201/025 . . Boron
- F05C 2201/026 . . Lithium
- F05C 2201/028 . . Magnesium
- F05C 2201/04 . Heavy metals
- F05C 2201/0403 . . Refractory metals, e.g. V, W
- F05C 2201/0406 . . . Chromium
- F05C 2201/0409 . . . Molybdenum
- F05C 2201/0412 . . . Titanium
- F05C 2201/0415 . . . Zirconium
- F05C 2201/0418 . . Noble metals
- F05C 2201/0421 . . . Silver
- F05C 2201/0424 . . . Gold
- F05C 2201/0427 . . . Platinum group, e.g. Pt, Ir
- F05C 2201/043 . . Rare earth metals, e.g. Sc, Y
- F05C 2201/0433 . . Iron group; Ferrous alloys, e.g. steel
- F05C 2201/0436 . . . Iron
- F05C 2201/0439 . . . . Cast iron
- F05C 2201/0442 . . . . . Spheroidal graphite cast iron, e.g. nodular iron, ductile iron
- F05C 2201/0445 . . . . . Austempered ductile iron [ADI]
- F05C 2201/0448 . . . Steel
- F05C 2201/0451 . . . . Cast steel
- F05C 2201/0454 . . . . Case-hardened steel
- F05C 2201/0457 . . . . Cemented steel
- F05C 2201/046 . . . . Stainless steel or inox, e.g. 18-8
- F05C 2201/0463 . . . Cobalt
- F05C 2201/0466 . . . Nickel
- F05C 2201/0469 . . Other heavy metals

F05C 2201/0472	. . . Cadmium
F05C 2201/0475	. . . Copper or alloys thereof
F05C 2201/0478	. . . . Bronze (Cu/Sn alloy)
F05C 2201/0481	. . . . Brass (Cu/Zn alloy)
F05C 2201/0484	. . . . Nickel-Copper alloy, e.g. monel
F05C 2201/0487	. . . Manganese
F05C 2201/049	. . . Lead
F05C 2201/0493	. . . Tin
F05C 2201/0496	. . . Zinc
F05C 2201/90	. Alloys not otherwise provided for
F05C 2201/903	. . Aluminium alloy, e.g. AlCuMgPb F34,37
F05C 2201/906	. . Phosphor-bronze alloy

### **Inorganic materials**

<b>F05C 2203/00</b>	<b>Non-metallic inorganic materials</b>
F05C 2203/02	. Glass
F05C 2203/04	. Phosphor
F05C 2203/06	. Silicon
F05C 2203/08	. Ceramics; Oxides
F05C 2203/0804	. . Non-oxide ceramics
F05C 2203/0808	. . . Carbon, e.g. graphite
F05C 2203/0813	. . . Carbides
F05C 2203/0817	. . . . of silicon
F05C 2203/0821	. . . . of titanium, e.g. TiC
F05C 2203/0826	. . . . of wolfram, e.g. tungsten carbide
F05C 2203/083	. . . Nitrides
F05C 2203/0834	. . . . of aluminium
F05C 2203/0839	. . . . of boron
F05C 2203/0843	. . . . of silicon
F05C 2203/0847	. . . . of titanium
F05C 2203/0852	. . . . of zirconium
F05C 2203/0856	. . . Sulfides
F05C 2203/086	. . . . of molybdenum
F05C 2203/0865	. . not used, see subgroups
F05C 2203/0869	. . . Aluminium oxide
F05C 2203/0873	. . . . Sapphire
F05C 2203/0878	. . . Aluminium titanate
F05C 2203/0882	. . . Carbon, e.g. graphite
F05C 2203/0886	. . . Silica

- F05C 2203/0891 . . . Zinc oxide
- F05C 2203/0895 . . . Zirconium oxide

#### **F05C 2211/00 Inorganic materials not otherwise provided for**

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#### **F05C 2221/00 Leather**

### **Organic materials**

#### **F05C 2223/00 Cellulosic materials, e.g. wood**

#### **F05C 2225/00 Synthetic polymers, e.g. plastics; Rubber**

- F05C 2225/02 . Rubber
- F05C 2225/04 . PTFE [PolyTetraFluorEthylene]
- F05C 2225/06 . Polyamides, e.g. NYLON
- F05C 2225/08 . Thermoplastics
- F05C 2225/10 . Polyimides, e.g. Aurum
- F05C 2225/12 . Polyetheretherketones, e.g. PEEK

#### **F05C 2231/00 Organic materials not otherwise provided for**

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#### **F05C 2251/00 Material properties**

- F05C 2251/02 . Elasticity
- F05C 2251/04 . Thermal properties
- F05C 2251/042 . . Expansivity
- F05C 2251/044 . . . similar
- F05C 2251/046 . . . dissimilar
- F05C 2251/048 . . Heat transfer
- F05C 2251/06 . Reflective properties
- F05C 2251/08 . Shape memory
- F05C 2251/10 . Hardness
- F05C 2251/12 . Magnetic properties
- F05C 2251/125 . . non-magnetic
- F05C 2251/14 . Self lubricating materials; Solid lubricants

### **Material properties or characteristics**

#### **F05C 2253/00 Other material characteristics; Treatment of material**

- F05C 2253/02 . Fabric
- F05C 2253/025 . . woven
- F05C 2253/04 . Composite, e.g. fibre-reinforced
- F05C 2253/06 . Amorphous

- F05C 2253/08 . Crystalline
- F05C 2253/083 . . Directionally-solidified crystalline structure
- F05C 2253/0831 . . . monocrystalline
- F05C 2253/10 . Syntactic
- F05C 2253/12 . Coating
- F05C 2253/14 . Foam
- F05C 2253/16 . Fibres
- F05C 2253/18 . Filler
- F05C 2253/20 . Resin
- F05C 2253/22 . Reinforcements
- F05C 2253/24 . Heat treatment